

LAND USE AND PUBLIC POLICY IN NORTHERN CANADA

by

John Kennedy Naysmith

B.Sc.F., University of New Brunswick, 1953

M.F.S. Harvard University, 1968

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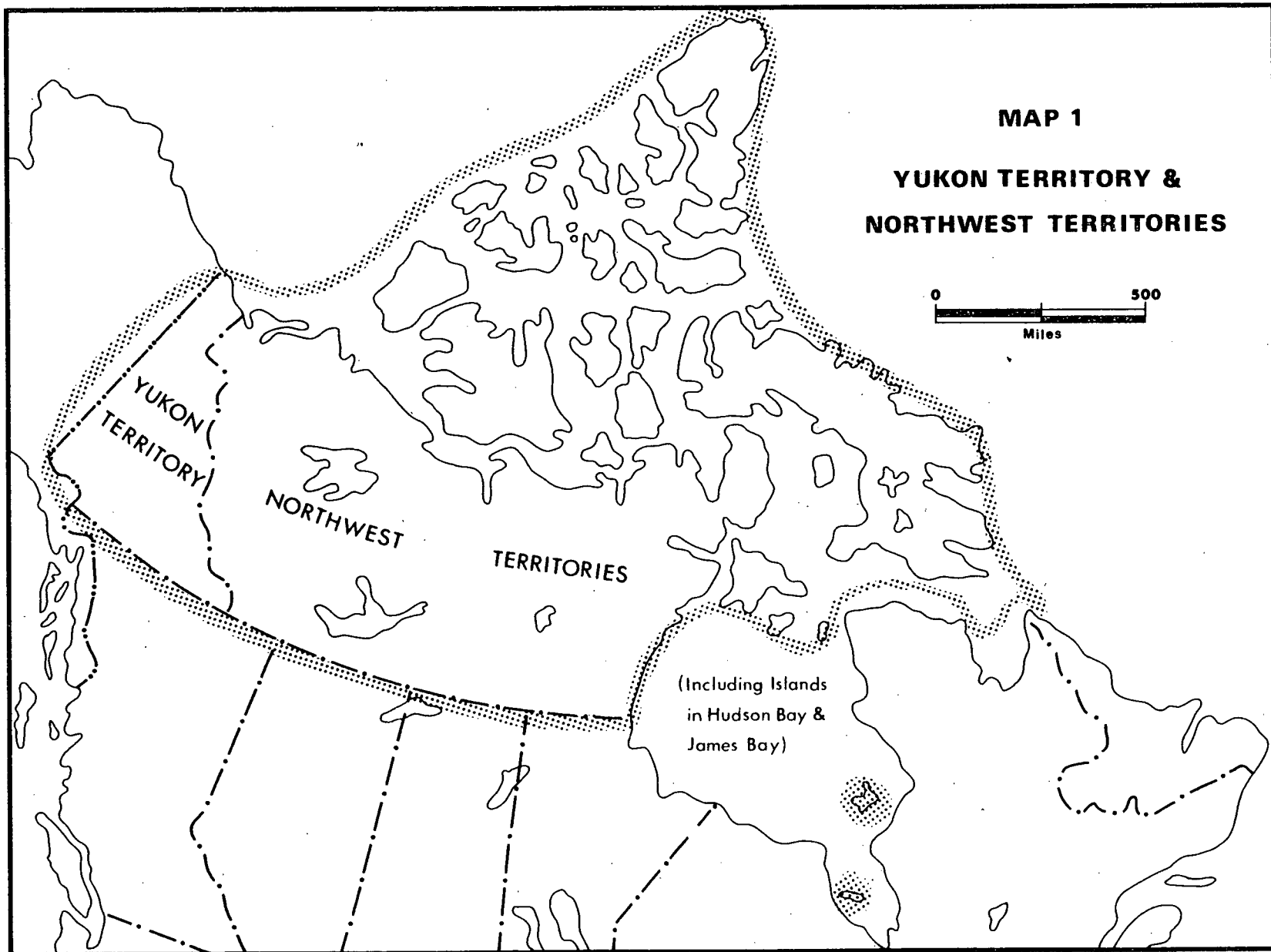
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Department of Forestry

The University of British Columbia  
2075 Westbrook Place  
Vancouver, Canada  
V6T 1W5

Date September 29, 1975



## ABSTRACT

Northern Canada was first occupied by man at least 25,000 years ago. The fur trader, the first European to live in what is now the Yukon Territory and Northwest Territories, arrived less than 300 years ago, and northern land use, not related to subsistence living or the fur trade, has a history of less than 100 years.

The north has experienced three distinct waves of land use activity within the past seventy-five years. The discovery of gold in the Yukon and the subsequent placer mining operations at the turn of the century marked the beginning of the 'development era'. During the second world war, roads, pipelines and airfields were constructed north of 60. Finally, the extensive oil, gas and mineral activity, which today extends across the north, including the Arctic Islands, began in the 1960s.

The purpose of this study is to analyze northern land use and related public policy in Canada north of 60 degrees north latitude and to propose a course of action for the administration and management of the region's 1.5 million square miles of public land.

It is shown that starting with the Dominion Lands Act in 1872 virtually all of the body of law pertaining to northern land has been a response to increasing and/or altering demands for the alienation of public land and associated resources. As a result the relationship of the various acts and regulations to each other grow more complex while the respective administrative responsibilities of the federal and two territorial governments become less definable.



In addition to the legal and administrative institutions related to northern land, there are the claims of the north's native people to substantial areas of land, and society's growing awareness of the social and cultural implications of northern development.

If policy-makers are to resolve the complex issues surrounding northern land today they must first consider the land itself and develop policy which is based on an understanding of its nature, capability and limitations.

Within that context the study proposes the following with respect to the future administration and management of northern lands:

- (1) a land use planning process for guiding and determining decisions respecting land use and allocation which would:
  - (i) account for the natural values and properties of the land;
  - (ii) consider the potential uses of the land and its capabilities;
  - (iii) propose and assess the consequences of various forms of land use and development;
  - (iv) monitor and document land use;
- (2) a land use planning commission in each territory;
- (3) a northern land classification system;
- (4) a mechanism for citizen participation in the land use planning process;
- (5) a revised legislative base;
- (6) a selection process for settlement of native land claims.

The next logical step in the evolution of the territorial governments is an increased role in the management of northern land. The administration of federal land legislation by a department of lands and forests in the Yukon Territorial Government and the Government of the Northwest Territories is suggested.

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3 Land Use Information series (Dept. of the Environment) maps of Ogilvie River, Teslin, and Wolf Lake in pocket.

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## PREFACE

For at least four centuries observations of, and experience in, what is now the Canadian Arctic have been documented. In addition we are fortunate in having a more or less continuous, albeit unheralded, history of research and scientific reporting for nearly a century. In the last decade there has been a proliferation of written material about northern Canada.

I have contributed to the latter in what is generally considered to be the rather unromantic area of public policy, and have been encouraged by the response. Hopefully this study will further provide Canadians with a basis for debating one important aspect of policy, that related to management of northern land.

Policy, as defined by Webster, is a definite course of action selected from among alternatives, and in the light of given conditions to guide and usually determine present and future decisions. Considered in that light it behooves Canadians first to be aware of the conditions and second to consider the alternatives, before formulating public policy which involves more than one-third of Canada.

During the course of this study I discussed various aspects of the administration and management of northern land with several colleagues in the Department of Indian and Northern Affairs. I wish to acknowledge the cooperation of Mr. A.B. Yates, Director of the Northern Policy and Program Planning Branch, Dr. J. Riddick and Messrs. R.J. Goudie, W.F. McIntosh and G.C. Evans in Ottawa; Messrs. B.J. Trevor, G.A. McIntyre

(now a member of the Council of the Yukon Territory), and T. Retallack of Whitehorse, Y.T.; Messrs. M.J. Morison and N. Adams of Yellowknife, N.W.T.; and Messrs. G.B. Armstrong and L.V. Brandon both of whom are now with the Canadian Department of the Environment.

In addition I wish to thank Mr. James Smith, Commissioner of the Yukon Territory and Mr. John H. Parker, Deputy Commissioner of the Northwest Territories and members of their respective staffs, in particular Messrs. W.A. Bilawich, G.L. Privett and R. Raghunathan of Whitehorse and Messrs. R.A. Creery, A.E. Ganski and R.B. Hall of Yellowknife.

Much of the formal part of this research was conducted at the University of British Columbia to which I was seconded by the Canadian Department of Indian and Northern Affairs. While there I was fortunate to be able to confer on a regular basis with several members of the faculty including Drs. I. McT. Cowan, H.B. Hawthorn, L.M. Lavkulich, J.R. Mackay, J.K. Stager, and J.V. Thirgood. In particular I wish to thank Dr. J.H.G. Smith who contributed much toward making my sojourn at the university both productive and stimulating.

Much of the research for this study is based on experience gained over a period of 22 years divided nearly evenly between the forest industry and the federal government. Following 12 years with the Abitibi Paper Company in eastern Canada I left there as Woods Superintendent to join the federal department of Northern Affairs and National Resources, the predecessor of the present department of Indian and Northern affairs. For the past ten years I have been associated with the northern program of those departments and seven years ago, became

chief of its water, forests and land division.

I have had the opportunity to work closely with people whose everyday business was 'using land' and it is those confreres of more than two decades who have unknowingly contributed much to the underlying approaches contained herein.

Finally I wish to thank my family to whom I am indebted. If this study makes a contribution it will be due in large part to the understanding, encouragement and practical help of my wife Etoile, daughters Jean-Ann and Caron, and son John.

...the genesis of a northern lands policy should be a thorough understanding of the nature, capability and limitations of the land; but to understand the human values and attitudes respecting northern land, is to know its essential character.

## INTRODUCTION

In the 1870s westward expansion was the focal point of Canadian public policy. The admission of Rupert's Land and the North Western Territory into the Dominion, British Columbia's entry into Confederation and the promise of a transcontinental railway were all salient issues of that period. In turn these issues gave impetus to the passage of perhaps Canada's most influential land law - the Dominion Lands Act of 1872.

For the ensuing sixty years, the ultimate goal of federal land policy was the settlement of western Canada, and the statutory vehicle was the Dominion Lands Act. The spirit of the Act was embodied in those sections providing free homestead grants to entice settlers into the west and granting vast tracts to railway companies in the form of land subsidies in order to further encourage settlement and as an incentive to construct a transportation network which would sustain the settler.

In the 1970s national attention turned northward, thus developing for Canada a dimension of depth to supplement the one of breadth which was established a century earlier. Although the specific questions differ, the issues remain substantially the same.

In both cases development impelled the use of vast areas of land. Today it is the oil and natural gas fields of the Mackenzie Delta and the High Arctic Islands in place of the fertile agricultural land of the prairies a century ago.

Such development can only be supported by establishing major

transportation facilities. Now large diameter pipelines are proposed for the Mackenzie Valley and the eastern Arctic, whereas transcontinental railways were needed to sustain settlement in western Canada.

Today, the two northern territories are seeking responsible, rather than simply representative government, as was the province of British Columbia before 1871.

Finally, while western settlement was stimulated by the alienation of public land, a major issue of northern development is the need to recognize the legitimate claims to land of the north's native people.

But today there is an additional force at work. I refer to a shifting sense of values which is bringing into perspective the social and cultural implications of development as well as the economic and political ones.

The history of land use in what is now the Yukon Territory and the Northwest Territories, may be considered in terms of three epochs<sup>(1)</sup> viz.:

- (i) the prehistoric period of hunters and food gatherers;
- (ii) the early fur trade; and
- (iii) the industrial development of natural resources.

Each epoch is characterized by distinct forms of land use as well as prevailing attitudes<sup>(2)</sup> and concepts concerning the land. Values

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(1) Kuznets (1966: 2) in discussing the economic growth of nations defined an economic epoch as being a relatively long period, extending well over a century, possessing distinctive characteristics that give it unity and differentiate it from epochs that precede or follow it.

(2) Tuan (1974: 4) in his discussion of how society views and evaluates nature, including land, defined attitude as a cultural stance formed by a long series of perceptions.

which man attributed to land during the first two epochs were reflected in unwritten policy respecting its use. During the third epoch a more formal kind of land policy, embodied in legal and administrative institutions has been introduced.

What were the patterns of land use and the prevailing attitudes respecting land during each of these epochs? What was their relationship to the land policy which evolved in each case? To what degree does present policy fall short of incorporating prevailing attitudes and values respecting northern land? How can present northern lands policy be expanded to reduce the discrepancies identified? What link is there, if any, between improving the administration and management of northern land and major issues such as native rights and the evolution of the territorial governments? These are some of the questions which I wish to address.

The study is divided into three major parts, viz.:

- (1) Historic Perspective - examines the evolution of land use and policy from the precontact period to the end of the 1960s;
- (2) The Present Setting - includes the current status of land use and policy as well as the administrative and political structure in the north;
- (3) A Future Course - considers several aspects of future northern lands policy and suggests some basic revisions in the administration and management of public land in the north.



It is established, fairly I believe, that beginning with the Dominion Lands Act, public land policy in the north has been essentially a series of responses to demands for land, rather than a framework within which decisions respecting use and management are made on the basis of the land itself.

Thus the study proposes a new course for the administration and management of public land in the north based first on a consideration of the nature, capability and limitations of the land.

Essentially the approach takes into account the composite value of northern land and incorporates a course of action for guiding and determining future decisions respecting its use and management. It would be incorrect to assume that this study solves the complex problems associated with the native rights question or the future role of the territorial governments in the area of natural resources. Nevertheless by putting one corner of the house in order, namely the administration and management of northern land, it will hopefully clarify some of the issues surrounding those questions and provide a basis for tackling them.

Finally it is hoped that this study will encourage debate, both in and out of government, and thereby produce a new era in public policy for the 1.5 million square miles of Canada's northern land.

PART ONE. HISTORIC PERSPECTIVE

Thus at the time Pytheas was cautiously observing the 'frozen north' from its periphery, people of the Dorset culture in the Canadian Arctic were mastering it at its centre....

## CHAPTER ONE. THE ORIGINAL PEOPLE

### (i) Man's Arrival in the North

Nomadic hunters probably entered the Western Hemisphere between 500 and 250 centuries ago.<sup>(1)</sup> Migrating eastward across the Canadian Arctic from present day Bering Strait and southward up the Mackenzie Valley, the northern hunter, over thousands of years, imperceptibly evolved a pattern of land use which successfully met his needs. It is the task of this chapter to focus, in a few pages, the activities of several millenia and describe how early people wrested a living from the northern land. Obviously it is not intended to be a definitive work but rather a review of the basic ingredients, hopefully, in a pattern which portrays the life of early man in the north and his close association with the land. The chapter closes with some observations on how those northern people viewed the land which may serve later as a benchmark for comparing changing attitudes as a result of the European's arrival and the establishment of the fur trade.

The exact timing of man's arrival in the Western Hemisphere is of course unknown but recent evidence indicates that he had been on this continent at least 25,000 years before the first European arrived.

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(1) Most authorities cite this as the probable range, see: Jennings (1974); Haynes (1969); Campbell (1963); MacNeish (1972); and Irving (1971).

Irving (1971:68-72) reporting on his own field work stated that there have been many examples uncovered in the Old Crow Flats of the Yukon Territory, of human workmanship in bone and that three of these have been dated to be between 25,000 and 29,000 years old.<sup>(2)</sup>

In the southwest Yukon, Johnson and Raup (1964) and MacNeish (1964) reported sites excavated in the Kluane-Dezadeash area revealing a series of cultures dating back 10,000 years. In the Fisherman's Lake area, near Fort Liard, Northwest Territories, Millar (1968) found a site said to be about 15,000 years old. However, available data are too few to evaluate this find and the identity of the material has yet to be satisfactorily explained (Irving 1971:71 and Cinq-Mars 1973:13).

Other evidence of man's early presence in northern North America has been found in caves near Trail Creek of Alaska's Seward Peninsula dated at about 13,000 years ago (Larsen 1968a, 1968b) and a site near Healy Lake, southeast of Fairbanks, Alaska which has been dated at about 11,000 years B.P. (Cook and McKennan, 1970). Farther east, at Acasta Lake south of Great Bear Lake, there is evidence of man's presence 7,000 years ago (Wright 1970). McGhee (1970) reported a date of 2,200 B.P. for a site at Bloody Falls near the mouth of the Coppermine River.

---

(2) Old Crow Flats are still used by, and partially provide a source of livelihood for, the Indians of the village of Old Crow, situated on the north bank of the Porcupine River, 67°35'N, 139°50'W, see Stager (1974); Naysmith (1971); Balikci (1963); Leechman (1954).

The theory that man migrated to the New World via a northern route is widely accepted (Jennings 1974:52; Haag 1972:18; and Wormington 1971:84). Haag (1972:15) pointed out that the Wisconsin glacier when it reached its maximum, about 18,000 years ago, <sup>(3)</sup> lowered the sea-level by as much as 460 feet, exposing a corridor or land bridge 1300 miles in width between Alaska and Asia. This bridge, one in a series <sup>(4)</sup> which allowed the migration to North America of various animals including the mastodon and mammoth, the muskoxen, bison, moose, elk, mountain sheep and goats, probably also provided the access for man to enter the Western Hemisphere.

Although man's migration from Asia was probably a result of his pursuit of large herbivores which were moving eastward, the land bridge did not represent the only means of access. Both Irving (1971:72) and Wormington (1971:85) argued that anyone sufficiently competent to live in the northern forest or tundra was no doubt equal to making a boat and crossing open water or moving across the winter ice.

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(3) Pers. Comm., J.R. Mackay.

(4) During the Pleistocene a series of at least four glacial and interglacial periods took place beginning about one million years ago (Solecki, 1972).

(ii) Cultural Evolution and Land Use

By the time the first Europeans arrived the aboriginal population of what is now the Yukon and Northwest Territories probably numbered some 35,000 (Mooney, 1928).

Jenness (1967:8-14) has classified Canada's native population on the basis of seven cultural areas. Two of these, the Tribes of the Mackenzie and Yukon Basins<sup>(5)</sup> and the Eskimos<sup>(6)</sup> cover virtually all of the two territories. A third, the Tribes of the Cordillera represented by the Tagish of Marsh and Tagish Lakes inhabited a small region in the southern Yukon (see Map no. 3).




The Tagish, about whom little is known prior to a report by Dawson (1888), were probably an Athapaskan tribe originally. However, by the 19th century their language was Tlinkit. Numbering less than 100 they occupied a small area in the south-central Yukon and were compelled to work for the Tlinkit, purchasing furs from the Indians of the Yukon interior for subsequent trade on the Pacific Coast.

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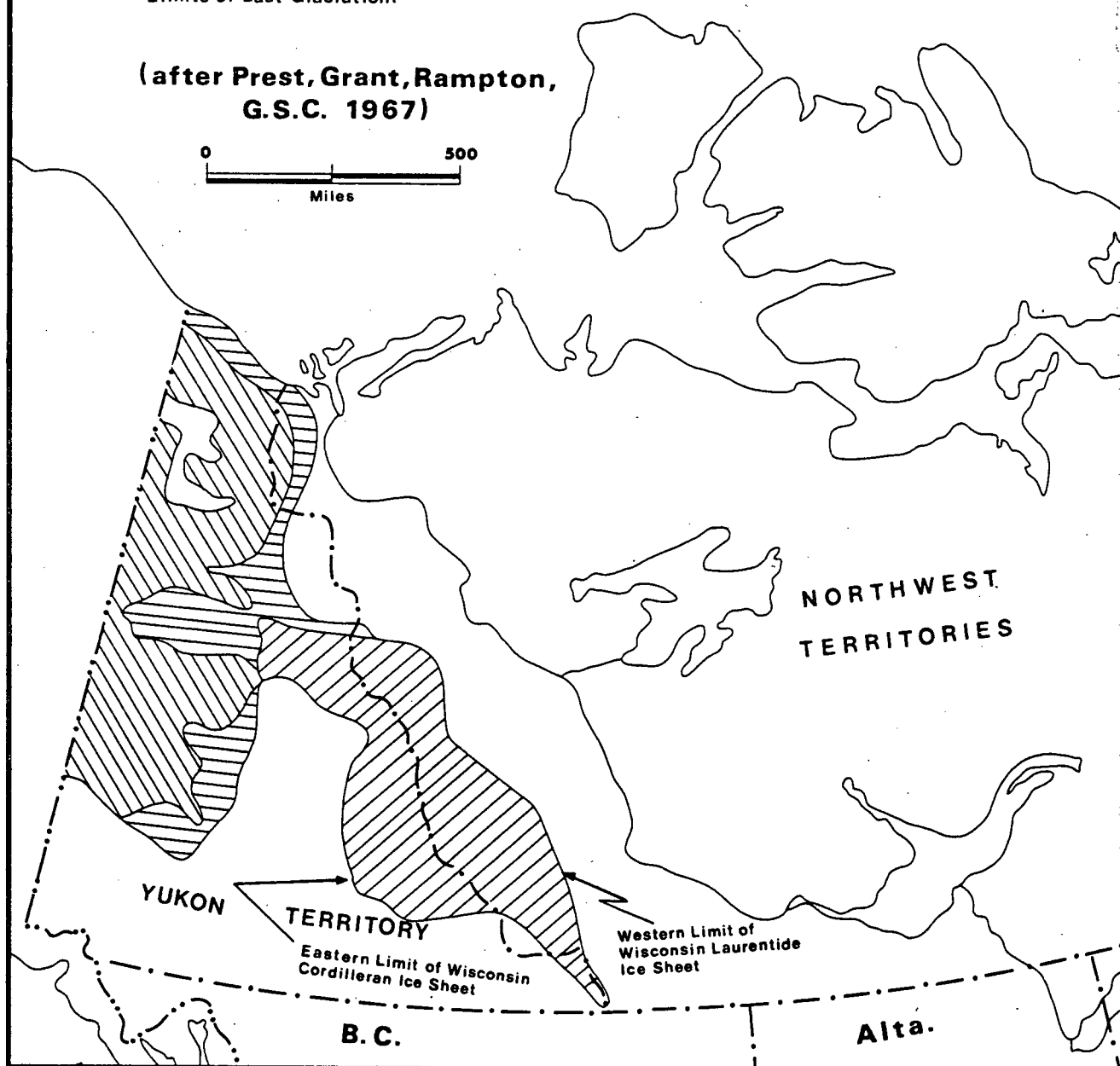
(5) This cultural area contains nine distinct tribes of which seven reside wholly or in part north of 60°N lat. viz. Kutchin, Nahani, Slave, Dogrib, Hare, Yellowknife, and Chipewyan (Jenness 1967:378), see Map no. 4.

(6) Includes five groups: Mackenzie, Copper, Caribou, Central and Labrador Eskimos. All but the latter were located in the Yukon and Northwest Territories in the 16th century (Jenness 1967:406), see Map no. 8.

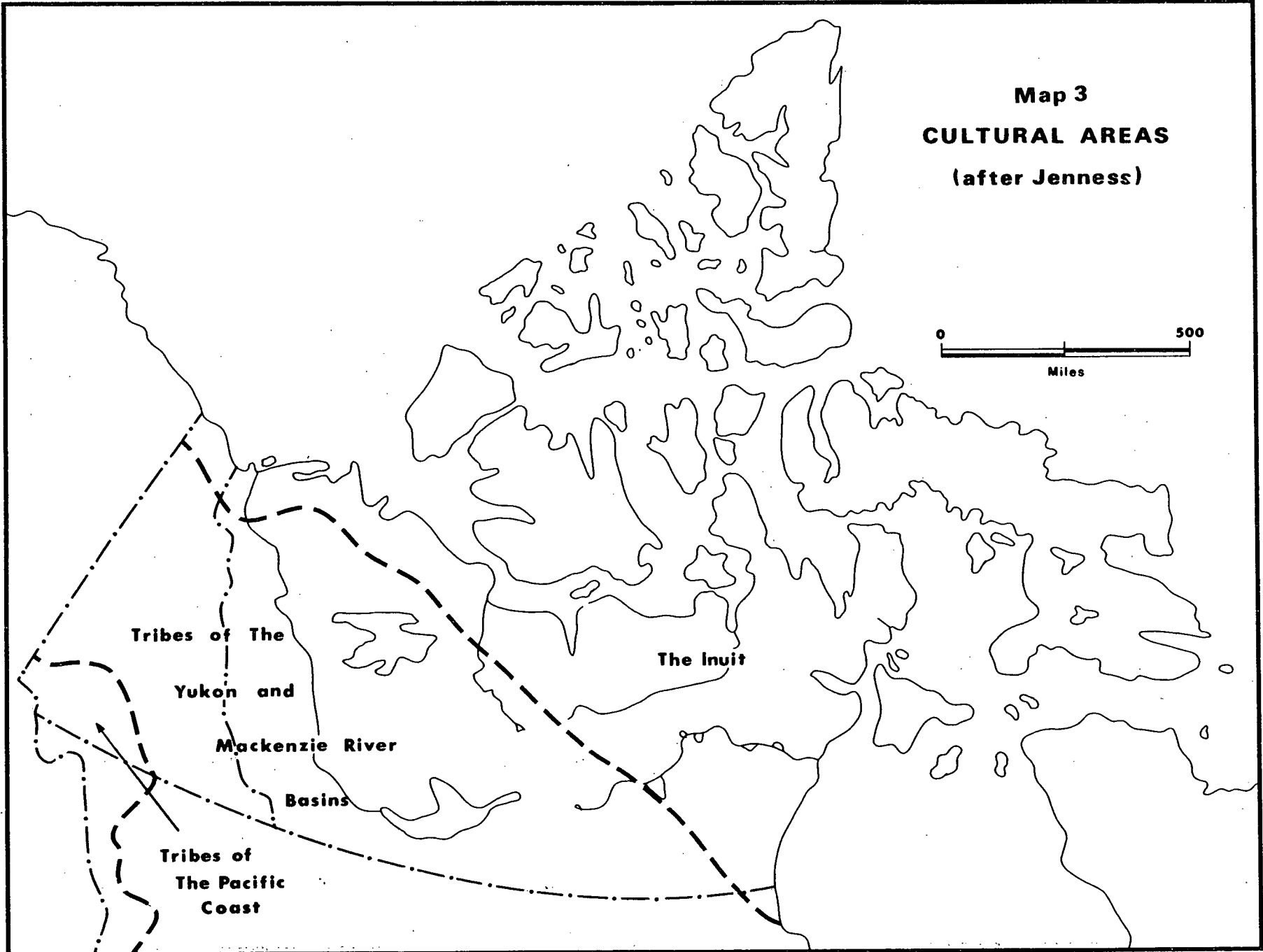
## Map 2 GLACIATION

-  Unglaciaded Areas
-  In Part Unglaciaded, In Part Covered  
By Ice of One or More Glaciations.
-  Area of Pre-Wisconsin Glaciation Beyond  
Limits of Last Glaciation.

(after Prest, Grant, Rampton,  
G.S.C. 1967)



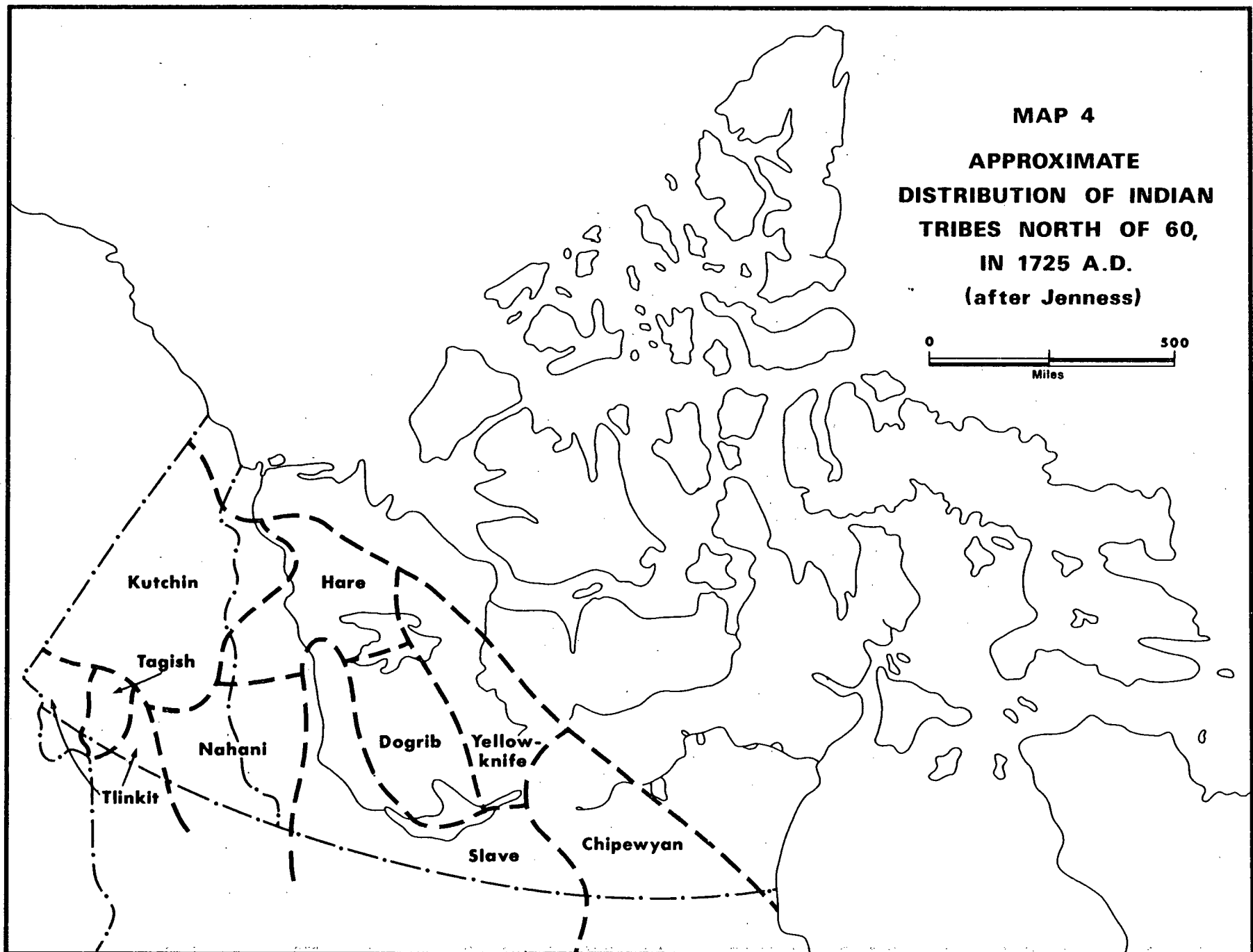
**Map 3**  
**CULTURAL AREAS**  
**(after Jenness)**





**MAP 4**  
**APPROXIMATE**  
**DISTRIBUTION OF INDIAN**  
**TRIBES NORTH OF 60,**  
**IN 1725 A.D.**  
**(after Jenness)**

0 500  
Miles



Indians of the Mackenzie and Yukon Basins (7)

The Tribes of the Mackenzie and Yukon Basins ranged from the treeline, extending roughly from the Mackenzie Delta to the point of intersection of the 60th degree north latitude with the western shore of Hudson's Bay, south and west over virtually all of the Yukon and the Northwest Territories. The pre-European populations in this area was estimated by Mooney (1928) to be about 12,000.

These tribes consisted mainly of woodland people, and although living near the treeline, some such as the Slave, Hare and Nahani rarely ventured into the barren grounds. The Chipewyan, Dogrib, Kutchin and Yellowknives when in pursuit of game, particularly the migrating barren ground caribou, made frequent expeditions into the area north of the treeline.

These aboriginal people as well as the Inuit (Eskimos) farther north were completely self-sufficient having evolved a way of life which represented a true closed society. The seasonal characteristics of the game and fish upon which they were heavily dependent were reflected in their dwellings, hunting patterns and social organization.

The Indians of the Mackenzie Valley and Yukon relied heavily upon caribou for food, clothing and shelter. The Chipewyan, Kutchin and Dogrib all hunted the barren ground caribou in the forest region in

---

(7) The following discussion is drawn primarily from Jenness (1967).

winter and north of the treeline in summer. The typical method of hunting the caribou was to spear them in open water during the summer and by snare or bow and arrow in winter. Although 'edge-of-the-wood' people, their natural reluctance to leave the forest is perhaps typified by the fact that the Dogrib packed fuel wood when going to the barren grounds. For all Indian tribes these northern excursions were for a particular purpose and of short duration. The Slave Indians, who never left the forest region, relied upon woodland caribou and moose for their main source of food.

Snares were commonly used by all tribes for capturing various animals in addition to the caribou including moose, waterfowl and hare. The art of trapping by means of wooden traps, which for the Slave included the beaver, was developed prior to the arrival of the fur-trader.

Fish also represented a substantial portion of the Indians' diet and as a result they had developed, prior to the arrival of the European, a wide range of fishing gear which included spears, bone hooks and nets. The Chipewyan made fish nets of babiche whereas the Dogrib, Slave and Hare used willow bark. The Kutchin, who also relied heavily on fish, used all of the above gear but in addition had developed a double gaff, perhaps as a result of their contact with the Inuit, and a fish basket similar to that used by the coastal Indians.

Because of his total dependence upon country food, the northern Indian was keenly aware of the life cycle of animals and fish and knew the value of various plants from the standpoint of food, tools

and weapons. Concerning the judicious use of resources Jenness (1967: 50) made the following comment: "certainly they were wasteful when buffalo and caribou were plentiful and had no conception of the conservation of game; but then no conservation was necessary as long as they lacked fire arms, for natural increase more than offset losses".

Stone tools formed the basis of the northern native's material culture. Prior to the European's arrival the Indians and Inuit of northern Canada had no metals, except in some isolated cases where limited use was made of copper, to make tools or weaponry. Virtually all of the Mackenzie Valley and Yukon Indians used two basic tools, stone adzes mounted on wooden handles and knives made either of bone or caribou antler. With these they were able to convert timber into rough boards for use in making such items as toboggans and paddles, and poles for their dwellings.

Other wood products furnished by the northern Indian included canoes made from spruce bark and less frequently birch bark (in 1969 the writer observed the Indians of Nahanni Butte, N.W.T., using a spruce-bark canoe), snow shoes and various eating utensils. Spruce bark was frequently used to cover pole frames in the construction of dwellings.

Spear-tips, daggers, arrowheads and chisels were made of bone or caribou antler. Some Chipewyan and Slave hunters had learned to use copper, a trading commodity which probably originated with the Eskimos of Coronation Gulf, for such items as arrowheads, hatchets and

knives.

For winter hauling the northern Indian developed a rough toboggan made by lashing planks together. The Kutchin however used the two-runner sled which may have been as a result of their contact with the Inuit. Sleds were best suited to the hard packed snow of the barren grounds. The fact that other tribes who also occasionally travelled in the barrens did not also use the sled probably reflects the fact that their northern excursions were limited to the summer, and the softer snow conditions of the forest region, where they wintered, were more suited to toboggans.

The dwellings of the northern Indian reflected his migratory life and movements which were governed by the seasonal characteristics of the fish and game. Except for hide coverings which were packed from one location to another, the building materials used were those in the area of the campsite. Camps or individual dwellings were strategically located in order to capitalize on the presence, in large numbers, of fish or game, for example at the traditional stream crossings of migrating caribou, and adjacent to good drinking water and fuel sources.

The summer dwellings of most Mackenzie Valley and Yukon Indians consisted of conical huts made from poles and covered with either caribou hide or brush and spruce bark. Variations of this were the lean-tos of the Hare and the dome-shaped lodge of the Kutchin. The latter was usually 9-12 feet in diameter at the base and consisted of arched willow poles both ends of which were driven into the ground;

the frame was then covered with caribou skins, with a hole at the top and centre to allow smoke to escape.

The Kutchin used the same type of dome-shaped building in winter simply by banking snow about it and spreading coniferous boughs on the floor. Winter dwellings for the balance of the northern Indians usually were low rectangular cabins constructed of poles, the walls chinked with moss and the roof covered with brush, bark or hides.

The migratory nature of the northern hunter had a direct effect upon the social structure in which he lived. The basic unit of social organization was the family, dwelling together. In turn, related families grouped together in small bands in order to hunt and fish in specific geographic areas.

The band, although it was a relatively stable unit with territorial boundaries, did fluctuate in size with family groups dispersing and uniting depending on the season and the nature of the hunt. The tribe as an amalgamation of several bands did not exist in the northern context. Although several bands might unite for a few days during a tribal festive period the only clearly defined political unit was the band. Tribes were nothing more than groups of scattered bands with similar speech and customs and common interests due to intermarriage but with no central governing authority.

Each family group and band had a nominal leader in whom was vested no real authority. Because the composition of the bands varied, so did their leaders. During time of war each band selected an experienced hunter as its leader but when hostilities ended so did his

mandate to lead. Bands were normally widely scattered in order to take advantage of the best hunting areas within a region. For this reason it was difficult to organize large groups to wage lengthy wars, particularly when it required leaving known game and fish supplies. Hence wars were usually of short duration and local in nature.

Law and order within the band was based on public opinion rather than a legislative structure. Rules of conduct were handed down by word of mouth and where third party intervention was needed an informal council of hunters was formed to aid in settling local disputes.

#### The Inuit <sup>(8)</sup>

Whereas the distribution of the northern Indian was confined essentially to the Yukon and the forest region of the Northwest Territories, the Inuit and indeed their ancestors dating back at least 5000 years, were present in various locations throughout the Arctic from Alaska to Greenland.

In Canada the Eskimo way of life, defined by Taylor (1968:2) as being a distinctive culture and economy adopted to a treeless country, divides into four major periods or stages, viz: Pre-Dorset, Dorset, Thule, and Central Eskimo or Inuit.

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(8) The Inuit of Canada prefer to use their own name for themselves rather than 'Eskimo' which is a Cree word meaning 'eaters of raw meat'. Jenness (1967:408) pointed out that despite the name, the Eskimo always preferred cooked food and ate raw meat and fish only when driven by necessity.

The predecessors of the Pre-Dorset, the Denbigh people, came from the Bering Sea region (Giddings 1964:243, and Taylor 1971:160) and apparently these northern hunters were well equipped to survive in the Arctic. In this regard Giddings<sup>(9)</sup> stated that "The flint work of the Denbigh flint complex, the oldest cultural horizon yet identified in the Bering Strait region, is not only unique but possibly the world's most sophisticated. It shows no signs of being brought there in total from elsewhere".<sup>(10)</sup>

The Denbigh people moved eastward across northern Alaska, the central Canadian Arctic, the eastern arctic islands to Greenland and ultimately down into Ungava Peninsula and the west coast of Hudson Bay (see Map no. 5).

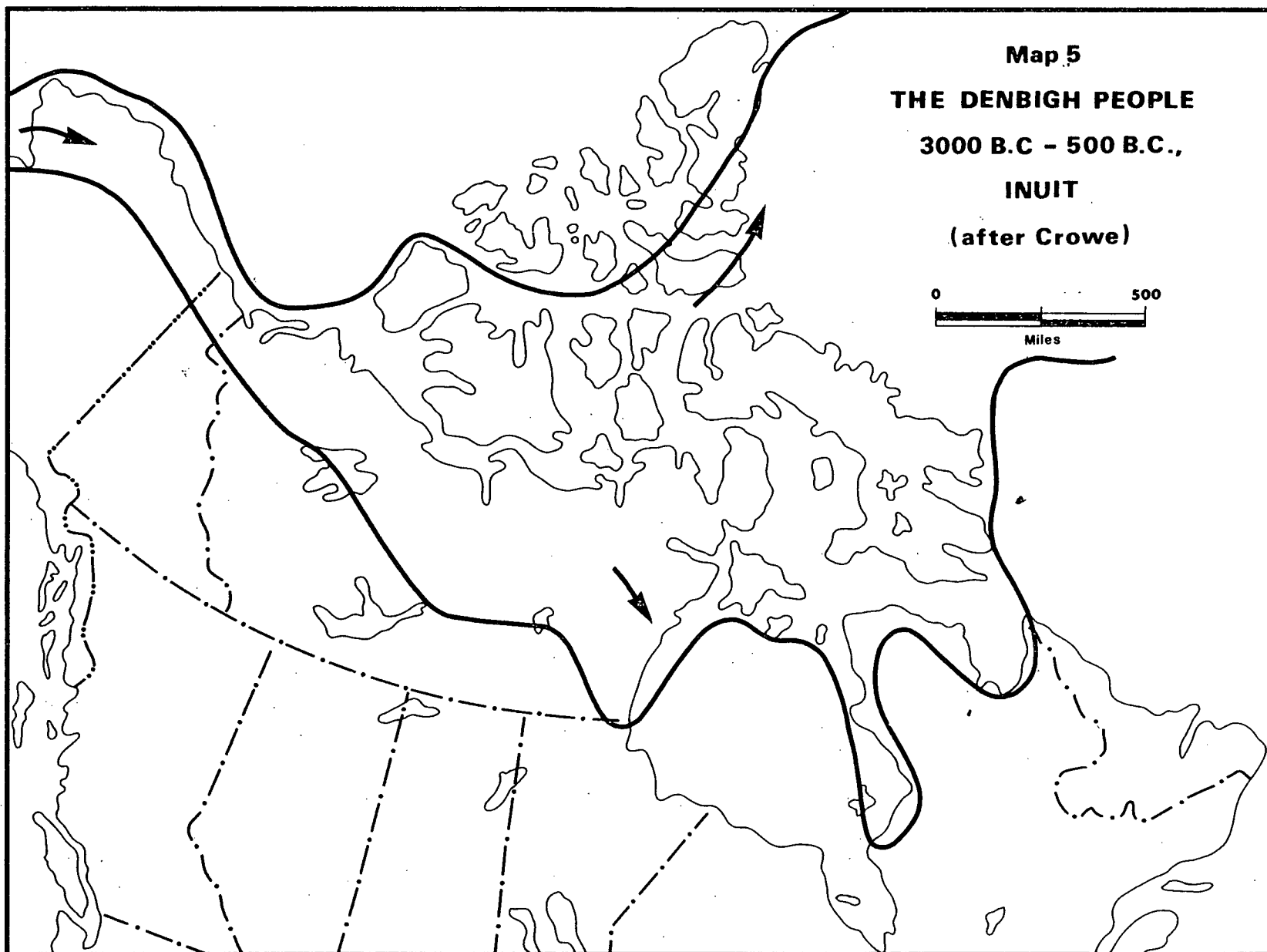
Sites of the Pre-Dorset culture, which refers to the eastward development, through Canada, of the Denbigh Flint Complex, indicate that those people lived in small, widely scattered, nomadic bands. Moving seasonally in order to hunt caribou and seal probably supplemented by fish and birds in summer, the Pre-Dorset culture persisted to about 800 B.C.

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(9) Discovered the 'Denbigh Flint Complex' at Cape Denbigh, Alaska, on the shore of the Bering Sea in 1948.

(10) Giddings, J.L. "Early Man in the Arctic", June 1952 in *Early Man in America - Readings from Scientific American*, eds, R.S. MacNeish, W.H. Freeman and Company, San Francisco, 1972.



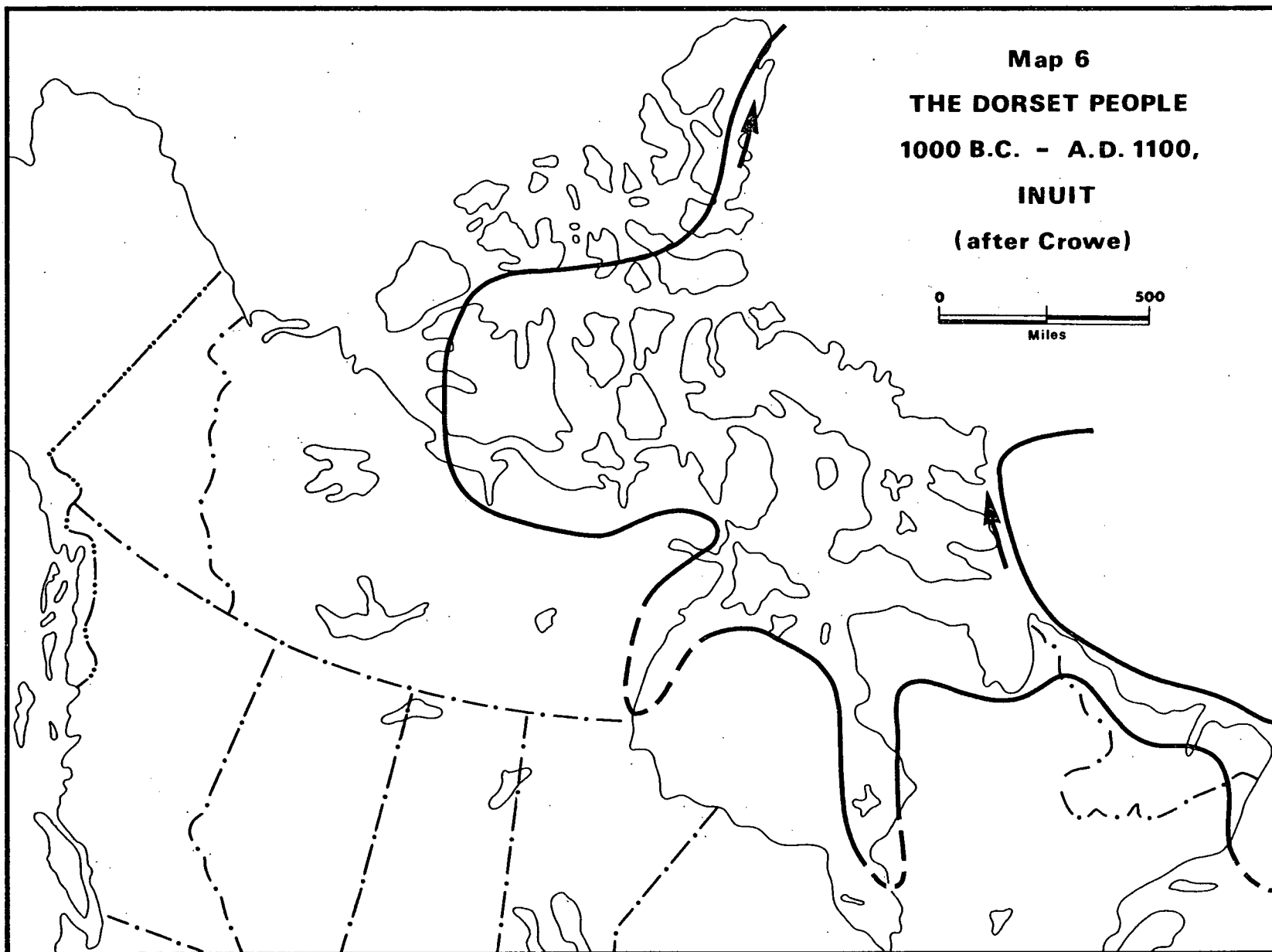


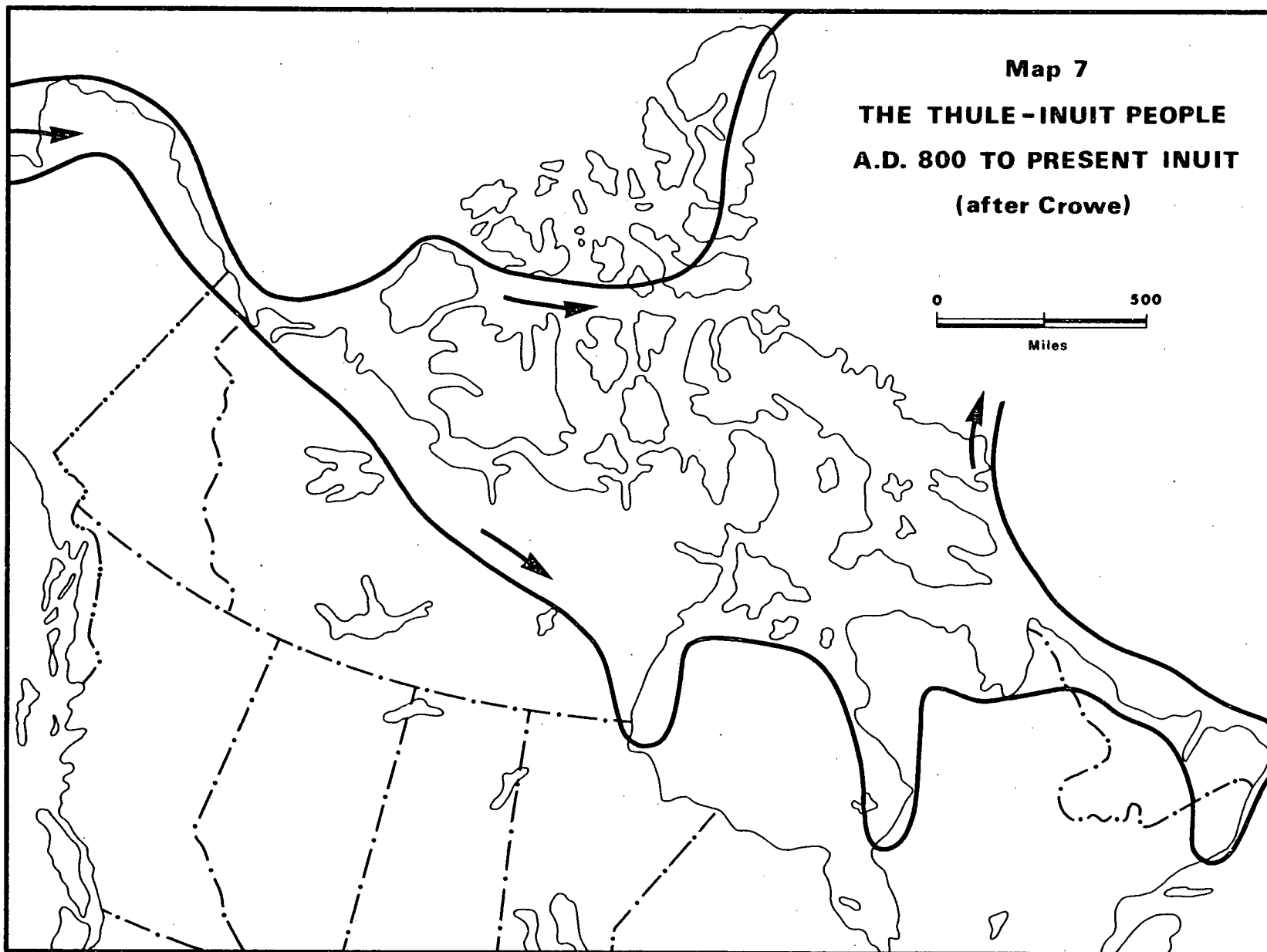
At one time the Dorset culture was thought to have evolved from that of the Indian tribes of the Great Lakes and St. Lawrence Valley region, however, it is now generally agreed that it developed first within the Canadian Eastern Arctic from the Pre-Dorset culture (Taylor 1971:163) (see Map no. 6). The Dorset people appear to have lived a seasonally nomadic life similar to their Pre-Dorset ancestors. One distinctive difference in the two cultures was the Dorset art which was characterized by delicate carvings in ivory, antler, and bone, depicting animals, fish, birds and humans. The Dorset also developed blades of ground and polished slate which seemed to have no connection with the Pre-Dorset culture and they may have invented the snow house (Taylor 1971:164). About A.D. 900 the Dorset culture began to disappear and to be replaced by the Thule culture, the third major period in Canadian Eskimo prehistory.

Migrants of the Thule culture whose origin was, as in the case of the Pre-Dorset, the region of the Bering Sea, began moving eastward from Alaska about 900 A.D., and along the arctic coast and northward through the arctic islands (see Map no. 7). The Thule people were even better equipped to live in a treeless country than were their ancestors. The Thule hunter made extensive use of dogs for hunting and hauling sleds thereby increasing his efficiency and mobility,<sup>(11)</sup> whereas there is little evidence that the Dorset people had domesticated the dog.

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(11) Crowe (1969:21) suggested that the rapid spread of the Thule culture through the Arctic was probably due in large part to dogteam transportation.





Perhaps the most significant feature of the Thule culture was the development of gear and expertise with which to hunt the baleen whale. This relatively large and constant source of food available to those early whalers allowed them to lead less nomadic lives and resulted in the construction of larger and more permanent settlements. The Thule winter village consisted of between six and thirty houses solidly built of stone slabs and sod set over a whalebone framework. The Thule people also used snowhouses for temporary accommodation. The art of construction was probably learned from the Dorset culture since snowhouses were not an Alaskan feature (Taylor 1971:167). <sup>15</sup>

The Central Eskimo culture was very similar to that of the Thule people from which it evolved. This fourth and final stage in the cultural evolution of the Canadian Eskimo appeared in the 18th century. These recent people derived directly from the Thule culture which ended mainly because of a marked decline in whale hunting. Taylor (1971:168) <sup>16</sup> considered that the decline in whale hunting may have been in part a result of a harsher climate during the period 1650-1850 <sup>(12)</sup> reducing the whales' summer range; also the presence of the European whalers further reduced the whale population.

With the decline in whaling the Thule had to resort to a more nomadic life, relying upon the more scattered herds of seal and walrus

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(12) The 'Little Ice Age' from 1650 to 1850 may also have been the reason for the Thule population withdrawing from the Canadian Arctic Islands of Ellesmere, Devon, Somerset, Cornwallis and Bathurst (Taylor 1971:168).

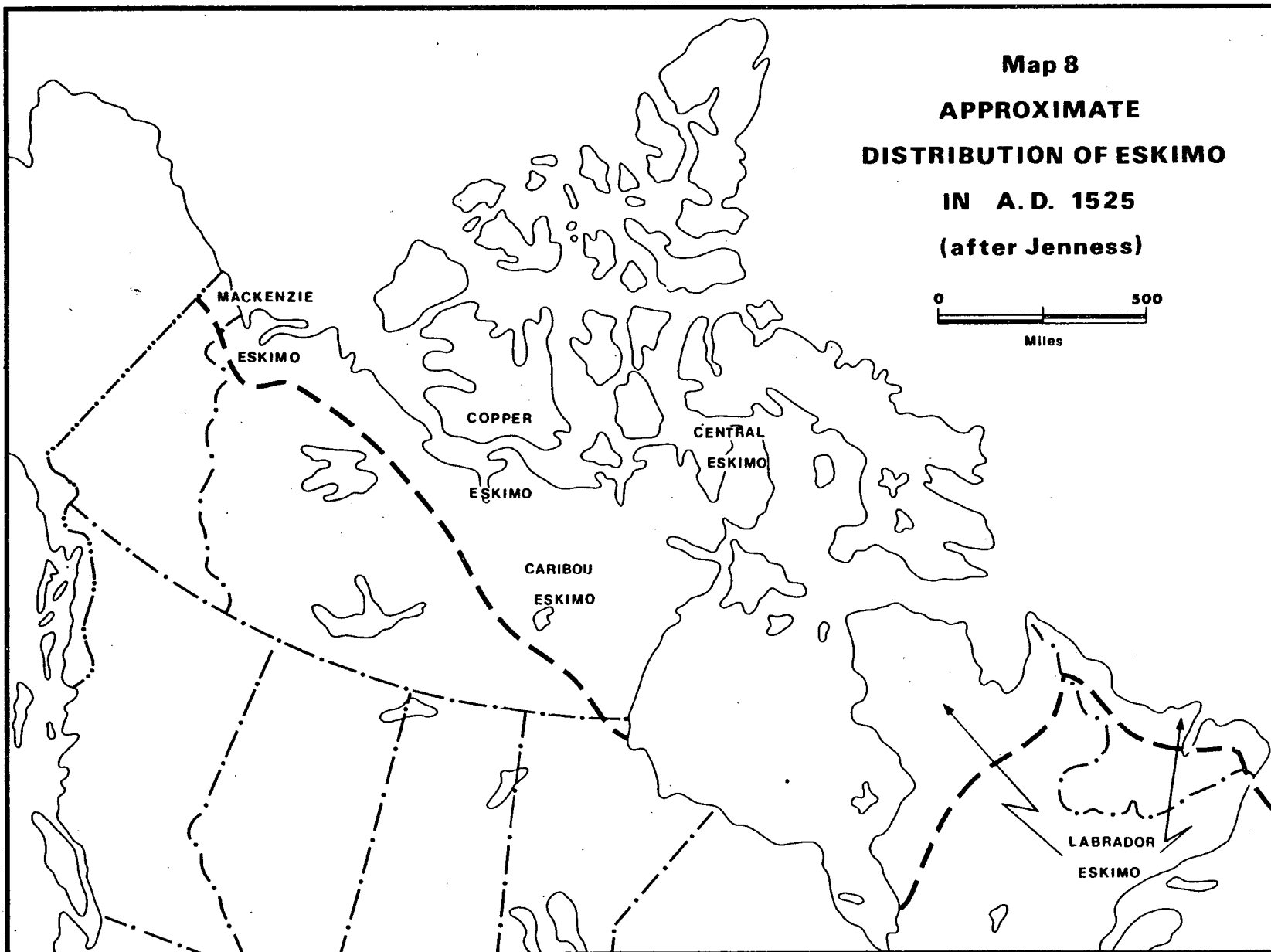
and in the process abandoned their large permanent villages and gradually shifted to the snowhouse on the sea ice. The change from Thule to Central Eskimo culture was completed with the arrival of the European.

The pre-European population of Canadian Inuit was estimated by Mooney (1928) to have been about 28,000. Nearly all of the Eskimo made their homes along the coast where they could hunt sea mammals year round, and, in summer, harvest the migrating salmon. Unlike the bands of Indians described earlier the Inuit did not follow the movements of the caribou throughout the year but basically limited the hunt to a two or three month period when the summer migration took the caribou to their northern grazing and calving grounds.

The 'Caribou' Eskimos, a small group who lived inland from the western shore of Hudson Bay did rely on the barren-ground caribou as their prime food source and virtually never went to the coast for sea mammals (see Map no. 8). According to Jenness (1967:407) the barren-ground or 'Caribou' Eskimos constantly suffered from famine during the winter months, since most of the caribou migrated southward to graze near the treeline. Coastal Eskimos were also better off than those who lived inland due to the fact that the blubber of the sea mammals, particularly the seal, provided a fuel much superior to caribou fat. This fuel, burned in soapstone lamps, was used for light and heat as well as for cooking and thus rendered the winter homes of those on the coast more comfortable than those of the inland Eskimo.

The Eskimos of the Mackenzie Delta region used nets to capture seals but unlike the Indians did not use fish-nets until after the arrival

**Map 8**  
**APPROXIMATE**  
**DISTRIBUTION OF ESKIMO**  
**IN A. D. 1525**  
**(after Jenness)**



of the European, although the latter point has been questioned by Mathiassen (see Jenness 1967:411). From roughly October to May, when the sea was ice covered, the breathing hole method of sealing was employed. During open water periods, seals were stalked as they lay on the shore or floating ice. During these periods seals were also harpooned from kayaks. <sup>(13)</sup>

The Eskimo could not construct pounds in which to capture caribou as did the Athapaskan Indians due to the absence of large willow or other woody plants. However, they could organize group hunts whereby caribou were herded into the water and speared. They also devised a system whereby caribou were driven between two converging rows of stone monuments (inukshuks) <sup>(14)</sup> toward concealed hunters.

It was pointed out earlier that just prior to the time of the European's arrival the form of settlement and style of the Thule dwelling began to undergo change due to a declining whaling economy. The return to a more nomadic way of life resulted in an increased use of the snowhouse. Where driftwood was available, as in the Mackenzie Delta

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(13) The kayak was used mainly for hunting and crossing small lakes and rivers whereas the umiak, a larger, open vessel, propelled by oars, was used for coastal travel. According to Jenness (1967:110) the Eskimos were the only native people in Canada to propel their boats by oars.

(14) Taylor (1972:77) has described in detail this system of caribou hunting.



region and the Tuktoyaktuk peninsula, more permanent winter dwellings were made of logs. These log houses were rectangular in shape, semi-subterranean and turf-covered with long underground passageways and entrances in the floor. The universal summer dwelling was the skin tent of caribou or seal, conical shaped in the western Arctic and with a ridge in the eastern Arctic.

Because of the particular conditions under which they lived the dress of the Canadian Eskimo was unique compared with the clothing of the various Indian bands to the south. Shirts (long pullovers with hoods and extended tails), breeks and stockings were all made of caribou fur, shoes and boots of sealskin. All were worn double in winter with the fur of the inner garment against the body. Hunters also used sealskin shirts during wet weather since caribou hide loses its fur with dampness. The whole outfit, even in winter, weighed only about five pounds.

Reference has already been made to the skills of the early ancestors of the present Eskimos, as illustrated by the Cape Denbigh site, in chipping flint for blades and projectile points. Subsequent cultures, building on this artisanship, excelled in the manufacture of various tools, weapons and utensils. From flint and quartz were made, for example, arrowheads, speartips, knife blades, saws and drills; and from ground slate, single and double-edged knives were made.<sup>(15)</sup> From

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(15) In the Coronation Gulf area, local copper was substituted for flint and slate in all cutting tools.

bone, antler and ivory the Eskimo learned to manufacture such items as: shoeing for sled runners; ice-chisels; arrows; harpoon parts; various handles; needles and thimbles. (16)

The Eskimo talent for carving was not limited to meeting their material needs but included sculpturing and engraving which reflected a love of art. For examples of some of this early work see Taylor (1968:10-11) and Jennings (1974:348-349). It should be noted too that their lives were made richer through the expression of their heritage in song, stories and dance and through various games which they played.

General rules of conduct handed down by each generation regulated life within the small but widely scattered Eskimo groups. Even less structured than the bands of northern Indians, Eskimo communities recognized no chiefs and members were never coerced or made to comply with pre-set conditions. (17) For anti-social practices such as theft or murder the penalty was death either by sentence of the group or through the operation of a blood-feud. However, discord was not common and there was little need for established authority (Jenness 1967: 416).

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(16) The importance of Eskimo women within the family group was well recognized and their respective position was superior to the women of the Athapaskan Indian bands to the south and west. According to Jenness (1967:420) this was due in large part to the indispensability of expert seamstresses for making tailored clothing necessary for life in the Arctic.

(17) On this point Birket-Smith (1929:1260) stated "among the Caribou Eskimo there are no chiefs, no clan system and no lay bonds upon the initiative of the individual. They know no government."

The successful hunter shared his catch with other members of the group hence, over time, no individual or family was better, or less well off, than others. However, because the supply of food available to any group or community was limited, no long-term welfare program was possible. Thus during periods when food was in particularly short supply it was sometimes necessary to regulate the number of mouths to feed. (18)

### The Concept of Land

Both the Indians and Inuit held various beliefs concerning the supernatural world and practised certain customs with regard to their physical and mental well-being. Several authors including Tuan (1974:83) and Blue (1974:192) have discussed the native's perception of land with respect to creation, and Berry (1974:203) stated that "despite a range of uses of land among native peoples in Canada, a strong cultural and psychological attachment to it is characteristic of most of them."

Considering his total dependence upon the land to provide food, clothing, shelter and energy, it is not surprising that it came to have a philosophical and religious meaning for native people of the pre-contact period. For example, the Athabaskan's concept of earth (dinedah), as the woman and the sky, as the man. Dinedah was considered

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(18) Population control included female infanticide, senilicide, invalidicide, adoption and migration.

the beginning, the spirit from which life came, the place from which succour came and the place to which the spirit returned (Blue 1974:193).

With this all-inclusive concept of land it is not surprising that neither the northern Indians nor the Inuit considered it in terms of private property. Jenness (1967:124) pointed out that land was never sold or alienated in any way.

Although personal property passed between individuals there were no individual owners of real property since land used for hunting, trapping and fishing purposes belonged to the band and was a prerequisite for survival. Any rules pertaining to land were really game laws; for example the need for a group to obtain permission before hunting in another group's area.

There appears to be at least one area where the individual did exercise some authority over natural resources. Driftwood dragged from the water and up the shore to a point above high water became the property of the individual Eskimo finding it. Using a method characteristic of present day forest companies, the owner would then apply his mark to the wood. In the case of the Eskimo this was done using a stone adze.

## CHAPTER TWO. THE INTRODUCTION OF WESTERN CULTURE

### (i) Early Exploration, Discovery and Occupance

It is nearly 400 years since Frobisher's voyages to the Canadian Arctic. Although they marked the beginning of an era of discovery, they had little, if any, lasting effect upon the life of the northern native. It would be another 200 years before Europeans would actually penetrate the closed system of which the northern Indians and Inuit had been a part for thousands of years.

As a result of the fur trade, long standing patterns of land use began to change. Trading posts, the first of which was established north of 60 in 1786, became regional focal points and in some cases provided the impetus for the growth of settlements. As settlements grew they often included church missions, thus introducing another established element to a hitherto nomadic population.

This chapter considers the period of nearly 300 years between Frobisher's discovery and the termination of the Hudson's Bay Company monopoly. It attempts to portray the nature of western society's entry into the north and the role played by the explorer, trader and missionary. That much of the discussion centres on the Mackenzie Valley and the Yukon Territory reflects the fact that until this century there were no trading posts in the territories east of Great Slave Lake (see Map no. 12).

The chapter concludes with observations concerning the changes which took place during and following the contact period. It is

important to bear in mind that the observations apply to specific areas and groups of native people, hence it is necessary to exercise some discretion when drawing general conclusions about the whole of the north.

Not until Martin Frobisher's third expedition to Baffin Island in 1578 A.D. was an attempt made to establish a European colony in the Canadian Arctic. During several centuries prior to this date, voyages of discovery had taken place in the north Atlantic and eastern North America.

The first record of polar discovery is that of Pytheas, a Greek citizen of considerable and diverse talents, from the Mediterranean colony of Massilia. In 320 B.C. Pytheas, having completed a commission for the merchants of Massilia, sailed north and west from Britain for six days to Thule,<sup>(19)</sup> an Arctic Island.

Pytheas described the frozen sea surrounding Thule as follows (Strabo c. 7 B.C.:399):

"...there was no longer either land properly so-called, or sea, or air, but a kind of substance concreted from all these elements, resembling a sea-lungs - a thing in which, he says, the earth, the sea and all the elements are held in suspension; and this is a sort of bond to hold all together, which you can neither walk nor sail upon."

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<sup>(19)</sup> Pytheas described Thule as being "...the most northerly of the Britannic Islands, is farthest north, and that there the circle of the summer tropic is the same as that of the arctic circle." From this Strabo (c. 7 B.C.:441) deduced the latitude of Thule to be 66° north. Kerwan (1959:16) suggested that Thule was probably Iceland.

Convinced that he could proceed no further, he returned to the Mediterranean. Thus at the time Pytheas was cautiously observing the 'frozen north' from its periphery, people of the Dorset culture in the Canadian Arctic were mastering it at its centre and would leave for future civilizations proof of their culture in the form of fine carvings of ivory and antler.

Following the discovery, settlement and colonization of Iceland and Greenland by the Vikings in the ninth and tenth centuries A.D., respectively, the voyages of Jerjulfsson and Eriksson led to the discovery of Baffin Island, Labrador and Newfoundland in about 1000 A.D.

By the 13th century the Norse colonies on Iceland and Greenland had begun to wane. Finally the combination of a progressively colder climate and a decline in Norwegian sea-power (Kerwan 1959:18) led to the abandonment, in the 15th century, of Norway's crown colony in Greenland. However, coincident with the termination of colonial activities in the north Atlantic was a new thrust, namely Europe's determination to find a sea-route to the kingdoms of Cathay.

The voyages of Columbus, Cabot and Cartier in the late 15th and first half of the 16th centuries had done little to sustain interest in the possibility of a western passage to the Orient. As a result Britain turned her attention eastward in search of a North-East Passage, around Russia, and for twenty-five years following 1551<sup>(20)</sup> she

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(20) On December 12, 1551, 'The Mysterie and Companie of the Merchants Adventurers for the Discoverie of Regions, Dominions, Islands and Places unknown' was established. This Company of Merchant Adventurers, with Sebastian Cabot its first governor, directed its earliest activities to the search for a North-East Passage (Kerwan 1959:28).

actively pursued exploration and trade in that region.

By 1576 a rekindled interest in the possibility of a North-West route to Cathay again shifted Britain's attention to the New World and the Canadian Arctic.

In June of that year Martin Frobisher, an Englishman born in Yorkshire about 1538, sailed for the Canadian Arctic, commissioned by the Muscovy Company to search for a North-West Passage.

Christopher Hall, Frobisher's Master aboard the ship Gabriel recorded, "The 11 August we found our latitude to be 63 degr. and eight minutes, and this day we entered the streight".<sup>(21)</sup> On the 19th of August, Frobisher and his men sighted Canadian Eskimos for the first time. Hall continued:

"...the Captaine and I tooke our boate, with eight men in her, to rowe us a shoare, to see if there were there any people, or no, and going to the toppe of the Island, we had sight of seven boates, which came rowing from the East Side, toward the Island: whereupon we returned aboard againe:...then I went on shoare my selfe, and gave every of them a threadden point, and brought one of them aboard of me, where hee did eate and drinke, and then carried him on shoare againe."

This initial cordiality was not sustained however and Frobisher, having had five of his men captured, kidnapped one of the Eskimos. Unsuccessful in his attempt to exchange his captive for the five crew members, Frobisher sailed for England August 26th, 15 days after his arrival. The Eskimo died in England shortly after the

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(21) Now known as Frobisher Bay at the south-eastern tip of Baffin Island.



expedition returned October 1576<sup>(22)</sup> (McFee 1928:53).

Frobisher fulfilled his promise to Michael Lock, one of the principals in the Muscovy Company, by bringing back 'something from the land' to commemorate his first landfall in the New World. It happened to be a piece of black rock and ultimately resulted in the first European land use operation in the Canadian Arctic.

Upon receiving the piece of rock, Lock who was no doubt concerned about his substantial financial participation in Frobisher's voyage, wondered about its value. Undismayed by three independent assays which showed the rock to have no commercial value he took heart from a fourth assayer who detected 'a little powder of gold' (McFee 1928: 57). Lock, sufficiently encouraged, promoted the formation of the Cathay Company and became its first governor. Commissioned by the Company and Queen Elizabeth I, Frobisher again sailed to the New World. He returned to England in September 1577 with 200 tons of the black 'ore' dug from one of the islands near the mouth of Frobisher Bay. While there he met more Eskimos but failed to find any trace of his five crew members lost the previous year.

Although the 200 tons of rock proved to be no more valuable than the original piece, Lock was able to gain additional financing for the now insolvent Cathay Company, and in May 1578 Frobisher once again

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(22) This was not the first Eskimo to be so treated; in 1501 Gaspar Corte-Real took to Portugal 50 captured Eskimos, probably from Labrador (Cooke and Holland 1970:173).

sailed for the Canadian Arctic. The third voyage, unlike the first two, was for purpose of colonization and included fifteen ships and 100 men, including 30 Cornish miners and a governor for the proposed colony. Frobisher's plan to mine gold during the winter had to be abandoned when his fleet was caught in a storm and he lost a ship which carried half of a prefabricated building, which was to have housed the miners.

After inadvertently entering Hudson Strait, which Frobisher named 'Mistaken Straytes' he returned to Frobisher Bay where he moored his ships near the Countesse of Warwicks Island, whereupon he ordered the miners ashore. Before leaving for England with 1000 tons of the black rock he built a small house and his chaplain held a religious service on the island. (23)

During Frobisher's absence the 'gold ore' was proved beyond question to be worthless and the Company of Cathay was placed in receivership.

Thus ended phase one of Europe's presence in the Canadian Arctic. Beyond the fate suffered by the one unfortunate captive, the

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(23) Thomas Ellis, one of Frobisher's officers, in his account of the third voyage, said, "But before we tooke shipping, we builded a house in the Countesse of Warwicks Island...Also here we sowed pease, corne, and other graine, to prove the fruitfulness of the soyle against the next yeere. Master Wollfall on Winters Fornace, preached a godly sermon, which being ended, he celebrated also a Communion upon the land." (Hakluyt 1927:163,265).

life of the Eskimo people was not particularly affected by Frobisher's three visits. Europe's first attempt at land use in the Canadian Arctic resulted in considerable travail and no reward. However, there were gains; first-hand observations of the North's original occupants and their way of life were noted, the entrances to Hudson Strait and Frobisher Bay were mapped and several islands on Canada's eastern Arctic shore were discovered.

The next attempt at northern settlement would not come for 100 years but during the interim the search for a North-West Passage continued and much of Canada's eastern Arctic shoreline was explored. Between 1585 and 1616, Davis, Weymouth, Bylot and Baffin<sup>(24)</sup> explored and mapped the coast of Baffin Island from Lancaster Sound, at its northern extremity, southward to Hudson Strait, including Cumberland Sound and Frobisher Bay.

Henry Hudson, sponsored by the Northwest Company,<sup>(25)</sup> explored the north shore of Hudson Strait and followed the east coast of Hudson Bay south to James Bay where his ship the 'Discovery' was caught in the ice in the winter of 1610-11. Thomas Button, also sponsored by the

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(24) Bylot and Baffin in 1616 sailed north as far as Smith Sound, between Greenland and Ellesmere Island, about 78° N Lat. and also discovered Jones Sound between Ellesmere and Devon Islands where they landed.

(25) Not to be confused with the 'North West Company', formed in 1779 and discussed later.

Northwest Company, discovered Coats and Mansel Islands at the entrance to Hudson Bay and explored the west coast of Hudson Bay between the Churchill River and Roes Welcome Sound, wintering there in 1612-13.

Others, including Foxe and Munk who was sponsored by King Christian IV of Denmark, and James added to the knowledge of Hudson and James Bays with their expeditions between 1619 and 1632.

(ii) Enter the Trader

Indians around the Gulf of St. Lawrence had already been aware of the European's interest in furs by the time of Cartier's arrival there in 1534 (Biggar 1901:49) and during the next 100 years fur trading flourished in the region of the St. Lawrence and Ottawa River Valleys. By the middle of the 17th century French-Canadian fur-traders were travelling as far as Lake Huron and Lake Superior in order to acquire new sources of fur and maintain the existing trade in Canada.

Two of these fur-traders, <sup>(26)</sup> convinced that the best approach to expansion of the Canadian fur-trade lay via Hudson Bay rather than the St. Lawrence, went to London where they received an audience from King Charles II. The two traders apparently made their point for a group of London financiers, none of whom had to contribute more than

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(26) Medard Chouart, Sieur des Groseilliers, born in France, migrated to Canada in 1641, and Pierre Esprit Radisson, probably born in France, migrated to Canada as a boy and was captured by the Mohawk Indians in a raid on Trois Rivières in 1651.

200 pounds each (Rich 1960:33), provided sufficient funds to support a voyage to Hudson Bay.

In June 1668, two ships, the Nonsuch and the Eaglet, left London bound for Hudson Bay. Only the Nonsuch, with Groseilliers aboard, reached her destination; the Eaglet with Radisson returned to Plymouth in August of the same year. A fort was built at the mouth of the Rupert River (Fort Charles) and the crew wintered there carrying on successful trade with the Indians. In October 1669 the Nonsuch returned to London where her cargo of fur was quickly sold for £1,379 6s. 10d. (Rich 1960:42). A northern fur-trade appeared to be a reasonable commercial venture and from this beginning it proceeded to shape the pattern of development and land use in the Canadian North over the next 200 years.

Following the success of the first trading expedition, steps were taken to safeguard the future position of the project's financial contributors. In April 1670, Prince Rupert, cousin of King Charles II, put forward to Privy Council a draft charter on behalf of those who had participated in the first venture and on May 2nd 1670 a Charter was granted under the Great Seal of England. Under the Charter the eighteen 'Adventurers' who had by May 1670 subscribed to support the voyages were incorporated by the name of the "Governor and Company of Adventurers of England tradeing into Hudson's Bay", and Prince Rupert was nominated Governor.

Under the Charter the Company was granted the

"sole Trade and Commerce of all those Seas Streights Bayes Rivers Lakes Creekes and Soundes in whatsoever Latitude

they shall bee that lye within the entrance of the Streights commonly called Hudsons Streights together with all the Landes and Territoryes upon the Countryes Coastes and confynes of the Seas Bayes Lakes Rivers Creekes and Soundes aforesaid that are not actually possessed by or granted to any of our Subjectes or possessed by the Subjectes of any other Christian Prince of State".

These lands, to be known as Rupert's Land, were considered as a plantation or colony and the Company claimed the rights to minerals and fish as well as the exclusive trade and the land itself.

The 'Company of Adventurers' moved quickly to establish its position in the area surrounding Hudson Bay. Fort Charles, built in 1686 by Groseilliers and the crew of the Nonsuch, was chosen as the site for its first permanent post with the construction of Rupert's House in the fall of 1670. During the next ten years two other posts were established in James Bay and a depot-warehouse to service them. (27)

In 1682, Radisson and Groseilliers built a trading post, Fort Bourbon, on the west coast of Hudson Bay, south of the Nelson River. The two men by this time had left the Hudson's Bay Company and were aware of its plans to establish in the region of the Nelson River. Two years later the Hudson's Bay Company built York Factory ~~alongside~~ Fort Bourbon and in 1685 built its second fort on the Hudson Bay coast at the mouth of the Severn River.

During this entire period the French competed for northern

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(27) Moose Factory in 1673; Fort Albany in 1679; and a warehouse depot on Charlton Island 1680.

furs by sending overland expeditions from Quebec to James Bay. This competition was not limited to intercepting and trading with Indians en route to Company posts but included the capturing of posts. In 1697 the Treaty of Ryswick gave France the right to Fort Albany and to trade in 'Bottom of the Bay' (Rich 1960:347). However, the Treaty of Utrecht in 1713 between Britain and France reversed the terms of the former treaty and provided for the restoration of Hudson Bay to Great Britain and official recognition of the Hudson's Bay Company title to Rupert's Land.

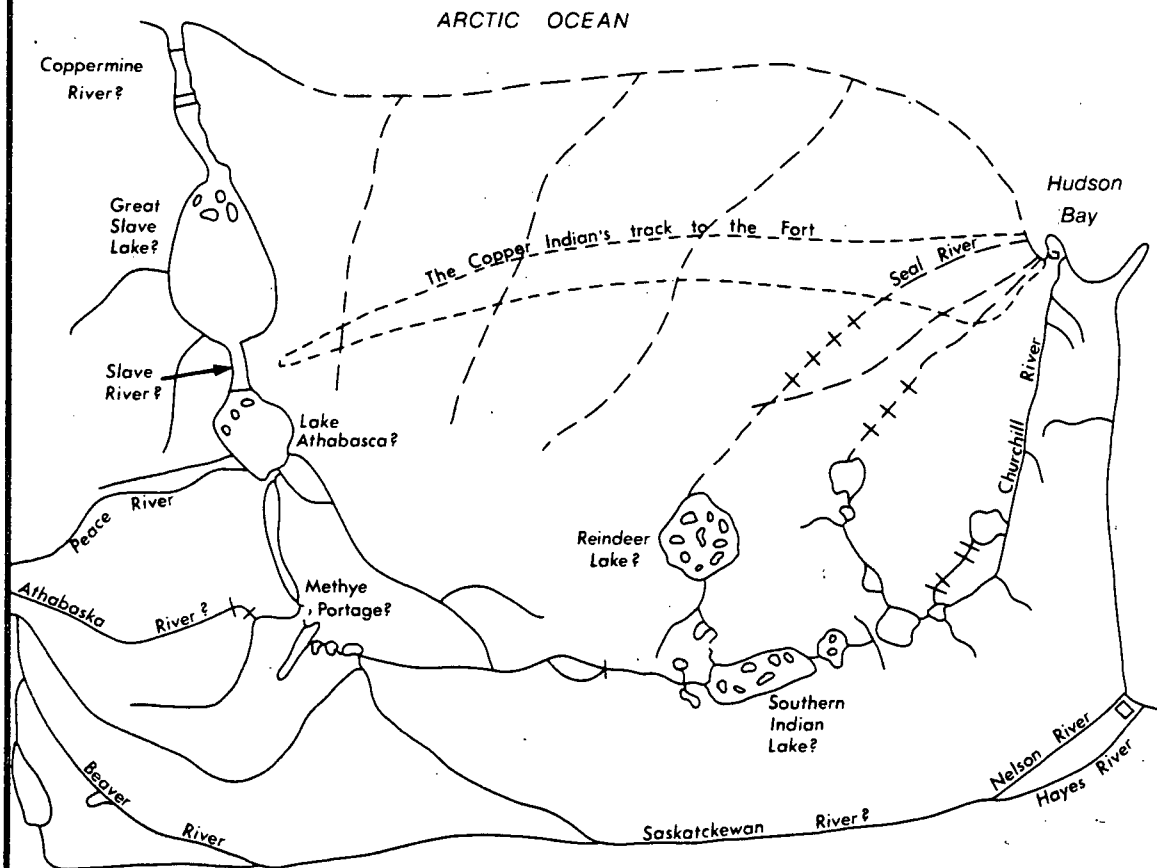
By 1718 stone bastions were planned for several of the trading posts, including those at Moose, Albany and Nelson, and in 1731 construction of a stone fortress at Churchill was underway (Innis 1956:130). The 18th century also saw a renewed interest in the north's mining potential. Beginning with Henry Kelsey's voyage in 1719<sup>(28)</sup> at least eight separate mining ventures were undertaken, none of which was successful (Cooke and Holland 1971:503,699).

As early as 1715 the Hudson's Bay Company had sent one of its men, William Stewart, as far west as Great Slave Lake, in order to persuade the Chipewyan Indians to trade at York Factory. A map, prepared in 1760 for Moses Norton, the Governor of the Company, situated at

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(28) Sailed northward along the west coast of Hudson Bay from Churchill as far as 62°40'N, in search of copper and to develop trade with the Eskimo.

**MAP 9**  
**MOSES NORTON'S DRAUGHT**  
**OF THE NORTHERN PARTS OF**  
**HUDSON BAY, RE-ORIENTED**  
**AND AMENDED BY**  
**R.I. RUGGLES (1971)**





Prince of Wales Fort, reflects the European's knowledge of Canada west of Hudson Bay at that time. The map based on the journeys of Norton and Stewart as well as information provided by the northern Indians and Inuit covered a considerable area including the Coppermine River, Great Slave Lake, Lake Athabasca and the Peace, Athabasca, Saskatchewan, Nelson and Churchill Rivers (Map no. 9).

Having some knowledge of the vast region to the west of Hudson Bay and encouraged by the reports from Indians trading at the fort, Norton commissioned Samuel Hearne to journey to the Coppermine River in search of copper.<sup>(29)</sup> In 1772, after two earlier attempts, Hearne reached the Coppermine River and descended it to its mouth but did not find copper ore in sufficient quantities to warrant further interest.

It was the formation of the North West Company<sup>(30)</sup> which

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(29) The instructions to Hearne from Norton dated Nov. 6, 1769 stated in part: "...a river represented by the Indians to abound with copper ore...and is supposed by the Indians to empty itself into some ocean the Arctic Ocean...Be careful to examine what mines are near the river, what water there is at the river's mouth, how far the woods are from the sea-side...And if the said river be likely to be of any utility, take possession of it on behalf of the Hudson's Bay Company..." (Hearne 1968).

(30) The first North West Company co-partnership was formed in Montreal in 1779 (Campbell 1957:1); subsequent reorganizations involving competitors took place in 1787 and 1804 (Stager 1962).

eventually spurred the Hudson's Bay Company to alter its established trading pattern around Hudson Bay and expand westward through northern Canada.

By 1786 the North West Company had established a post on the south shore of Great Slave Lake, now Fort Resolution.<sup>(31)</sup> Hoping to open up new trading routes to the Pacific Ocean on behalf of the North West Company, Alexander Mackenzie, in 1789, followed the river which now bears his name its entire length from Great Slave Lake to the Beaufort Sea. Although personally disappointed in not reaching the Pacific, his discovery opened up a vast new region and by 1817 the North West Company had established several posts down the Mackenzie River Valley.<sup>(32)</sup>

Innis (1956:279-280) referred to the 'violent efforts' of the North West Company to check the westward advancement and subsequent encroachment on the Athabasca<sup>(33)</sup> of the Hudson's Bay Company during

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(31) This was the first trading post to be established north of 60.

(32) Including Lac La Martre 1789, Trout Lake River 1796, Great Bear Lake Fort 1799, the 'Forks' (Fort Simpson) 1803, Fort Good Hope 1804, Fort Liard 1805, Fort Norman 1810 and Willow Lake River 1817. For a discussion of the history of trading posts in the Mackenzie Region up to 1850 see Stager (1962).

(33) The Hudson's Bay Company built Harrisons House, near the eastern end of Lake Athabasca in 1819, the North West Company having earlier abandoned its post situated nearby (Cooke and Holland 1971:916).

the first two decades of the 1800's. This struggle ultimately led to the amalgamation of the two companies in 1821.

One of the first acts of the amalgamated Company in re-organizing the Mackenzie District was the construction of a new post at the junction of the Liard and Mackenzie Rivers in 1822 replacing the 'Forks' built by the North West Company in 1803. This new post, named Fort Simpson after Governor George Simpson<sup>(34)</sup> became the administrative centre and distributing point for other posts in the Mackenzie Valley.

Between 1823 and 1834, A.R. and J.M. McLeod, Murdock McPherson, and John Hutchinson all led expeditions on behalf of the Hudson's Bay Company into the region of the Liard, Nahanni, Beaver and Smith Rivers. In 1829 Fort Halkett was established on the Liard River and in 1832 was relocated at the junction of the Smith and Liard Rivers.

It was not until the 1840's that the Company's operation extended into the Yukon. In the face of hostile opposition from native

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(34) Following amalgamation, March 26, 1821, Governor George Simpson was placed in charge of the whole trading territory and four departments were formed: The Canadas; the Southern, east of Hudson Bay; the Western, west of the Rockies; the Northern, the territory between Hudson Bay and the mountains and between the United States and the Arctic Ocean (Innis 1956:285).

middlemen, Robert Campbell established forts<sup>(35)</sup> at Dease Lake (B.C.) in 1837, Frances Lake in 1842<sup>(36)</sup> and Fort Selkirk at the junction of the Pelly and Lewes (Yukon) Rivers in 1848.

At the same time as efforts to develop trade in the southern Yukon were underway, new posts were being built in the north. In 1840 Peel's River post, later known as Fort McPherson, was established on the Peel River by John Bell. In 1847 Alexander Murray established Fort Yukon for the Hudson's Bay Company at the confluence of the Porcupine and Yukon Rivers and began trade with the Natsit (Chandalar) Kutchin Indians in competition with the Russian traders.

Following Campbell's discovery in 1851 that the Porcupine was a tributary of the Yukon, the difficult Liard River - Frances Lake route into the Yukon was abandoned. Thereafter, goods were taken down the Mackenzie to the Peel, over the portage to the Bell and down the

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(35) Considering the hardship and risk inherent in the efforts of men such as Campbell to expand the Company's sphere of influence, promotions did not come easily. Governor Simpson in a letter to Campbell dated July 4, 1837 said, "...pleased at your spirited tender of your services to establish Dease's Lake...which has led to your promotion to the rank of Clerk." Campbell in his Journals 1808-1853, noted that hitherto he had been rated as postmaster.

(36) The first post established in the Yukon Territory.

Porcupine to Fort Yukon (Innis 1970:291).<sup>(37)</sup> Fort Yukon, the most westerly of the Company's posts, was subsequently moved twice up the Porcupine River when it was found twice to be on the Alaska side of the U.S.-Canadian border (Stager 1974:29).

(iii) Missions Established

Although Moravian missionaries were active with the Eskimos of Labrador as early as 1752<sup>(38)</sup> it was more than a century later when the first permanent mission was established in what is now the Yukon and Northwest Territories.

In 1820 the Reverend John West, a member of the Church Missionary Society, England, was appointed by the Hudson's Bay Company, chaplain to its settlement on the Red River south of Lake Winnipeg.

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(37) This route and the confluence of the Porcupine and Yukon Rivers had been discovered by John Bell in 1845, however it was not until Campbell had traced the Yukon River from the Pelly River to the Porcupine that its importance was realized.

(38) On July 31, 1752 John C. Erhardt and four other Moravian missionaries landed on the Labrador coast at about lat. 55°10'N (Nisbet's Harbour) where they built a house and traded with the Eskimos, leaving there in the fall of the same year (Cooke and Holland 1971:516). Permanent Moravian missions were established in Labrador at Nain 1770, Okkak 1775 and Hopedale 1781. Each mission contained a dwelling, church, trading store and workshop; around this nucleus the migratory Eskimos built wooden houses for the winter months (Jenness 1964:10).

There he established a school for Indian children and the Red River Settlement became the headquarters of the Church Missionary Society's North-West Canada Mission (Stock 1899:vol I:246). From its founding in 1822 the North-West Canada Mission<sup>(39)</sup> expanded northward and westward following the Hudson's Bay posts.<sup>(40)</sup>

In 1849 David Anderson was consecrated first Bishop of Rupert's Land and arrived in Red River in October of that year. Encouraged by reports of Anderson the Church Missionary Society sent several men from England as lay schoolmasters to reinforce the Mission at Red River.

W.W. Kirkby was one of these men and after spending seven years at Red River he proceeded to Fort Simpson where, in 1859, he established the first permanent Anglican mission in the Northwest Territories (Stock 1899:vol II:328).

In 1858 Archdeacon Hunter had travelled with a Hudson's Bay Company brigade from Red River to Fort Simpson and remained in the Mackenzie Valley for nearly a year<sup>(41)</sup> visiting the Company's posts at

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(39) It was originally called the North-West American Mission.

(40) Three members of Sir John Richardson's expedition in search of Franklin, while wintering at Cumberland House in 1847, worked on the construction of the church and furnishings (Boon 1962:62).

(41) There is evidence however that the first missionaries in the Mackenzie River basin were James and John Hope, two of the first pupils of the Church Missionary School established in the Red River settlement in 1821 (Boon 1962:204).

Fort Liard, Fort Norman and Fort Good Hope.<sup>(42)</sup> The following summer he returned to Red River, meeting Kirkby en route.

The first Roman Catholic missionary to journey to the Mackenzie appears to be Father H. Faraud, O.M.I., who visited Fort Resolution from Fort Chipewyan in 1852. While there he built 'with his own hands' a mission house on an island in Great Slave Lake about three miles off Fort Resolution (Duchaussois 1923:201).

In 1858 Father Henri Grollier, O.M.I., established St. Joseph's Mission at Fort Resolution, the Mission of Immaculate Heart of Mary at Grande Isle (later moved to Fort Providence), and the Mission of Sacred Heart at Fort Simpson. The following year he established additional missions at Fort Rae,<sup>(43)</sup> Fort Norman and Fort Good Hope and at Fort

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(42) When Mgr. Tache, Bishop of St. Boniface, paid his first visit to London, England in 1856, Lord Colville, on behalf of the Hudson's Bay Company, invited him to form a Roman Catholic mission at Fort Good Hope (Duchaussois 1923:267). An R.C. mission was established there in 1859.

(43) The speed with which missions were established down the Mackenzie Valley in the latter half of the 19th century was partly due to the element of competition existing between the Anglican and Roman Catholic churches, e.g. Father Grollier wrote, "I came to Fort Rae from Fort Resolution. There are nearly 1200 Indians about this post. I came as soon as I possibly could, because it was reported that Archdeacon Hunter would send a Protestant minister here..." Similarly Father Grollier is reported to have said at a meeting in Fort Simpson August 26, 1860 "we shall save the Fort Liard Indians for the Church". On September 4, 1860 Father Gascon arrived in Fort Liard three days ahead of the Anglican minister (Duchaussois 1923:198-204). However, there were many instances of co-operation as well, e.g. in June 1862 Father Sequin (who had taken over from Grollier) accompanied Reverend Kirkby to Lapierre House, where he founded a 'little' R.C. mission. In the fall of the same year Father Sequin accompanied Robert McDonald to Fort Yukon from Fort Good Hope.

### McPherson in 1860.

The first post built in the western Arctic exclusively for Eskimo trade was established at Fort Anderson in 1861. Roderick MacFarlane, who had explored the Anderson River in 1857 and revisited it on several occasions to trade with Eskimos, received permission from the Hudson's Bay Company to build a post there in 1859. In the spring of 1861 he cut timber on the upper reaches of the Anderson near the Carnwath River. He then rafted the timber down the Anderson to a site some 180 kilometres from its mouth at about lat. 68°30'N where he constructed the fort (Cooke and Holland 1972:392). It was intended that Fort Anderson would become a focal point of Eskimo trade and reduce the influence of Russian traders who had established an Eskimo trading chain along the north coast of Alaska. Stager (1967:53) suggested that the fort was poorly located for this purpose and was a strong factor in the decision to abandon the post in 1866.

In 1862 Rev. Kirkby and another Anglican clergyman, Robert McDonald<sup>(44)</sup> travelled from Fort Simpson to Fort Yukon via the Mackenzie, Peel and Porcupine Rivers. McDonald remained at Fort Yukon until 1871 at which time he moved to Fort McPherson where he remained

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(44) McDonald, whose father was a Hudson's Bay Company employee and homesteader in the Red River Valley and his mother a daughter of an officer of the Hudson's Bay Co., was educated at the Red River Academy and took theological training from Bishop Anderson who ordained him in 1852. His son, Neil McDonald, a respected member of the Yukon community of Old Crow, still resides there.



for 33 years. During this time he translated, with the assistance of his wife, one of his converts whom he married in 1877, the Bible, Prayer Book and Hymnal into the Tukudh dialect.

In nearly all cases the missions were established near active trading posts. However, in the case of Fort Providence it was the reverse. In August 1861 Mgr. Grandin chose a new location for the mission which had been established on Grande Isle in Great Slave Lake (pp. 50). The new site, which eventually included an orphanage and a convent, he named 'Providence Mission'. It eventually attracted so many Indians that the Hudson's Bay Company established a post there, 'Fort Providence'. By November 1862 the chapel had been constructed and during the winter of 1863-64 an orphanage and two storey convent were completed. In 1869 there were 35 children in the orphanage-school, which was by then operated by the Grey Nuns, who were unable to accept more children due to limited food supplies. The shortage of food was a problem common to all missions in the north. Reverend W.C. Bompas<sup>(45)</sup> of the Anglican Church

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(45) Born in London, England, January 20, 1834, he arrived in Fort Simpson in 1865. During the 41 years he lived and worked in the Canadian north he travelled extensively throughout the Mackenzie District and the Yukon Territory. In 1874 he was consecrated as first Bishop of Athabasca (an area which covered the current Dioceses of Athabasca, Yukon and Mackenzie River). In 1884 the southern portion of Athabasca was established as the Diocese of Athabasca; and the Mackenzie area and what is now the Yukon formed a new Diocese, named Mackenzie River, with Bompas as its Bishop. Again a division took place in 1891 with the formation of the Diocese of the Yukon. Bompas who always chose the more remote portion of a division became its Bishop (Bishop Henry G. Cook, Yellowknife, pers. comm., 1974).

noted that his major concern during his first ten years in the Mackenzie Valley was famine and stated "a mission farm in connection with a mission seems almost a necessity...the wild animals of the woods are ceasing to yield even a precarious subsistence" (Boon 1962:214).<sup>(46)</sup>

Emile Petitot, O.M.I., a Catholic priest who visited the Mackenzie Delta in 1868, was the first missionary to reach the Arctic coast of the mainland (Jenness 1964:15). Between 1864 and 1872, while stationed at Fort Good Hope, he travelled throughout the Mackenzie District mapping much of the country and collecting information on the language and customs of the native people including the compilation of a grammar of the dialect of the Mackenzie Delta Eskimo.

In 1876 Rev. Edmund James Peck arrived in the eastern Arctic aboard a Hudson's Bay Company supply ship to carry out missionary work among the Eskimo. Between 1876 and 1884 he travelled between Moose Factory, Little Whale River and Great Whale River and made three unsuccessful attempts to cross overland to Ungava Bay. During this period he translated parts of the New Testament into syllabic script

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<sup>(46)</sup> Several mission farms have operated in the north, for example, 'St. Bruno's Farm', established by Bishop Breynat near Fort Smith, N.W.T., in 1911 (Duchaussois 1923:205-206). During the period 1953 to 1959 while Father Fumoleau was stationed in Fort Good Hope the mission garden there produced as much as 300 sacks of potatoes annually which were shipped with the Fort Good Hope children to the residential school in Aklavik (pers. comm. F. Fumoleau 1974).

(Pers. Comm. Cook:1974). (47)

(iv) Changing Patterns

The impact of the Europeans upon the Inuit and northern Indians during the 18th, 19th and early 20th centuries has been discussed by several authors including: Balikci 1960, 1968; Hargrave 1966; Honigmann and Honigmann 1965; Jenness 1964, 1968; Stager 1974; Vanstone 1963; and Wolforth 1971.

Prior to the arrival of the fur trader and whaler the northern native was self-sufficient, living in balance with the natural conditions surrounding him. To varying degrees, he became less independent with the introduction of manufactured goods and European food staples. His natural desire to acquire commodities which would apparently "make life easier", initiated a series of material, economic, social and cultural changes.

Trading commodities included guns, ammunition, steelstools,

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(47) Peck used a syllabic system invented about 1839 by James Evans, a Methodist missionary, to facilitate his work among the Cree Indians of northern Ontario and Quebec (Jenness 1964:16). The Eskimo of the Mackenzie Delta learned the use of English characters for writing, partially from Alaskan natives who arrived during the whaling era, from traders who followed the whalers, and from Anglican missionaries such as I.O. Stringer, who resided at Herschel Island between 1896 and 1901 and translated parts of the New Testament into Eskimo.

fish nets and implements, such as axes, ice chisels, knives, needles, metal pots and manufactured clothing of wool and cotton. These were followed by food staples such as flour, rice, sugar and tea and later items which pertained specifically to trapping such as steel traps, snare wire, canvas tents, wooden boats and canvas canoes.

Caribou hunting and sealing became much more of an individual effort when the rifle replaced the bow, arrow and spear. Thus hunting, and fishing with fish nets, became less of a communal undertaking and, in many cases, the group or camp ceased to function as an economic unit. This in turn resulted in the replacement of the strong sharing and co-operative ethic with one whereby the hunter retained his own catch.

As the hunter became more dependent upon ammunition and more accustomed to the use of other consumables such as imported foodstuffs and manufactured clothing, he became more firmly locked into the trapper-trader relationship. The trapper's allegiance was less to his neighbour, although, if possible, no one was allowed to starve, and more to the trader to whom he was often in debt.

The life of the hunter became more regulated as he attempted to meet his financial obligations and to provide the trade-goods to which he and his family had become accustomed. In addition to spending a substantial portion of his time on the trapline it was necessary to make regular periodic trips to the trading post. In discussing the Indians of Old Crow, Stager (1974:46) stated that maintaining traplines resulted in a greater dependence upon sled-dogs hence additional energies

were devoted to providing meat and fish to feed them.

Trapping became a family enterprise and this had the effect of reducing the cohesiveness of the group or band, characteristic of the precontact period. It also altered the long-standing concept of land use. (See also Part 76),

Individual families, with the trapper either working alone or with one partner, became the working unit. This led to the sub-division of group hunting areas into traplines. As with the meat-sharing ethic, the communal concept of land rights, in some instances, gave way to individual rights and the concept of 'land ownership' developed. When the Old Crow Indians began trapping, "ownership" of an area applied only to the time that a person trapped there. Through an informal process, areas were allocated and agreed upon periodically and, over a period of time, "ownership" of any one area might vary. Eventually a trapper became identified with a certain area and it became known as 'his' trapline (Stager 1974:40).

This approach to traplines and land was not universal. For example as late as 1936 the Eskimo trapper of Pelly Bay in the eastern Arctic had no specific trapline. His objection to non-relatives placing traps near his own was due not to any feeling of local rights over the land but only to a concern that his pelts might be stolen (Balikci 1960:17). It was also pointed out by Balikci (1960:20) that the Povungnituk Eskimo had traplines and indeed recognized the rights of an individual or a family to land and accepted the notion of inheriting a trail from

one's elders. Thus, following the arrival of the European, land assumed another dimension (the means to acquire a new range of goods) and, in some cases, the concept of individual, as opposed to group, land rights evolved.

### CHAPTER THREE. LAND USE AND THE LAW 1870-1970

#### (i) Introduction

The acumen and way of life of the native hunter were essential ingredients in the success of the fur trade. Thus it behooved the fur trader to minimize the disruptive force of his presence on the man-land relationship which had evolved in the north over thousands of years.

It was virtually not until the discovery of gold in 1896 that land use activities of an exogenous nature were introduced to the north. Put another way, the north which has a history of human occupation of at least 25,000 years has experienced in just 75 years a range of land use activities which include: mining, oil and gas production, railroads, highways, pipelines, agriculture and forestry.

This chapter considers northern land use and relevant legislation as they evolved during the hundred year period following Canada's acquisition of Rupert's Land and the North Western Territory. It was

the era of the Dominion Lands Act. Designed primarily to encourage the settlement of the Canadian west it also provided, ~~for more~~ than 75 years, the legal authority for the disposition of northern land and associated resources.

The various amendments to the Dominion Lands Act and the Territorial Lands Act which replaced it, were essentially responses to new requirements for the conveyance of rights, with little consideration, if any, for the land itself. Thus it was within that legislative context that the northern development thrust of the 1960's took place.

(ii) Rupert's Land and the North Western Territory

Not only was the fur trade the catalyst in expanding the northern native's concept of land but, through the Hudson's Bay Company, it was also the lynchpin which controlled substantial rights<sup>(48)</sup> in the vast regions of Rupert's Land and the North Western Territory stretching from the Atlantic Ocean to the Alaska border.<sup>(49)</sup>

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(48) Including trading, land, mineral and fishing rights.

(49) For a description of Rupert's Land as defined by the Royal Charter incorporating the Hudson's Bay Company in 1670, see pg. 49; the North Western Territory was that portion of the Company's holdings which did not drain into Hudson Bay and which it acquired through amalgamation with the North West Company in 1821. Amalgamation of the organizations of the Hudson's Bay Company and the North West Company involved a series of formal agreements drawn up between March 26, 1821 and September 15, 1824, see Innis (1962:283-284). In 1825 the British and Russian governments signed the St. Petersburg Treaty which recognized the 141st meridian of west longitude as the boundary between their respective territories (the present Yukon-Alaska boundary).

The first official recognition that the Company's role as administrator of these northern lands was under scrutiny was the appointment by the British House of Commons on February 5, 1857 of a Select Committee "to consider the state of those British Possessions of North America, which are under the administration of the Hudson's Bay Company or over which they possessed a licence to trade" (Oliver 1915:23).<sup>(50)</sup>

It was evident that the civil powers of the fur company were outdated and that the Company's privileges under the charter would have to be changed. The draftsmen of the British North America Act, 1867,<sup>(51)</sup> provided for just such changes. Section 146 of that Act made it lawful for Her Majesty on address from the Houses of the Parliament of Canada, to admit Rupert's Land and the North-Western

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(50) The Company continued to administer land even in the relatively settled regions, such as the Red River Settlement, into the mid-19th century. The point may be illustrated by the 'One Pepper Corn' Deed between the Governor and Company of Adventurers of England and a Red River settler, Edward Mowat, dated February 28, 1855. Mowat was granted approximately 143 acres for the sum of 47 Pounds 10 Shillings and an annual rent of one Pepper Corn for the term of the agreement, namely 1000 years. The covenants included that Mowat would settle on the land and within five years bring a portion of it under cultivation and would continue to cultivate for the term. In addition Mowat was not to "violate or evade any of the chartered or licenced privileges of the Company" (Oliver 1915:1301).

(51) 30 & 31 Vict., C.3 (Imp.).



Territory, or either of them, into the Union. In 1864 the British Government and the Hudson's Bay Company began negotiating the surrender of certain of the Company's rights, and by 1869 had reached agreement.

Under the British North America Act, enabling legislation was passed July 31, 1868, cited by the short title "Rupert's Land Act, 1868".<sup>(52)</sup> This Act granted Her Majesty the power to accept a surrender of "all rights of government and proprietary rights, and all other privileges, franchises, powers and authorities", belonging to the Hudson's Bay Company but reserved to the Company the right to carry on trade and commerce in Rupert's Land or elsewhere (Section 4). Under Section 5 of the Act, Her Majesty was granted authority to declare Rupert's Land a part of the Dominion of Canada by Order-in-Council. The Parliament of Canada was authorized to "make, ordain, and establish within the land and territory so admitted all such laws, institutions and ordinances and to constitute such courts and officers as might be necessary for the peace, order and good government of Her Majesty's subjects and others therein".

The Imperial Order-in-Council (R.S.C. 1952, VI, 6237) pursuant to the Rupert's Land Act, 1868, admitted the North Western Territory and Rupert's Land into the Dominion on July 15, 1870 and gave

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(52) 31 & 32 Vict., C.105, S.2 (Imp.) of the Rupert's Land Act, 1868, stated that "for purposes of this Act the Term 'Rupert's Land' shall include the whole of the Lands and Territories held or claimed to be held by the said Governor and Company". That is, in addition to the lands granted under the Charter of 1670, it included the Northwest Territory acquired in 1821.

the Parliament of Canada full power and authority to legislate for their future welfare and good government. Schedule C of the Order-in-Council was the deed of surrender from the Hudson's Bay Company to the Queen (see Appendix A).

The deed of surrender included the following terms: Canada should pay the Company 300,000 pounds sterling; the Company should retain those trading posts which it actually occupied in the North Western Territory<sup>(53)</sup> and might within 12 months of the surrender select a block of land adjoining each post outside of Canada and British Columbia; the Company retained the liberty to carry on trade as a corporation; and Canada agreed to relieve the Company from all responsibility to satisfy Indian claims to compensation for lands required for purposes of a settlement.

Under Article 6 of the deed of surrender the Company was permitted to claim grants of land not to exceed one-twentieth of the lands designated for settlement within the fertile belt.<sup>(54)</sup>

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(53) These totalled 120 in the year 1870; the following were situated north of 60° north latitude in what is now the Yukon Territory and the Northwest Territories: Fort Simpson, Fort Liard, Hay River, Fort Resolution, Fort Norman, Fort Good Hope, Peel's River, Lapierre's House, Fort Rae, Fort Providence.

(54) That area bounded by the United States border, the Rocky Mountains, the north branch of the Saskatchewan River and Lake Winnipeg and Lake of the Woods.

The Act for the temporary Government of Rupert's Land and the North-Western Territory when united with Canada, S.C.32 & 33 Vict., C.3, assented to June 22, 1869, provided for the renaming of Rupert's Land and the North-Western Territory as the "North West Territories" when admitted to the Dominion of Canada (S.1), and for the appointment of a Lieutenant-Governor responsible for the administration of the Territories (S.2).

With passage of the Temporary Government Act, 1869, the way was clear for the formation of the Province of Manitoba out of the North-West Territories. The Manitoba Act, 1870<sup>(55)</sup> established and provided for the Government of the Province of Manitoba. It also provided the first authority for administering the newly acquired Crown lands of the Dominion, under Section 33, which said "the Governor in Council shall from time to time settle and appoint the mode and form of Grants of Land from the Crown, and any Order-in-Council for that purpose when published in the Canada Gazette shall have the same force and effect as if it were a portion of this Act". By Order-in-Council dated March 1, 1871 the control and management of all Crown Lands in Manitoba and in the remaining part of the North-West Territories were placed under the Canadian Secretary of State.

The acquisition of the North-West Territories and the subsequent establishment of the Province of Manitoba marked a

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(55) S.C.33 Vict., C.3.

fundamental change in the nature of Confederation. The original Dominion as established under the British North America Act, 1867, was a federation of provinces and, by virtue of Section 109, each was vested with control over its own lands. However, for the new Province of Manitoba and all of the North-West Territories unalienated lands were, by statute, to be administered by the Government of Canada.

With respect to Manitoba this continued to be the situation until the passage of the Manitoba Natural Resources Act<sup>(56)</sup> in 1930 which stipulated that pursuant to S.109 of the British North America Act, 1867, interest of the Crown in all Crown lands, mines, minerals (precious and base) and royalties derived therefrom, within the Province shall belong to the Province.

(iii) Dominion Lands Act

However, public lands in the North-West Territories, which today comprise the Yukon Territory and Northwest Territories, are still under the control and management of the Government of Canada by virtue of the Territorial Lands Act, 1950, as Amended. For more than three-quarters of a century prior to the enactment of the Territorial Lands

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(56) Or 'An Act respecting the transfer of the Natural Resources of Manitoba' S.C.20-21 George V, c.29. Similar acts were passed in 1930 with respect to the Province of Saskatchewan, S.C.20-21 George V, c.41 and the Province of Alberta, S.C.20-21 George V, c.3.

Act, the Dominion Lands Act, 1872<sup>(57)</sup> was the statutory vehicle by which 'federal' lands were administered. Under this Act, Dominion Lands were alienated under several broad classes, viz:

(i) railway land grants which provided the impetus for the construction of the transcontinental railway and several 'colonization' railways. Martin (1973:74) pointed out that nearly 3000 miles of railway line were built in the Prairie Provinces under a policy of land subsidies and in the process nearly 32 million acres were granted to railway companies (Ibid:56-57).

(ii) homestead grants of 160 acres were authorized under Section 33 of the Act. This was a free grant subject to certain naturalization, residence, improvement and cultivation requirements. Under Section 29, surveyed Dominion Lands were opened for purchase at \$1.00 per acre up to 640 acres.<sup>(58)</sup> In 1874 the Act provided for pre-emption rights authorizing a homesteader to occupy and cultivate an adjoining quarter section with a right to purchase the pre-emption when he had obtained Patent for his homestead. Pre-emption rights were finally discontinued January 1, 1890, although the initial attempt to repeal the authority to grant such rights took place seven years earlier in the consolidated Dominion Lands Act of 1883 (S.C.46 Vict., C.17, S.39).

Martin (1973:168) estimated that up to 1927 there were nearly 99 million acres of original homestead entries in Western Canada. By

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(57) S.C.35 Vict., C.23.

(58) Discontinued in 1881.

comparison the total acreage of homesteads patented in 1930 was 51 million acres with an additional 6.8 million acres unpatented. Even if Patent was received on all of the latter it would mean that over 40 percent of the original homestead entries were cancelled. Put another way only 60% of Canadian homesteaders actually acquired ownership of their land.<sup>(59)</sup>

(iii) Hudson's Bay Company lands; referred to earlier, were allocated under authority of Section 17 of the Dominion Lands Act, 1872, in accordance with Articles 5 and 6 of the Deed of Surrender. These lands included tracts surrounding the Company's trading posts as listed in the Schedule as well as one-twentieth of the surveyed land in the 'fertile belt'. The area of land allocated to the Hudson's Bay Company under the latter scheme was estimated at slightly more than seven million acres of which nearly one-half was located in Saskatchewan and the balance in Manitoba and Alberta.<sup>(60)</sup>

Other classes of land alienation under the Dominion Lands Act included: school lands;<sup>(61)</sup> half-breed grants and scrip; swamplands; and university grants.

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(59) Experience showed that the homesteader was often unable to usefully use his pre-emption right with the result that the land fell to speculators (Martin 1973:161).

(60) From the Report of the Canadian Department of the Interior 1929-30: 26.

(61) "No phase of Dominion Lands policy has commanded wider admiration than the provision in the Dominion Lands Act of 1872 for setting aside sections...as an endowment for public schools" (Martin 1973: 100).

The original Dominion Lands Act and subsequent amendments provided the Governor in Council with authority to withdraw certain areas from disposal under homestead or purchase and established reservations for National Parks, Timber Reserves, Indian Reserves, Hay and Grazing Areas, Coal and Mineral Lands, Town Plots, Military and other Federal Reserves. Because of these reservations it was necessary to insert provisions in letters Patent in order to establish continuing rights of the Crown. For example the free use of all navigable waters was reserved in all patents. The rights of fishery and fishing were excepted and grants were made subject to the provisions of the Irrigation Act.

The Dominion Lands Act of 1872 provided the Minister<sup>(62)</sup> with authority to sell mineral lands ("any person may explore and purchase mining lands", S.37). Although the Minister was able to withdraw valuable lands from sale, and lease them instead, Section 36 of the Act stated that sub-surface rights were not to be reserved in patents of lands. These rather generous conditions were expanded upon in 1879 when the Act was amended<sup>(S.C.43 Vict., C.26, S.6)</sup> so that lands containing coal or other minerals, whether in surveyed or unsurveyed territory, were not subject to the provisions of the Act respecting sale or homesteading but would be disposed of under regulations made

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(62) An Act providing for the establishment of "The Department of the Interior" (S.C.36 Vict., C.4), assented to May 3, 1873, made the Minister of the Department of the Interior responsible for the Dominion Lands Act (S.5) and the control and management of the affairs of the North-West Territories.

by Governor in Council. (63)

Mining regulations to govern the disposal of quartz and placer mineral lands and excluding coal lands were passed by Order-in-Council, March 7, 1884. (64) The regulations, which applied to all Dominion Lands (Manitoba and the North-West Territories) containing gold, silver, lead, copper, petroleum and other mineral deposits except coal, provided that any person "may explore vacant Crown land not appropriated or reserved by Government for other purposes with a view to obtaining a mining claim". Included in the Regulations were conditions respecting right to enter upon, use and occupy the surface of a claim, work commitments, lease and purchase. For example, Sections 5 and 6 provided that within one year of recording a quartz mining claim (not more than 40 acres) and having completed \$500 work, the claim could be purchased for \$5.00 per acre.

Dominion Lands policy between 1870 and 1930 was not geared to the management of non-agricultural or 'marginal' lands. During this period "the settlement of Western Canada and its integration into Canadian Nationality was the ultimate goal of all land policy" (Martin 1973:28).

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(63) Regulations for the Disposal of Coal Lands were enacted by Order-in-Council dated December 17, 1881 (see S.C.45 Vict., p.LV, 1882).

(64) See S.C.47 Vict., C.47, pp. 71-92, 1884.



With fertile agricultural land as the medium by which this goal was to be attained land legislation was enacted which specifically served to encourage settlement. The primary function of the Dominion Lands Act, 1872 was to provide a legal and administrative mechanism for settling and developing the West's agricultural land. The fact that it applied to the Province of Manitoba and all of the North-West Territories (Section 1) had little relevance to the substance of the Act.

The spirit of the Act was embodied in those sections which provided free homestead grants to entice settlers into the west and the granting of vast tracts of land to railway companies as an incentive to construct a transportation network which would sustain the settlers.

Where the Dominion Lands Act did refer to non-agricultural lands it was often to provide additional incentive and support to the settler. For example, Section 46 stated that timber in townships open for settlement was to be disposed of in order to benefit the largest number of settlers. Similarly, an Order-in-Council of November 11, 1895 provided for the mining of coal if to be used for the settlers' own purposes (see S.C.59 Vict., p.LII). Other values inherent in the land-base, such as minerals, petroleum and natural gas received even less recognition. It was not until seventeen years after the passing of the Dominion Lands Act that mining rights in all Dominion Lands were

reserved in Land Patents.<sup>(65)</sup> The first regulations pertaining to petroleum and natural gas were enacted by Order-in-Council of August 6, 1898 and stated in part that an area not greater than 640 acres might be reserved for six months for any prospector who might then purchase the land at \$1 an acre subject to royalties of 2½ per cent (Ibid:194).

Dominion Lands legislation of the 1800's was not drafted with the Canadian north in mind; however, the Dominion Lands Act was the legislative base for northern land-use at the turn of the century. Following the passage of the Yukon Territory Act, June 13, 1898<sup>(66)</sup> an Order-in-Council of July 7, 1898 provided for the disposition of lands in the Yukon Territory under regulations which applied to that territory only.

Until the Yukon gold rush in 1896-97, northern Canada was still considered the domain of hunters, trappers and missionaries. It is perhaps indicative of this that the first piece of natural resource legislation, dealing specifically with the unsettled parts of the North-West Territories, was a game preservation Act, passed by the Canadian Government in 1894.<sup>(67)</sup> This Act, which applied to those portions of the North-West Territories which were not included in the provisional

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(65) Solid, liquid and gaseous minerals were reserved in Grants covering Dominion Lands west of the 3rd Meridian from October 31, 1887 and east of the 3rd Meridian from September 17, 1889.

(66) S.C.61 Vict., C.6.

(67) "An Act for the preservation of game in the unorganized portions of the North-West Territories of Canada" (S.C.57-58 Vict., C.35), assented to July 23, 1894.

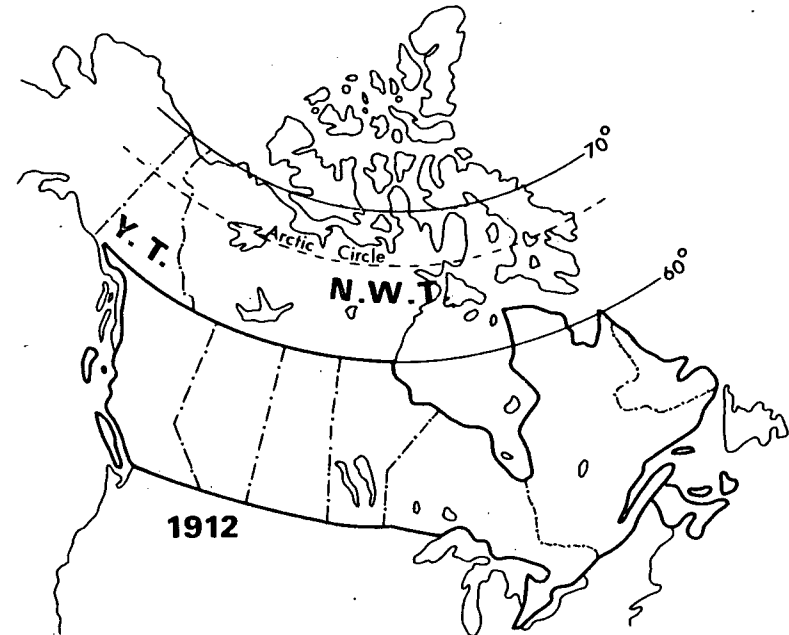
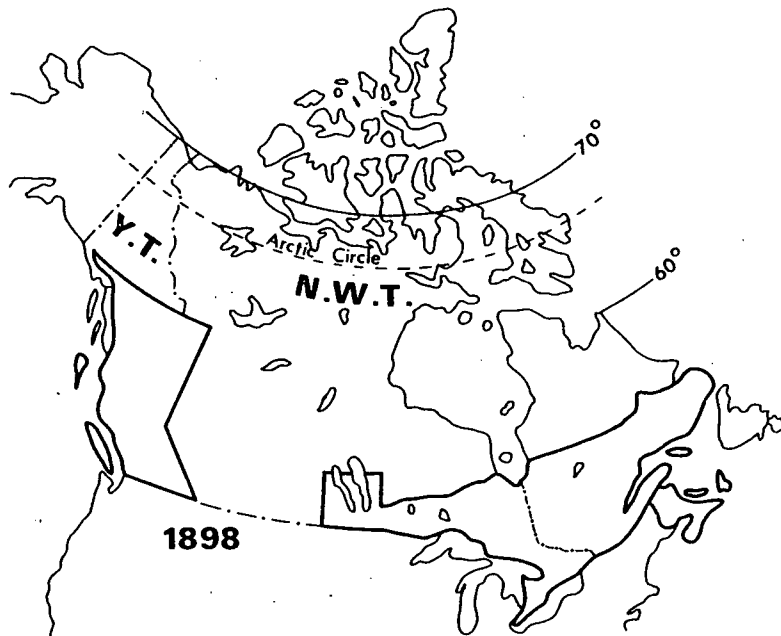
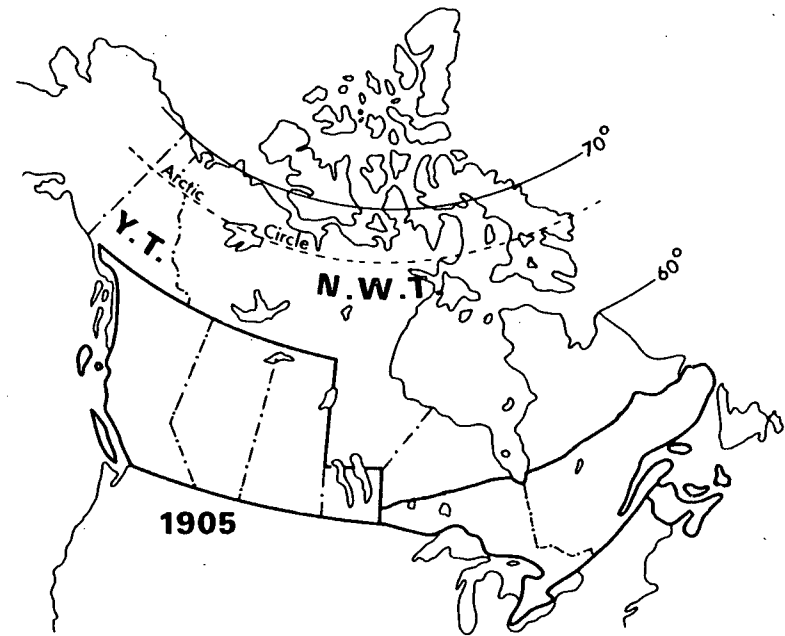
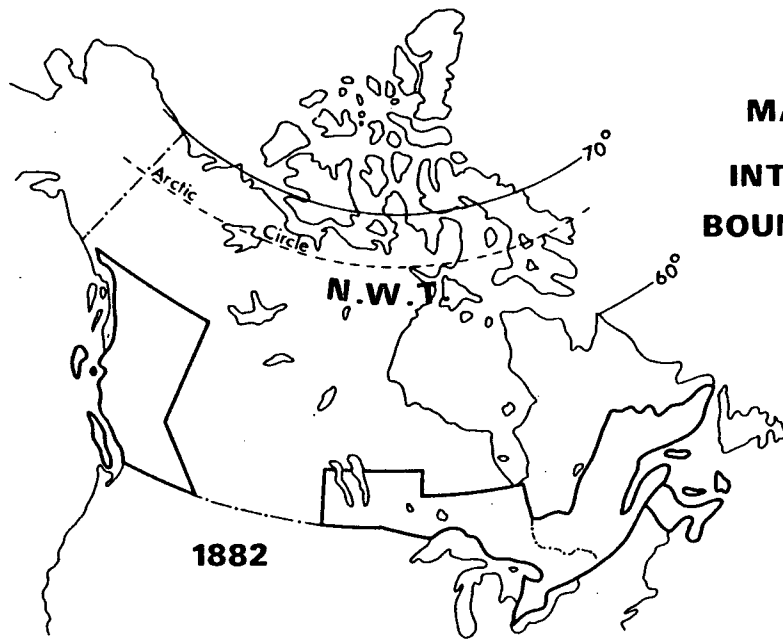
districts of Assiniboia, Alberta and Saskatchewan,<sup>(68)</sup> placed a restriction on the hunting of various species of game and was aimed mainly against transients and newcomers. Ogilvie (1889:45) had reported five years earlier "that game is not now as abundant (in the Yukon) as before mining began and it is difficult, in fact impossible, to get any close to the river."

Northern land use patterns changed little during the first two decades following the acquisition by Canada in 1870 of Rupert's Land and the North Western Territory. Despite the loss of her monopoly position the Hudson's Bay Company's first permanent competition in the present Northwest Territories appears to have occurred as late as 1887, with the establishment of posts at Old Fort Rae, Fort Providence and Fort Good Hope (Usher 1970:26).

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(68) In 1875 the Canadian Parliament passed the North West Territories Act (S.C.38 Vict., C.49) which has been described by one historian as "The Magna Charta of separate political existence for the North West Territories" (Oliver 1915:26). The District of Keewatin was created in 1876, those of Assiniboia, Saskatchewan, Alberta and Athabaska in 1882 (see Map no. 10) and those of Ungava, Franklin, Mackenzie and Yukon in 1895. The Yukon was made a separate Territory in 1898, "An Act to provide for the Government of the Yukon District" or the "Yukon Territory Act" (S.C.61 Vict., C.6).

**MAP 10**  
**INTERNAL**  
**BOUNDARIES**



(iv) The Yukon Territory Before 1900

Due in part to the presence of the Alaska Commercial Company on the Yukon River following the departure of the Hudson's Bay Company from Fort Yukon in 1869,<sup>(69)</sup> private traders moved into the Yukon Territory more quickly. In 1874, N.L. McQuesten and Arthur Harper founded the trading post of Fort Reliance on the Yukon River about six miles below the present site of Dawson. McQuesten and A.H. Mayo then built posts at the mouth of the Stewart River and Fortymile River and Harper and Joseph Ladue established other posts at the site of Fort Selkirk<sup>(70)</sup> (built by Robert Campbell for the Hudson's Bay Company and subsequently sacked by Chilkat Indian middlemen in 1852) and on the Sixtymile River.<sup>(71)</sup>

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(69) The Company's interest in Fort Yukon was sold following the purchase of Alaska by the United States in 1867.

(70) Harper had occupied the Fort Selkirk site since 1891 according to a declaration which he made before Wm. Ogilvie, Dominion Land Surveyor, at Fortymile, July 1, 1896. In addition to Harper's own dwelling, trading post and garden, the grounds, in 1896, contained several cabins occupied by prospectors and Indians. Harper probably envisaged a major migration of prospectors and miners into the Yukon and applied June 30, 1896, to the Minister of the Interior for 640 acres, under the Dominion Lands Act (it was less than two months after he filed his application, August 17, 1896, that gold was discovered on Bonanza Creek, and the Klondike gold rush began). Town-lots were subsequently surveyed and sold in Fort Selkirk (it is now abandoned) although Harper's application was not processed due to his death (Public Archives of Canada, RG 91, Yukon Territory Records, Vol. No. 7, file no. 956).

(71) The names Fortymile and Sixtymile refer to the distance in miles down the Yukon River from Fort Reliance.

The influx of miners into the Yukon in the 1880's (Morrison 1968, estimated that there were nearly 1000 men in the Fortymile Creek area in 1885) had the effect of transforming the fur trader into a general merchant and entrepreneur. As such he was interested in acquiring land in order to provide goods and services to a rapidly growing transient population.

The first applications to purchase land in Canada north of 60° north latitude were filed in the summer of 1894. Thomas W. O'Brien, a "merchant and miner", applied August 14, 1894, to purchase 320 acres at the confluence of the Fortymile and Yukon Rivers. Letters Patent 83005, dated April 18, 1900 were subsequently issued to O'Brien for a tract of 160 acres (Lot 21, Group 1). O'Brien subdivided his purchase and sold lots to "squatters and newcomers".

The second application was that of John J. Healy, dated Fort Cudahay, Yukon District, N.W.T., September 3, 1894. Healy, a "general merchandiser", requested, under Section 29 of the Dominion Lands Act, 160 acres also at the junction of the Fortymile and Yukon Rivers. In his letter of application he noted that he had deposited with the Dominion Government Agent the sum of one hundred and sixty dollars, made up of \$155 in gold<sup>(72)</sup> and \$5 in silver coins (see Appendix B). Letters Patent 178505 were issued to Healy on behalf of

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(72) Coarse gold was first found on Fortymile River in the season of 1886 (Ogilvie 1889:13).

North American Trading and Transportation Company for 65.28 acres (Lot 1, Group 1). The balance of the 160 acres applied for, covered the townsite of Fort Cudahay and was not available to Healy (PAC. RG91, TGR. Vol. 7, file no. 956).

By the 1890's the needs of miners, merchants and trading companies, the church through its missionaries, and the government represented by the North West Mounted Police, <sup>(73)</sup> added another dimension to northern land-use and, ironically, considering the vast region and the small population, created certain conflicts. <sup>(74)</sup>

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- (73) Established in 1873 under "An Act respecting the Administration of Justice and for the establishment of a Police Force in the North West Territories" (S.C.36 Vict., C.35) assented to May 23, 1873. Section 10 of the Act stated that "the Governor in Council may constitute a Police Force in and for the North West Territories". In 1894 Inspector Charles Constantine travelled to, and reported on conditions in, the Yukon and the following year a NWM Police detachment was established at Fort Cudahay (Fortymile), authorized under Order-in-Council P.C. 1492. Constantine's main task upon arriving in the Yukon in July, 1895 was to impress the fact of Canadian authority on the gold miners of the Yukon and to establish the principle of the authority of the Crown over that of squatter sovereignty. This point was clearly made when in July 1896 a force of NWM Police upset an equitable miners' court decision to insist that a dispute be settled in accordance with Canadian procedures (Zaslow 1971:99).

- (74) For example, on May 12, 1899, the Reverend R.M. Dickey of the Presbyterian Church, "Grand Forks of Eldorado", Y.T. (situated at the junction of Bonanza and Eldorado Creeks, Grand Forks did not exist prior to the gold rush; in 1898-99 the population of Grand Forks and environs was 5500, by 1911 it had dropped to 62 and soon after was abandoned) applied to the Commissioner, Dawson, Y.T., for a lot on which to build a church. In a follow up letter, Sept. 26, 1899 the Rev. D.G. Cock wrote "the place of worship in which we now meet in this place (Grand Forks) is situated on Creek claim no.5 above Bonanza and I have been informed that the owners of that claim propose ground-sluicing the ground on which the church is situated, next September. This would necessitate moving the church. Now Sir I pray you to grant me the right to a piece of ground suitable for the purposes of a church building..." (PAC. RG91, YTR).

The flow of gold seekers was soon to have its effect upon the Indians of the Klondike who still congregated in small groups at traditional hunting and fishing locations. Bishop Bompas, in applying to the Minister of the Interior in October 1896<sup>(75)</sup> for 40 acres of land "for mission purposes and Indian occupation", described the following situation. Twenty or more Indian families had always had a fishing camp at the mouth of the Klondak (sic) River. The miners coming into the area pressed the Indians to sell them their cabins which were situated there. About 15 of the cabins were sold with the result that a second town (the first being Dawson City on the north side of the Klondike River) emerged in the midst of the fishing camp.

Inspector C. Constantine, NWM Police and Acting Government Agent, was not entirely sympathetic to the position taken by Bishop Bompas and in a letter to the Deputy Minister, Department of the Interior, dated Fort Constantine, October 30, 1896,<sup>(76)</sup> he stated "I cannot recommend this application (Bompas'). The ground asked for has been applied for by the Police<sup>(77)</sup> for their own and other government purposes, and is suitable for them. If one lot large enough for a log church and a cabin is granted it is my opinion quite sufficient."

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(75) Letter from Bishop W.C. Bompas, Oct. 28, 1896, Buxton Mission, Upper Yukon River, to the Minister of the Interior (PAC. RG91, YTR, Vol. 19, file no. 4682).

(76) PAC. RG91, YTR, Vol. 19, file no. 4682.

(77) Letter from Constantine to Deputy Minister, Department of the Interior, September 24, 1896 (PAC, RG91, YTR, file no. 4607).



Constantine goes on to say in a follow up letter dated November 19, 1896 (see Appendix C), "The idea that the Indians would be driven from the neighbourhood by the encroachment of the Whites is absurd. There is plenty of room for their winter cabins either on the many well wooded islands in the Klondike or on its banks a little above the mouth or on a large island directly opposite their old winter quarters".

Finally in June 1897, Constantine reported in a letter to the Secretary of the Interior (see Appendix D) "...that arrangements have been made with the Indians at Klondak (sic) with the knowledge and approval of their missionaries whereby they relinquish any claim so far as the Department is concerned to the site of the old Indian Village at Klondak and are now located on a point about three miles below the site of Dawson on the east bank of the Yukon River".

By 1899 the junction of the Klondike and Yukon Rivers had become the site of a city with a population between 15,000 and 20,000 where four years earlier it had been an Indian fishing camp of 20 families. Observed in this light Constantine's decision appears more wise than autocratic.

In 1898, 7080 boats went down the Yukon River carrying approximately 28,000 people (Report of NWM Police, 1898:Part III:83). The result of this was that the traditional grounds of several Indian bands in the Yukon River valley were encroached upon. In a letter to the Deputy Minister of the Department of the Interior, dated May 1, 1900, Wm. Ogilvie, then Commissioner of the Yukon Territory, recommended the

laying out of a reserve of 320 acres for the Indians camping on the shore of Lake Laberge. This recommendation was quickly acted upon and by an Order-in-Council of July 13, 1900 a tract of land containing 320 acres was laid out and set apart for the Indians in the vicinity of Lake Laberge. (78)

(v) Indian Lands; Treaties 8 and 11

Although by 1903 the 'mining' population of the Yukon had begun to drop, concern was still being expressed for groups of Indians whose traditional lands were in jeopardy. Z.T. Wood, Assistant Commissioner, Commanding the NWM Police, Dawson, in a letter to the Commissioner of the Yukon Territory dated May 4, 1903 referred to the Indians living at the junction of the McQuesten and Stewart Rivers expressing his concern that they could be ousted by some 'townsite speculator' if a reserve was not established for them. A survey was subsequently carried out and by Order-in-Council dated June 4, 1904 an area of 320 acres was reserved for the use of the Indians.

This and other similar reserves did provide some constraints on white settlement in specific and relatively small areas inhabited by Indians. However the more fundamental issue of the rights of Yukon

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(78) PAC. RG91, TGR, Vol. 7, file no. 1331. A similar request from Ogilvie dated July 17, 1900 for reserves at Tagish, Teslin, Big Salmon River, Selkirk, Stewart River and Fortymile was approved and by Order-in-Council of September 1, 1900 such reserves were set apart (Ibid.).

Indians with respect to land was not reflected in any Treaty and indeed to this day the Indians of the Yukon Territory (like the Inuit of the Northwest Territories) have signed no treaties with the Canadian Government.

Morrow J. (1973:36) pointed out that in an address to the Queen by the Senate and House of Commons of Canada made in December 1867 respecting the acquisition of Rupert's Land and the North-Western Territories it was stated that "the claims of the Indian tribes to compensation for lands required for the purposes of settlement will be considered and settled in conformity with the equitable principles which have uniformly governed the British Crown in its dealing with the Aborigines". This policy statement was later embodied in legislation with the passing of the Dominion Lands Act, 1872 which stated in Section 42, "None of the provisions of this Act respecting the settlement of agricultural lands, or the lease of timber lands, or the purchase and sale of mineral lands, shall be held to apply to territory the Indian title of which shall not at the time have been extinguished".

Prompted by developments in the District of Athabaska an Order-in-Council of January 26, 1891 contained the following statement: "the discovery in the District of Athabaska and in the Mackenzie River Country that immense quantities of petroleum exists within certain regions as well as the belief that other minerals and substances of economic value, such as sulphur on the South Coast of Great Slave Lake and Salt on the Mackenzie and Slave Rivers, are to be found therein, the development of which may add materially to the public weal, and the further consideration that several Railway projects in connection with

this portion of the Dominion may be given effect to...appear to render it advisable that a treaty or treaties should be made with those Indians who claim those regions as their hunting grounds, with a view to the extinguishment of the Indian title..."

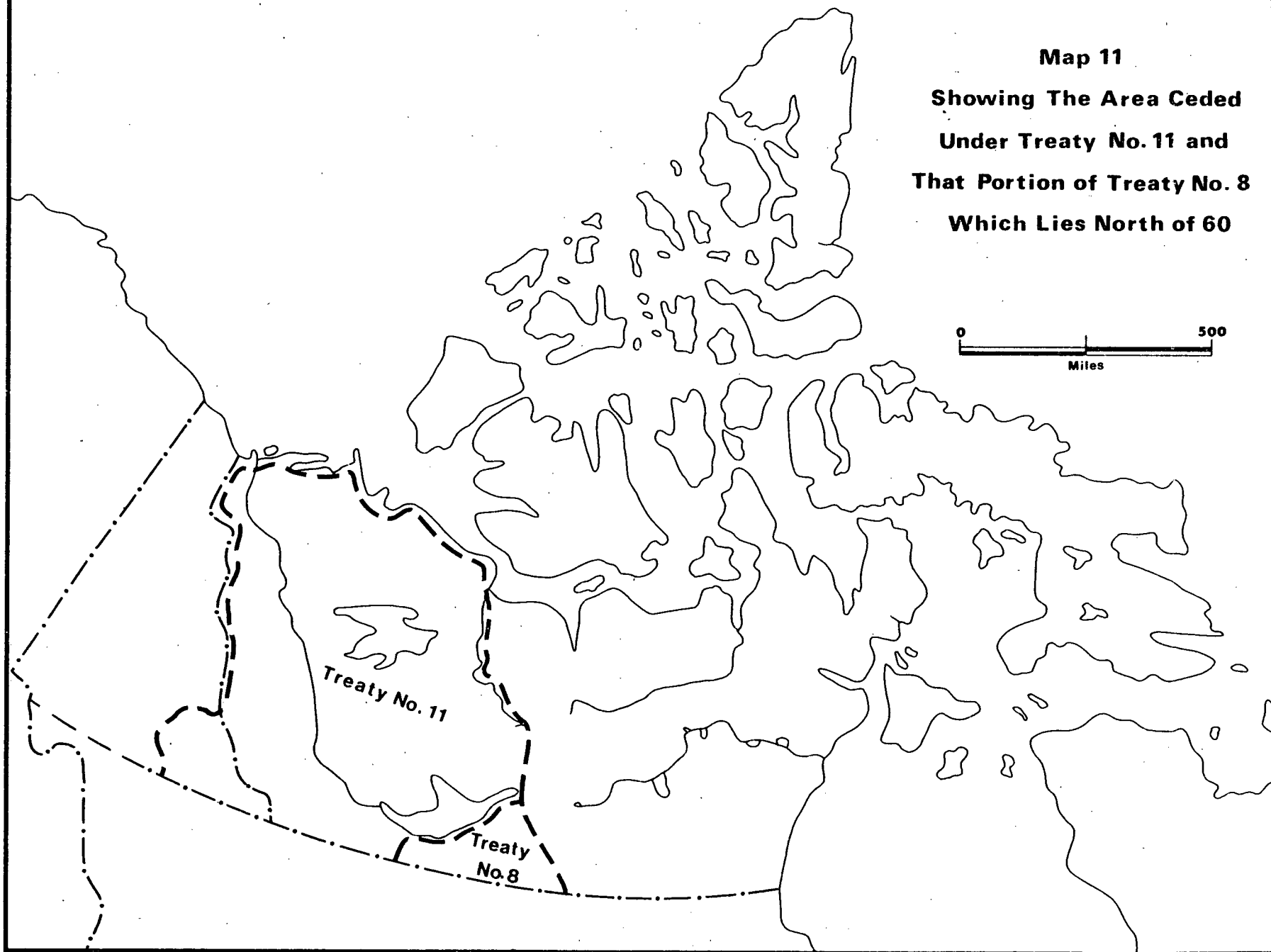
By Order-in-Council P.C. No. 2749 of June 27, 1898 a Commission was authorized to negotiate a treaty with the Indians of the Athabaska and Peace River districts and a portion of the present Mackenzie District of the Northwest Territories lying south of Great Slave Lake. Following negotiations conducted during the summer of 1899 a treaty was signed with various bands resident in the region delineated as "Treaty 8" in Map no. 11 and an area of just under 325,000 square miles was ceded to Canada. The only other treaty signed by native people north of 60 is Treaty 11 which was negotiated in 1921 and 1922 with the Indians of the Mackenzie District not included in Treaty 8 of 1899. Under Treaty 11, as shown in Map no. 11, 372,000 square miles were ceded to Canada.

Treaties 8 and 11 contained several nearly identical clauses pertinent to the present discussion, viz:

"...Indians have been notified that it is Her Majesty's desire to open for settlement, immigration, trade, travel, mining, lumbering, and such other purposes..., a tract of land as bounded and described and to obtain the consent thereto of Her Indian subjects inhabiting the said tract, and to make a treaty, and arrange with them so that there may be peace and good will between them and Her Majesty's other subjects..."

"...the said Indians do hereby cede, release surrender and yield up to the Government of the Dominion of Canada...for ever, all their rights, titles and privileges whatsoever, to the lands..."

**Map 11**  
**Showing The Area Ceded**  
**Under Treaty No. 11 and**  
**That Portion of Treaty No. 8**  
**Which Lies North of 60**



"And Her Majesty the Queen hereby agrees with the said Indians that they shall have the right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered...subject to such regulations... and excepting such tracts as may be required for settlement, mining, lumbering, trading or other purposes.

"And Her Majesty the Queen hereby agrees to lay aside reserves<sup>(79)</sup> for such bands as desire reserves the same not to exceed in all one square mile for each family of five... for such families or individual Indians as may prefer to live apart from band reserves. Her Majesty undertakes to provide land in severalty to the extent of 160 acres to each Indian, the land to be conveyed with a proviso as to non-alienation without the consent of the Governor in Council of Canada..."

In March 1973, 16 Indian Chiefs from the Northwest Territories signed a caveat claiming an interest in 400,000 square miles of land in the Mackenzie District of the Northwest Territories, an area covered by Treaties 8 and 11. When lawyers for the Indians tried to register the caveat the matter was referred by the Northwest Territories Land Registry Office in Yellowknife to Justice W.G. Morrow of the Supreme Court of the Northwest Territories. The Judgement of Morrow J., filed October 2, 1973 (No. 2247), established in part that:

"...those same indigenous people...are prima facie owners of the lands covered by the caveat - that they have what is known as

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(79) To date, only the Hay River Band has exercised this right. By Order-in-Council P.C. 1974-387 of February 26, 1974 (see Appendix I) approximately 52 square miles were set apart for the use and benefit of the Hay River Band of Indians and referred to as Hay River Indian Reserve Number 1.

aboriginal rights" and

"...notwithstanding the language of Treaties 8 and 11 there is sufficient doubt on the facts that aboriginal Title was extinguished and therefore such claim for title should be permitted to be put forward by the Caveators." (80)

The Canadian Government subsequently appealed Justice Morrow's decision to the Appeal Court of the N.W.T., and, while awaiting the results of the appeal, has stated through the Minister of Indian Affairs and Northern Development, that it is prepared to negotiate a land settlement with the Indians and Inuit north of 60, but it is not willing to renegotiate Treaties 8 and 11.

(vi) Timber, Agriculture and Homesteading

The first significant use of northern forests for the production of timber came with the Klondike gold rush. Authority for the disposal of timber on Dominion Lands lay with the Dominion Lands Act. Timber rights were alienated either through the granting of timber berths or the issue of timber permits. Timber berths were awarded

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(80) For the argument leading to this decision see "Reasons for Judgement of the Honourable Mr. Justice W.G. Morrow (No.2) in the Matter of an Application by Chief Francis Paulette et al. to lodge a certain Caveat with the Registrar of Titles of the Land Titles Office for the Northwest Territories" dated Yellowknife, September 6, 1973.

following public competition and could not exceed 25 square miles except for purposes of cutting pulpwood in which case the area was determined by the Governor in Council. The lessee of a timber berth was granted an annual licence, renewable from year to year, which provided authority to cut and remove timber, according to the terms of the licence, within the limits of the berth.

Timber berths for purposes of pulpwood production have yet to be granted north of 60 but as early as 1900 berths were awarded to sawmill operators in the Yukon Territory. An Order-in-Council of March 16, 1901<sup>(81)</sup> stated with respect to timber in the Yukon Territory that not more than five berths of five square miles each should be granted to any one person or company and that a licensee should have a sawmill in operation for at least six months of each year. By 1901 there had been 97 timber berths awarded in the Yukon covering a total of 225 square miles.<sup>(82)</sup>

Permits to cut timber on Dominion Lands were issued under S.57 of the Dominion Lands Act to settlers for building purposes and firewood; to prospectors, miners, steamboat owners; for the construction of public works, railways, churches, schools; and for sale as cordwood and pulpwood. Permits were issued on an annual basis and for tracts of land not exceeding one square mile unless by authority of the Governor in Council.

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(81) Canadian Department of the Interior Annual Report, 1900/01:xxiv.

(82) Ibid:No.19, p.37.



During the gold rush and for several years following, much of the timber cut under permit in the north was for purposes of supplying steamboats which plied the Yukon River. (83)

In 1900/01 there were 69,483 cords of firewood, 26,736 house-logs and 6,234,000 board feet of lumber produced in the Yukon. (84) By 1905/06 the volume of firewood cut had been reduced to 11,600 cords, mainly due to the production of coal which that year amounted to 12,500 tons.

Except when the Canol pipeline and Alaska highway were being constructed during the Second World War, the annual total volume of lumber and firewood produced in the two territories has seldom exceeded 10 million board feet and 20,000 cords respectively. Since the 1950's timber cut for the mining industry has provided a substantial portion of the total timber harvested, with the annual production for the two territories averaging between two and three million lineal feet.

When the Territorial Lands Act (S.C.14 George VI, C.22) was enacted in 1950 the Dominion Lands Act was repealed (S.26). Under the new Act timber disposal in both the Yukon and Northwest Territories was provided for under S.13 which authorized the Governor in Council

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(83) Steamboats were first used north of 60 by the Hudson's Bay Company. Between 1883 and 1887 the Company operated three boats in the Mackenzie River basin. One of these, the "Wrigley", served trading posts down the Mackenzie River between Great Slave Lake and the Arctic Coast (Zaslow 1971:56).

(84) Can. Dept. of the Interior, Annual Report 1900/01, No.19, pp.12-37.

to make regulations respecting the issue of permits to cut timber and to prescribe the terms and conditions under which timber could be cut. All reference to timber berths and licences were deleted although in practice the term 'permit' has been broadly interpreted. It is the Territorial Lands Act which provides present-day authority for the disposal of timber in the Yukon and Northwest Territories.

The use of northern land for the production of food crops dates back to the early trading posts. The Hudson's Bay Company's policy of making their posts self-sufficient in provisions and supplies is reflected in the fact that by 1826 gardens were kept at all of the Company's posts as far north as Fort Good Hope, 66° 15' north latitude. (85) Discussing the Hudson's Bay Company, Innis (1962:300) pointed out that in 1852 crops at Fort Simpson included 700 bushels of potatoes, 120 bushels of turnips and 180 bushels of barley, that at Fort Resolution farm production included potatoes, turnips and butter and at Fort Liard 700 kegs of potatoes and 500 kegs of turnips were produced.

Bishop Bompas' request in 1876 that mission farms be established in the District of Athabaska to supply missions in the Mackenzie District and his proposal that steamboat transportation be inaugurated on the Mackenzie River to freight food supplies into the north (Boon 1962:214) illustrates the general concern shared by all early northern missionaries with respect to sufficient food supplies. It was

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(85) Department of Resources and Development, Annual Report 1948/49, Ottawa, p.56.

pointed out above that Bishop Breynat in 1911 established a farm near Fort Smith, N.W.T., in order to supply the Roman Catholic missions in the region (Duchaussois 1923:205-206).<sup>(86)</sup>

The influx of horses to the Yukon for police patrol and for freighting and packing as a result of the gold rush, added another dimension to northern land, namely the use of hay meadows for grazing and forage crops. An excerpt from a letter<sup>(87)</sup> from Inspector J.C. Richards, N.W.M.P., to his Commanding Officer in 1903 exemplifies the broader perspective in which land was beginning to be considered:

"...after a patrol out of Whitehorse to the Alsec River and the alleged gold fields I chose four sites for future stations based on the following reasons: vantage point with respect to trails and water routes of prospectors; good timber for construction material, firewood and boat building; hay meadows and grass for grazing of horses; and fresh water for men and horses..." For the 12-month period ending March 31, 1901, there were 133 hay permits issued in the Yukon and 918.5

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(86) For several years the Oblate Missions also carried out garden trials for the Canadian Department of Agriculture, commencing in 1911 at Fort Resolution and Fort Providence and in 1928 at Fort Good Hope. Other agricultural experimental stations, operated by the Department of Agriculture, included those at Minto Creek, Y.T., in 1915, the farm of James Farr at Swede Creek, near Dawson, in 1917, and Fort Simpson, N.W.T., and Mile 1019 (Haines Jct.) on the Alaska Highway, Y.T., where work commenced in 1947.

(87) J.C. Richards, Inspector, N.W.M.P., White Horse (sic), August 3, 1903 to Officer Commanding 'H' Division, N.W.M.P., White Horse (PAC RG91, YTR, v.18, file no. 4607).

tons of hay cut.<sup>(88)</sup> By 1905 hay cut under permit had dropped to 135 tons and in 1941 with a population in the Yukon of 4914 (from 27,000 in 1901), six permits were issued and 78 tons of hay were cut.

Prior to the passing of the Yukon Territory Act, June 13, 1898, which separated the Yukon District from the rest of the Northwest Territories, land there was administered under regulations pursuant to the Dominion Lands Act. Following the establishment of the Yukon Territory an Order-in-Council was passed, July 7, 1898, which provided for the disposition of lands in the Yukon under regulations which applied to that territory only.

Although most of the stampeders who went to the Klondike had left by 1903/04 there were some who stayed and of those a few turned from mining to agriculture. In response to this new demand for land another Order-in-Council was passed, July 23, 1906,<sup>(89)</sup> which stated that land suitable for agricultural purposes could only be acquired by homesteading or leasing and not by purchase.

By this Order-in-Council the Commissioner of the Yukon Territory was empowered to grant homestead entry for agricultural lands under the following conditions: the head of the family or every male over the age of 17 years was entitled to obtain homestead entry to

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(88) Canadian Department of the Interior, Annual Report 1900/01, No.19, p.12.

(89) S.C.6-7 Edward VII, 1907, p.xcix.

Dominion Lands in the Yukon Territory for an area not to exceed 160 acres; the homestead must be settled on within three months following approval of application; and the applicant was entitled to patent if he had erected a dwelling, had 10 acres under cultivation and had resided on and cultivated the homestead for two successive years from May to October inclusive.

In 1912 the homestead entries in force in the Yukon numbered 33 and covered 4027.5 acres,<sup>(90)</sup> and by 1916 the number had doubled to 66 covering 9968 acres.<sup>(91)</sup> The proportion of homestead entries which resulted in the issue of letters patent was very low. Perhaps prompted by this fact, George Black, Commissioner of the Yukon, in a letter<sup>(92)</sup> to the Deputy Minister, Department of the Interior, March 27, 1916 stated in part, "I am of the opinion that it would be in the best interest of the Yukon and agricultural development to amend the land regulations permitting the sale of small areas of ground for agricultural purposes. Leasing of land does not appear to be very effective

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(90) Department of the Interior, Annual Report 1911/12, p.49.

(91) Department of the Interior, Annual Report 1915/16, p.45.

(92) PAC RG91, YTR, v.10, file no. 1791.

where large sums of money have to be expended."<sup>(93)</sup> On the basis of Black's recommendations an Order-in-Council of June 3, 1916 withdrew the restrictions upon land suitable for agriculture set out in the Order-in-Council of July 23, 1906, and allowed such lands to be sold.

By 1920 there had been a total of 99 homestead entries granted of which 64 were in force covering a total area of 9931 acres. Letters patent had been issued for 14 homesteads<sup>(94)</sup> or slightly more than 14 percent of the total entries granted. Until 1950, when the Territorial Lands Act replaced the Dominion Lands Act and the provision for homesteading was discontinued, the number of homestead entries and agricultural leases in force in the Yukon averaged 25 and 10 respectively.

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(93) Some homesteaders in the Yukon did prove up and receive their 160 acres of land, however more followed the pattern of F.M. Watt who made application in 1919 for homestead entry to 160 acres, two miles east of Champagne near the Whitehorse to Kluane wagon road. His application of June 10, 1919 was approved by the Gold Commissioner July 3, 1919. In a letter to Watt, dated May 14, 1924, the Dominion Land Agent in Whitehorse stated, "The homestead entry applied for by you...is liable to cancellation as you have not made application for patent according to the provisions of the Homestead Regulations. Kindly inform me if you wish to retain your homestead and what improvements you have made." Watt responded by letter, June 30, 1924, stating that no improvements had been made to the land and that he "wished to throw up the homestead." His returned homestead entry certificate was cancelled by the Dominion Land Agent August 1924 (PAC RG91, YTR, v.50, file no. 31228).

(94) Canadian Department of the Interior, Annual Report 1919/20, p.22.

In the Northwest Territories the disposal of land, suitable for agriculture, was carried out under those sections of the Dominion Lands Act not directly related to homesteading. Although agricultural leases were common, "agreements of sale" took the place of granting homestead entries as practised in the Yukon. The provision for the sale of land for agricultural purposes with or without homestead conditions (the former in effect an agreement of sale) was made in Section 32 of the Dominion Lands Act as Amended, 1908. Regulations pursuant to this Act, passed by Order-in-Council of June 3, 1918, P.C. No. 1263, provided in Section 10, that "If the purchaser fails to comply with the terms of the sale either with regard to the payment of purchase price and interest, or in regard to the performance of the prescribed settlement duties, the same may be cancelled in the discretion of the Minister."

During the following three decades the number of land transactions in the Northwest Territories, outside of settlements, rarely exceeded 50 in number in any one year. For example in 1935 there were 21 applications for land received, two patents issued, four agreements of sale drawn up and 17 leases granted for various purposes including agricultural, grazing and fur-farm operation.<sup>(95)</sup> The first land sale recorded in the present Northwest Territories<sup>(96)</sup> was to Captain

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(95) Department of the Interior, Annual Report 1934/35, p.36.

(96) Sale # 16118, Group 1683, file 2001774; 960 acres, three miles east of Pond Inlet, Baffin Island. Letters Patent issued May 16, 1910; Department of Indian and Northern Affairs records, Ottawa.

J.E. Bernier<sup>(97)</sup> in 1910. That year Captain Bernier had found coal deposits near Pond Inlet; he took 155 tons to burn in the C.G.S. Arctic (Phillips 1967:149).

By 1965/66 the total number of land transactions in the Northwest Territories had reached 712 (see Table 1).

(vii) Trapping

When the Hudson's Bay Company relinquished its fur-trade monopoly in 1870 it had a total of ten posts north of 60, nine of which were in the Mackenzie District and one in what is now the Yukon Territory (see 'Deed of Surrender, Appendix A). For two centuries the pattern established by the Hudson's Bay Company had been one whereby the native trapper made periodic trips to one of the Forts to trade his furs. The introduction of competition to the Hudson's Bay Company

after

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(97) Captain Bernier was commander of the C.G.S. Arctic when it made three important voyages to the Canadian Arctic between 1906 and 1911. Appointed a fisheries officer under the Canada Fisheries Act, he collected fisheries licence fees from whalers plying Canadian Arctic waters, advised them on regulations regarding custom duties and landed at various Arctic islands taking formal possession in the name of Canada. During this period he overwintered three separate years at three locations, Pond Inlet, the region of Banks and Victoria Islands and Arctic Bay. Following his second voyage he wrote to Prime Minister Laurier urging him to pass legislation for the regulation of hunting in the Arctic islands because of his concern for the Eskimos there and the depletion of game due to American explorers and hunters (Zaslow 1971:267). An "Act respecting Game in the Northwest Territories of Canada", (S.C.7-8 George V, C.36) was passed in 1917 which set closed seasons for certain animals and placed a total prohibition on the hunting of others including musk-oxen.



TABLE 1Land Transactions in the Northwest Territories, Selected Years

	<u>1965/66</u> <sup>(1)</sup>	<u>1973/74</u> <sup>(2)</sup>
agreements of sale in force	217	118 <sup>(3)</sup>
leases in force:		
residential	140	65 <sup>(3)</sup>
commercial	212	298
religious-education	32	28
agric./grazing/ gardening	25	15
quarrying	7	3
recreation/summer residence	5	67
Total leases	421	594
Total land transactions in force	638	712

(1) Annual Report, Department of Northern Affairs and National Resources, 1965/66, Ottawa.

(2) Annual Report, Yellowknife Lands Office, DIAND, 1973/74.

(3) Reduction from 1965/66 due to transfer of land in and around communities from federal to territorial government.

after 1870<sup>(98)</sup> brought with it variations to this established pattern.

Usher (1970:op. cit., p.20) described the several types of traders as follows: those who conducted a regular trade from permanent establishments consisting of a store, warehouse and dwelling; on the Arctic Coast many traders had schooners which they used as 'floating posts', wintering in different locations each year; whalers who engaged in the fur trade either from their vessels or from whaling stations; trappers who maintained permanent camps and conducted a small volume of trade in addition to their own trapping; and itinerants who travelled about in scows or sleds and traded with the trappers where they found them.

Following the First World War and the rise in fur prices, the number of licensed white trappers<sup>(99)</sup> in the Northwest Territories increased from 140 in 1921/22 to 500 in 1926/27 (Usher 1970:26). Due to the substantial difference in overhead costs, many of these newcomers ~~feither followed~~ the practice of 'itinerant trading' or maintained permanent camps from which they trapped and traded rather than establishing permanent trading posts. This resulted in certain areas being

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(98) The first independent traders to establish a permanent post north of 60 were McQuesten and Harper, at Fort Reliance, Y.T., in 1874.

(99) The Northwest Game Act, 1917 (S.C.7-8 George V, C.36), Section 4.9 stated that anyone hunting, trapping or trading in game, except native-born Indians, Eskimos and Half-Breeds, required a licence.

heavily trapped, and worked to the general disadvantage of the Hudson's Bay Company.

An Order-in-Council, P.C. 807 of May 15, 1929 required trading posts to be in operation for at least eight months of the year, and outposts for at least three months. In addition it stipulated the kinds of buildings which could be licensed<sup>(100)</sup> and hence put an end to itinerants and floating posts (Ibid:20).

Since it was then illegal to conduct trade in fur from anything except established posts, the number of permanent posts increased considerably and the fur trade expanded into the Central and Eastern Arctic (see Map no. 12). During the period 1915 to 1919 there were 85 posts in the Northwest Territories and by 1925-1929 this figure had increased to 217. Since then the number of trading posts has steadily declined until by 1970 there were 69 situated in 54 different locations (Ibid:35).

In spite of the substantially fewer posts, the actual number of furs traded in 1927/28 and 1969/70 was approximately the same (see Table 2). The value of the fur harvested in 1973/74, \$3,067,725, appears to be an all-time high.

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(100) Order-in-Council, P.C. 1146, of July 19, 1926, prohibited the establishment or maintenance of a trading post without the authorization of the Commissioner of the Northwest Territories.

**Map 12**

**Routes and Dates of  
Development of Fur  
Trade In The Northwest  
Territories as Indicated  
By The Establishment  
of Permanent Posts  
(after Usher:1971)**

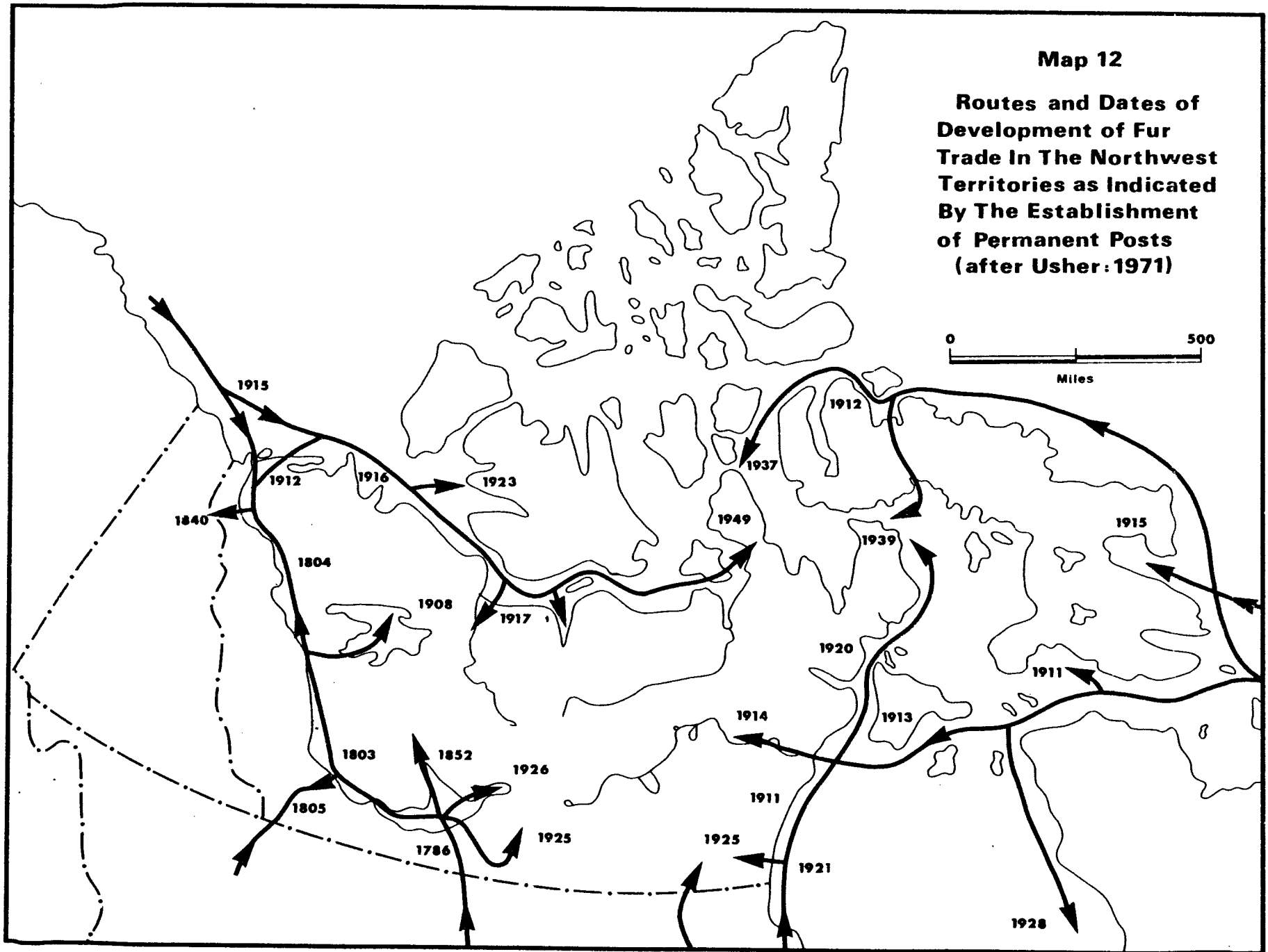


TABLE 2

Number of Fur-Bearing Animals Traded Under Northwest Game  
Licences, Selected Years<sup>(1)</sup>

<u>Kind</u>	<u>1927/28</u>	<u>1934/35</u>	<u>1959/60</u>	<u>1969/70</u>	<u>1973/74</u>
bear, polar	384	39	512	313	452
bear, other	233	76	15	148	177
beaver	7287	11,291	7954	8,157	3,332
coyote	377	133	-	16	57
fisher	72	24	8	27	46
fox, white	21,141	52,615	10,453	6,688	40,555
fox, other	3855	17,709	897	846	1,462
lynx	2621	5829	2509	4,893	1,015
marten	7743	5543	10,240	11,803	5,684
mink	3630	11,134	9669	9,429	3,304
muskrat	154,648	101,044	206,561	114,108	130,555
otter	228	386	173	202	160
skunk/ squirrel	35 0	52 0	0 29,747	0 9,875	0 5,347
weasel	8535	5715	10,362	3,603	3,045
wolf	379	701	249	291	690
wolverine	272	123	82	58	62
seal	na	na	na	31,185	36,391
Total Number	211,440	212,414	289,431	201,642	232,344
Total Value (\$)	2,300,000 (est.)	1,678,544	862,184	1,058,134	3,067,725

(1) Data for years: 1927/28 and 1934/35 from Canadian Department of the Interior, Annual Reports, and for years: 1959/60, 1969/70 and 1973/74 from records of Government of the Northwest Territories, Game Management Division.

In 1948 an Act to Amend the Northwest Territories Act (S.C.11-12, George VI, C.20) was passed which repealed the Northwest Game Act (RSC 1927, C.142) and expanded the legislative power of the Commissioner of the Northwest Territories to include the preservation of game. This authority had been already vested in the Commissioner of the Yukon under the Yukon Territory Act. Hence to-day game is the one natural resource in each territory which is under the jurisdiction of the territorial governments and is administered under territorial ordinances rather than federal legislation.

(viii) Mining, Oil and Gas

In the 1870's prospecting and mining activities were superimposed upon an already changing pattern of northern land use, precipitated and shaped by the fur trade introduced north of 60 nearly a century earlier.

Northern mining began with the production of placer gold, in what is now the Yukon Territory, in the 1880's. During the following three decades the chief placer fields were to be discovered in the Klondike, Sixtymile, Stewart River, Mayo, Big Salmon and Kluane areas. Following the discovery of placer gold in the Klondike in 1896, the output of gold from the Yukon increased rapidly, reaching a maximum in 1900 of 1,120,000 ounces.<sup>(101)</sup> Zaslow (1971:46,111) showed that 'pre-

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(101) Camsell, 1947:29.

Klondike gold production in the Yukon never exceeded \$300,000 annually but by the year 1900 had reached \$22,275,000.

Initially, authority for the disposal of mineral rights on Dominion Lands in the north was contained in the Dominion Lands Act, 1872.<sup>(102)</sup> In addition to various surface rights, sub-surface rights were available through purchase (S.37) and were also provided for in the issue of Letters Patent (S.36) under the Homestead provisions. However, an amendment to the Dominion Lands Act in 1879<sup>(103)</sup> stipulated in Section 6 that lands containing coal or other minerals, within surveyed or unsurveyed territory, were not subject to the provisions of the Act with respect to sale of homesteading, but were to be disposed of under regulations made by the Governor in Council.

An Order-in-Council of March 7, 1884<sup>(104)</sup> set out Mining Regulations governing the disposal of mineral lands, other than coal lands.<sup>(105)</sup> Section 2 of these Regulations stated that any person could explore vacant Crown Lands, not appropriated or reserved by the Government for other purposes, with a view to obtaining a mining claim.

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(102) S.C.35 Vict., C.23.

(103) S.C.43 Vict., C.26.

(104) S.C.47 Vict., C.47, pp.71-92, 1884.

(105) Regulations providing for the disposition of coal lands had already been passed by Order-in-Council of December 17, 1881 (S.C.45 Vict., p.LV, 1882).

Sections 3 through 16 then described the procedure for staking and recording quartz mining claims as did Sections 17 through 35 with respect to placer mining claims. The Regulations stipulated that a quartz mining claim could not exceed 40 acres in area and that within one year of recording his claim, provided he had done \$500 work on the claim, the holder could purchase all of the mineral rights for \$5.00 per acre.

It was this statutory and regulatory authority which prevailed at the time of the Klondike discovery and it was these Regulations to which Ogilvie<sup>(106)</sup> referred when he reported in 1889, "When I was at Forty-Mile River the miners were very anxious to see me, and to know our mining regulations and laws. I explained everything they enquired about as fully as my knowledge and the documents at my disposal would permit. Many of them who were used to the United States system of each mining community making its own by-laws,<sup>(107)</sup> based on the general mining law of the country, and electing their own recorder to attend to the regulations and see them carried out ~~thought~~ some of our regulations rather stringent and hard. I heard their statements and answered such of them as I could, and also promised to lay their views before the Department (of the Interior)..."

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(106) Wm. Ogilvie, D.L.S., Canadian Department of the Interior, reporting on his survey of 'Forty-Mile River', from its mouth to the International Boundary Line. Department of the Interior, Annual Report, 1889:Sec.II-13.

(107) Morrison (1968:4,6) estimated that 75% of those who participated in the Klondike gold rush were citizens of the United States; by 1900 this figure had dropped to 53%.



An Order-in-Council (P.C.2640) of October 2, 1895 was passed, which established the 'Yukon District' of the North West Territories.<sup>(108)</sup> This was followed by the passing of three sets of Regulations in 1898<sup>(109)</sup> all of which pertained to mining in the Yukon District as distinct from the rest of the North West Territories.<sup>(110)</sup>

By 1898 the federal government's policy was to encourage large-scale mining and an Order-in-Council (P.C.22) of January 12, 1898 granting a lease to conduct hydraulic mining operations formed the basis for the hydraulic Regulations passed later that year.<sup>(111)</sup> Such operations, to be feasible, required substantial tracts of land and large volumes of water and this in turn led to the practice of consolidating claims. In many cases the small holdings of the independent miners were bought up by companies. Not all claims were purchased, however, and a decision by the federal government in 1901/02 conveying to a mining syndicate, headed by A.N.C. Treadgold, the right to enter

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(108) See Canada Gazette, vol.xxxi, p.350, 1897 for a schedule describing boundaries.

(109) Placer Mining Regulations for Yukon District, Order-in-Council of Jan. 18, 1898. Dredging Regulations for Yukon District, Order-in-Council, of Jan. 18, 1898. Hydraulic Mining Regulations for Yukon District, Order-in-Council of Dec. 3, 1898.

(110) This distinction still persists in that mining, unlike all other natural resources under federal administration in the two territories, is administered under different Acts in each territory.

(111) Morrison (1968:41).

and work all lapsed claims on three of the Klondike creeks met with considerable public opposition. For a full discussion of this case see Morrison (1968:43-56).

In 1906 the Yukon Placer Mining Act<sup>(112)</sup> was passed which facilitated the grouping of claims with the objective of encouraging large-scale capital investment. In the short term, at least, the Act seemed to have the desired effect; annual production did increase from 158,700 ounces of gold in 1907 to 294,500 ounces by 1913. Then production steadily declined reaching a low point of 25,000 ounces in 1926.

For purposes of the Act, placer mining was held to mean all methods of working whereby earth, soil and gravel could be removed, washed, sifted and refined for the purpose of obtaining gold or other minerals but did not include the working of rock in situ.

The right to enter land and acquire claims was provided for under Section 17 of the Act which said,

"Any person over eighteen years of age may enter for mining purposes, locate, prospect and mine for gold or other precious minerals or stones upon any lands in the Territory, whether vested in the Crown or otherwise, except lands within the boundaries of a city, town or village as defined by any ordinance of the Commissioner in Council, unless under regulations approved by the Governor in Council, or lands occupied by a building, or within the curtilage of a dwelling-house, or lawfully occupied for placer mining purposes, or that form part of an Indian reserve."

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(112) S.C.6 Edward VII, C.39.

Part VIII of the Act dealt with the grouping of claims and made provision for adjoining claims, not exceeding ten in number to be grouped for the performance of work upon filing notice with the mining recorder. With the approval of the Commissioner adjoining claims exceeding ten in number and any number of claims some of which were not adjoining could also be grouped.

An amendment to the Placer Mining Act in 1908 stated that nothing in the Act shall prevent the enactment by the Governor in Council of regulations under which dredging leases may be issued (S.C. 6-7, Edward VII, C.54, S.7) and redefined 'creek' to exclude streams having an average width of 150 feet, that is those streams which may be considered rivers under the Dredging Regulations (S.C.7-8, Edward VII, C.77, S.1).

By 1911 most of the independent placer miners had left the Yukon<sup>(113)</sup> and gold production was derived mainly from large-scale operations. In 1912 there were 45 dredging leases in force in the Yukon Territory extending along 210.65 miles of the Yukon, Stewart, McQuesten, Fortymile, Big Salmon, Klondike, Hootalinqua and Mayo Rivers.<sup>(114)</sup> However, as these operations systematically retraced the steps of the original placer miners, they too began to decline and by 1929 there were only three dredging leases in force, covering 14.34

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(113) Yukon population in 1911 was 8,512, down from 27,219 ten years earlier.

(114) Department of the Interior, Annual Report 1912, p.48.

miles of river. (115)

Railroad rights-of-way were another form of land-use, introduced to the north as a result of the gold rush. Before the turn of the century two railroads had been granted charters, the White Pass and Yukon Route (initially the White Pass and Yukon Railway and the British Yukon Railway) and the Klondike Mines Railway Company.

The former proved successful, surviving the vicissitudes of Yukon development through the 20th century and is currently an integral part of the Yukon transportation system. The White Pass and Yukon Route's 110 miles of line in crossing the Coastal Mountains and stretching from Skagway, Alaska on the coast to Whitehorse, Yukon Territory, traverses Alaska, British Columbia and the Yukon for 20.4, 30.9 and 59.1 miles, respectively. Construction of the railroad began at Skagway, April 1898, reached Whitehorse June 8, 1900 and was operational by July 29, 1900, a period of just over two years (Graves, 1908).

The Klondike Mines Railway Company proved less successful. Under a charter granted July 10, 1899, the Company was authorized to construct a railroad from Klondike City (across the Klondike River from Dawson) to Bonanza Creek, Dominion Creek, Indian River, Yukon River, hence to Dawson City; plus certain branch lines in the vicinity. An Order-in-Council dated September 4, 1900 approved the route as set

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(115) Department of the Interior, Annual Report 1929.

out by the company and granted it the right to enter upon and occupy Crown lands for purposes of construction.

In a letter to the Board of Railway Commissioners for Canada dated August 16, 1906 the Klondike Mines Railway Company applied to open the first 15 miles of line "from Dawson up the Creeks" for the carriage of traffic. By this time much of the line's raison d'etre had dissipated. The Company was in financial difficulty from the beginning<sup>(116)</sup> and finally in 1920 submitted to a request by the Commissioner of the Yukon that the track be removed so that the right-of-way could be used for road purposes.<sup>(117)</sup>

Although the White Pass and Yukon Route was built primarily to move men and freight to and from the goldfields in concert with steamships plying between Whitehorse and Dawson, its presence provided other benefits as well. For example the Whitehorse copper belt was discovered in 1897, and its location close to the railway made its early development possible.

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(116) The Company in a letter to the Commissioner of the Yukon Territory, dated July 15, 1909, asking that provisions of the Yukon Territory tax ordinance not be levied on the Company for a period of five years, stated that between the time the railway commenced operation, November 5, 1906 and May 31, 1908, its earnings were \$128,058.82 and its expenses \$249,655.47 (PAC. RG91, TGR, vol.16, file no. 3306).

(117) Letter from J. Latta Esq. to Commissioner, Y.T., dated August 5, 1920 (Ibid.).

Another lode deposit of silver-lead was discovered by placer miners in 1906 near Mayo, Y.T., and mining began there in 1913. The Silver King property on Galena Hill was the first mine to enter production. From 1920 to 1923, most of the silver and lead produced, came from deposits that were discovered on Keno Hill. In 1924, Treadwell-Yukon Corporation built a 150-ton concentration mill at Keno Hill and in 1935 the mill was moved to the Elsa property on Galena Hill.

Some lode gold was mined in the Klondike and Carmacks districts, the most important being the Lone Star mine between Bonanza and Eldorado Creeks. The Department of the Interior annual report for 1935 noted that gold-bearing quartz had been discovered near the Yukon River and that possibly a 50-ton mill would be constructed in 1936 to process it (p.35). Apparently this was not done.

In 1924 lode mining in the Yukon Territory was provided for under a separate Act, just as placer mining had been 18 years earlier. The Yukon Quartz Mining Act, 1924 (S.C.14-15, George V, C.74) replaced in the Yukon Territory the Quartz Mining Regulations pursuant to the Dominion Lands Act, although the latter continued in force in the Northwest Territories. The Act applied<sup>(118)</sup> to Dominion Lands in the Yukon Territory and defined 'mine' to be any land in which any vein, lode, or rock in place, shall be mined for gold or other minerals.

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(118) The Quartz Mining Act and Yukon Placer Mining Act are still in force.

The Act provided any person over the age of eighteen years with the right to enter, prospect and mine any vacant Dominion Lands in the Yukon Territory and any other lands which may be occupied but to which the rights to enter, prospect and mine were reserved to the Crown. There were certain exceptions such as land occupied by any building or under cultivation, but these too could be entered and mined with the written consent of the owner or lessee.

Although interest in the mineral potential of the north dates back to Frobisher's return to England from Baffin Island in 1576, it was not until 1933 that the first metal mine<sup>(119)</sup> in the Northwest Territories started production. In 1930, silver and pitchblende were discovered by Gilbert La Bine on the east shore of Great Bear Lake and in 1933 a mill was placed in production on the La Bine deposit by Eldorado Gold Mines Ltd. By the end of 1939 about 126,370 tons of ore had been milled and the estimated value of the concentrate produced was \$7.6 million.

Because of the importance of uranium during the latter stages of the Second World War, the company was expropriated by the federal government in January 1944 and converted to a Crown corporation.

In 1935 gold was discovered by a Geological Survey of Canada party along the west shore of Yellowknife Bay. Following three years

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(119) Crude oil was being produced near Fort Norman, N.W.T., in 1920.

of considerable prospecting and exploration activity, three mines, Con, Rycon and Negus were brought into production in 1938-39, followed by a fourth in 1951.<sup>(120)</sup> Milling, which began in July 1938 and continued until August 1943, when operations were suspended due to a shortage of labour, produced gold valued at \$6.9 million. Milling operations were resumed in August, 1946.

In addition to the four mines which were in production, there were also 4690 claims in good standing by the end of 1941. The effect of this mining activity is partially illustrated by the fact that the non-native population of the Northwest Territories, which had been 137 in 1901, rose to 2284 in 1941. Unlike the Yukon, the Northwest Territories has experienced a steady rise in population since the turn of the century (see Table 3, below).

In 1887, R.G. McConnell of the Geological Survey of Canada, noted promising indications of the presence of oil in the Devonian rocks of the Mackenzie Valley. In 1914, Dr. T.O. Bosworth on behalf of a syndicate in Calgary staked three claims on the bank of the Mackenzie River about 50 miles below Fort Norman.<sup>(121)</sup> These claims were subsequently acquired by the Northwest Company, a subsidiary of

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(120) Con and Rycon, owned by Consolidated Mining and Smelting Company (now Cominco), are situated on the west side of Yellowknife Bay adjacent to the city of Yellowknife.

(121) Alexander Mackenzie, on his voyage to the Arctic Ocean in 1789, had noted oil seepages in the area around what is now Fort Norman.



TABLE 3

Population of the Yukon Territory and the  
Northwest Territories <sup>(1)</sup>

<u>Year</u>	<u>Y.T.</u>	<u>N.W.T.</u>
1901	27,219	na
1911	8,513	6,507
1921	4,157	7,988
1931	4,230	9,723
1941	4,914	12,028
1951	9,906	16,004
1961	14,628	22,998
1966	14,382	28,180
1971	18,388	34,366
1974 (est.)	20,000 <sup>(2)</sup>	41,579 <sup>(3)</sup>

(1) Statistics Canada.

(2) Yukon Territorial Government, Whitehorse, Y.T.

(3) Government of the Northwest Territories, Department of Information, Yellowknife, N.W.T.

Imperial Oil Limited (Camsell 1948:40).<sup>(122)</sup>

In 1920 the first well was drilled and oil was encountered at a depth of 783 feet. The following year a small refinery capable of producing motor gasoline and diesel fuel was erected. The first substantial local demand for oil came in 1932 with the development of the pitchblende-silver deposits of Eldorado Gold Mines at Great Bear Lake. In 1941, production totalled 80,000 gallons of aviation gasoline, 112,000 gallons of motor fuel, and 230,000 gallons of fuel oil.

In order to provide a relatively secure source of motor fuel for military forces in northwestern North America during the Second World War, the 'Canol Project' was conceived. The object of the project was fourfold, namely: a large increase in the production of the Norman

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- (122) Early provisions to stake claims and acquire petroleum rights in the Yukon and Northwest Territories were found in:
- (i) Order-in-Council of May 31, 1901 (S.C.63-64, Vict., p.lxv) "all unappropriated Dominion Lands in Manitoba, North-West Territories and Yukon Territory shall, on July 1, 1901, be open to prospecting for petroleum by any individual or company desiring to do so".
  - (ii) Order-in-Council of March 23, 1904 (Can. Gazette, vol.xxxvii, p.1970) "should oil be discovered an area of not more than 640 acres, including oil well, will be sold to the company or person making the discovery at \$1.00 per acre and an additional 1280 acres of area may be sold at \$3.00 per acre". See also Regulations governing the disposal of petroleum and natural gas rights in Manitoba, Saskatchewan, Alberta, Northwest Territories and the Yukon Territory.
  - (iii) Order-in-Council of August 12, 1911 (S.C.2, George V, p.clx).

Wells oilfield; the construction of a pipeline to carry the crude oil from Norman Wells, N.W.T., to Whitehorse, Y.T.; the erection of a refinery at Whitehorse to provide aviation gasoline and other petroleum products; and the construction of supplementary pipelines for the distribution of the petroleum products of the refinery.

Under the terms of an agreement between the Canadian and United States Governments, the cost of the project was to be borne by the United States, and Canada was to provide essential land and rights-of-way and waive royalties on oil production.

The laying of the pipeline was a notable achievement in that it traversed the Mackenzie Mountain Range lying between the Mackenzie and Yukon Basins. The line consisted of 457 miles of 4-inch pipe and 120 miles of 6-inch pipe, and ascended to a maximum elevation of 5,860 feet. Work was begun early in 1943 and was completed in February 1944; the first oil through the line reached Whitehorse April 16, 1944. The pipeline road, paralleling the line, was completed in October of 1944.

To distribute the petroleum products of the refinery at Whitehorse (which had a storage capacity of 678,500 barrels), a 4-inch pipeline along the right-of-way of the White Pass and Yukon Route between Whitehorse and Skagway, a 3-inch pipeline paralleling the Alaska Highway from Whitehorse to Fairbanks, and a 2-inch pipeline from Carcross to Watson Lake were completed in 1943.

In early 1945 the need for large petroleum supplies in Alaska and the Yukon had lessened considerably and on March 8, 1945

drilling and production under Canol Project ceased. By that date 67 wells had been drilled in the Norman Wells field and 60 of these had been brought into production and 1,858,751 barrels of crude oil were produced for the Canol Project.

The approximate metal and petroleum production in the Yukon Territory and Northwest Territories up to the end of 1945 were as follows:

		<u>Y.T.</u>	<u>N.W.T.</u>
placer gold	oz	9,714,397	-
lode gold	oz	-	376,429
silver	oz	45,057,223	1,890,418
copper	lb	13,050,000	237,541
lead	lb	95,030,969	16,436
tungsten	lb	21,590	140,910
natural gas	m.c.f.	-	11,600
crude petroleum	bb1	-	2,048,425
pitchblende			na

(Source: Camsell 1948:23).

Following the Second World War mineral development and related activities formed an increasing proportion of northern land use. In 1947 the Mackenzie Highway was completed from Grimshaw, Alberta to Hay River, N.W.T., a distance of 385 miles and the gold mines in Yellowknife were supplied with electrical power from the Snare River power development to the north. By 1952 an additional 70 miles of road linked the Mackenzie Highway with Pine Point, the site of a large lead-zinc deposit, south of Great Slave Lake. The following year drilling operations were conducted at Pine Point and Rankin Inlet, the site of a nickel deposit on the west shore of Hudson Bay. The North Rankin Inlet Nickel Mines Limited came into production in the summer of 1958 and continued until 1962.

By 1958 oil and gas exploration permits had been issued which covered most of the Mackenzie Delta.<sup>(123)</sup> Between 1960 and 1962 construction and development of a tungsten mine on the Flat River straddling the Yukon Territory-Northwest Territories border was started; the survey of the Great Slave Lake Railway was implemented; lead-zinc discoveries were made at Little Cornwallis Island in the Arctic Islands and Strathcona Sound on northern Baffin Island;<sup>(124)</sup> and the first well

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(123) The number of active oil and gas permits in the N.W.T. increased from 189 covering 10,275,000 acres in 1954 to 403 covering 21,439,000 acres in 1958.

(124) Development work on this deposit commenced in 1974 and production is expected to begin by 1977.

was drilled in the Arctic Archipelago on Melville Island. By 1964 the first lead-zinc ore shipment went out from Pine Point over the Great Slave Lake Railway.

Development activity was not limited to the Northwest Territories. In 1956 an asbestos deposit was discovered at Clinton Creek in the Dawson area and a drilling rig was moved into the Eagle Plains in preparation for drilling the following year. In 1954 there were only 14 active oil and gas permits in the Yukon covering 747,803 acres but by 1958 these figures had increased to 225 and 10,006,995 respectively. Between 1961 and 1964 the number of mineral claims recorded in the Yukon averaged 2500 per year with a high of 3164 in 1962. Due largely to intensive activity in the Vangorda Creek area this figure rose to 15,889 in 1966. In 1969/70 the Anvil Mining Corporation began open-pit production of a large lead-zinc-silver deposit in this area, near Ross River. Gondola containers carrying the concentrate are hauled on tractor-trailer units 235 miles to Whitehorse where they are transferred to railway cars and forwarded over the 110-mile White Pass and Yukon Route railroad to Skagway, Alaska, where they are loaded on ships. In 1967 the Cassiar Asbestos Corporation Ltd. began production of asbestos fibre on the site of the 1956 discovery at Clinton Creek, near Dawson. The start-up of this mine came just one year after the termination of the large-scale gold dredging operations in the Dawson area.

Two natural gas pools were discovered in 1958<sup>(125)</sup> and

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(125) Beaver River gas field on the B.C.-Yukon border, immediately west of the Yukon-N.W.T. border.

1966<sup>(126)</sup> in the region where the B.C.-Yukon-Northwest Territories borders intersect. A 20-inch gas pipeline extending north from existing facilities at Fort Nelson, B.C., to the Beaver River pool was completed in 1970 and a 32-mile connecting pipeline to the Pointed Mountain pool was built in 1972.<sup>(127)</sup> These operations mark the first commercial production and delivery of natural gas from the territories.

The increasing importance of mineral exploration and production is perhaps best illustrated by the fact that between 1963 and 1973 the total value of mineral production north of 60 increased by a factor of ten (see Figure 1).<sup>(128)</sup>

For more than one hundred years, beginning in the late 18th century, the trading of fur was the north's only exception to the traditional pattern of land use. By 1900 the situation had changed. Gold in the Yukon's Klondike had resulted in extensive placer mining,

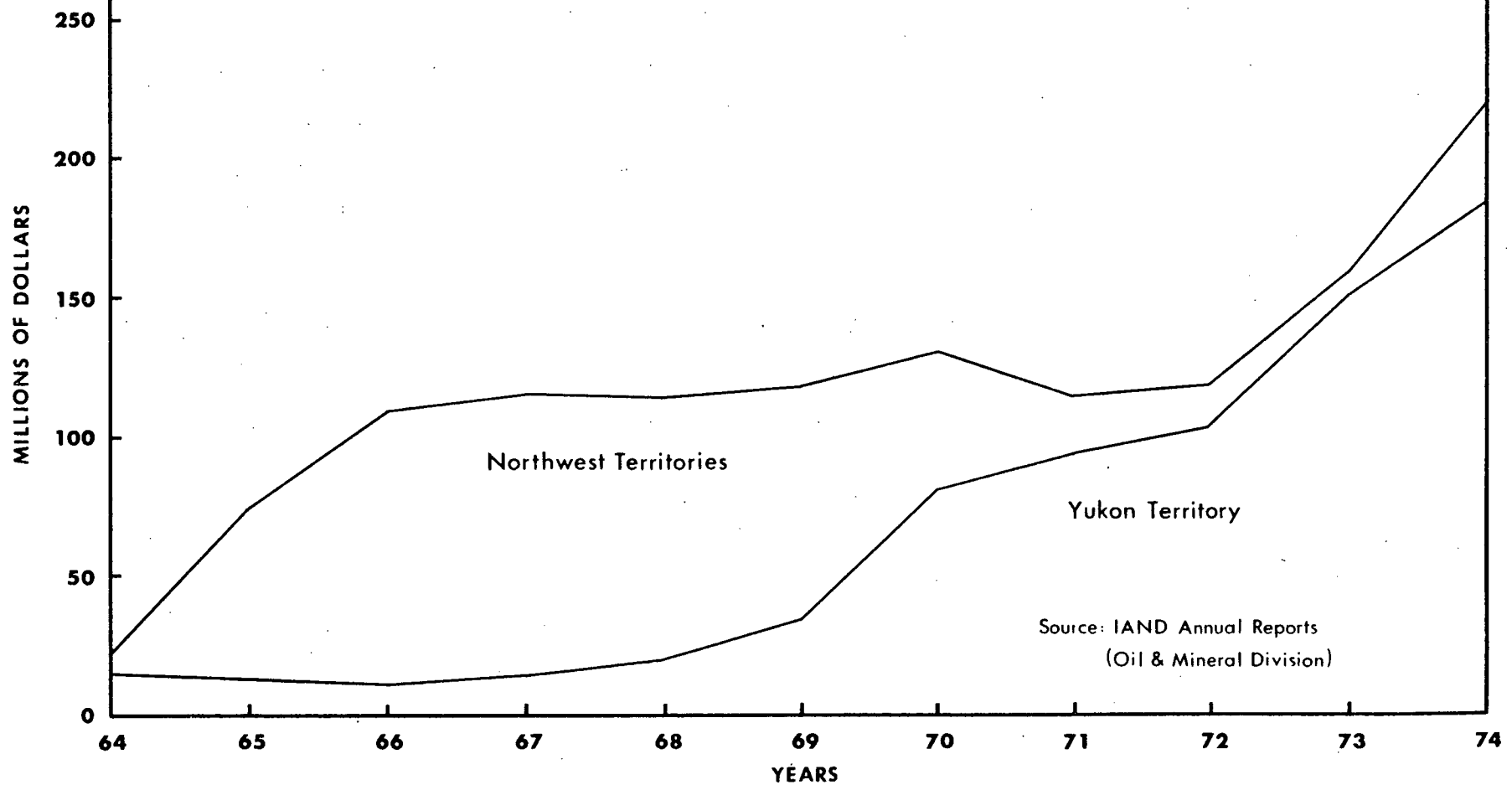
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(126) Pointed Mountain gas field in the Lower Liard River valley, west of Fort Liard, N.W.T.

(127) For a discussion of the conditions of the permit issued to Westcoast Transmission by the Department of Indian and Northern Affairs for the 32-mile right-of-way see Naysmith (1973:11).

(128) The total value of mineral production for the two territories in 1963 was \$29,093,683; by 1972 this had risen to \$224,407,417 and the preliminary figure for 1973 is \$310,371,000 (Indian/Northern Affairs publication number QS-1541-000-EE-A1, Ottawa).

**Fig. 1**  
**VALUE OF MINERAL PRODUCTION**  
**YUKON TERRITORY & NORTHWEST TERRITORIES**  
**1964 - 1974**





a northern city of 25,000 where a few Indian families had previously lived, and the construction of a railroad.

By the 1930's the first mine in the Northwest Territories went into production and oil was already being produced near Fort Norman on the Mackenzie River. Timber production reached an all-time high during the Second World War with the construction of the Canol pipeline and the Alaska highway. The 60's saw the construction of another railroad, this time in the Northwest Territories, and a surge in mineral and petroleum exploration and development, which has carried through to the present.

During this period, of roughly one century, the evolution of public policy respecting northern land can be characterized as a series of legislative amendments to the process of conveying rights to the use of resources, primarily oil, gas and minerals.

PART TWO. THE PRESENT SETTING

The demands made upon territorial lands today are diverse, sometimes conflicting, and rapidly increasing.

## THE PRESENT SETTING

### Introduction

Before attempting to determine the means for attaining a set of goals respecting public land (both means and goals are discussed at some length in Part Three), it is necessary to know the current status with respect to legislation, administration, and the nature and extent of the demands being made upon the land. Since land policy can be a useful mechanism for attaining certain social and economic objectives, as well as those pertaining to the development of local government, it is important to be cognizant of prevailing conditions in those areas also. With these points in mind Part Two comprises the following.

Consideration is given in the first two chapters of Part Two to current northern resource legislation. It is shown that in addition to the federal government's responsibilities, the territorial governments also play an important role in the administration and management of northern land. Although a substantial amendment was made to the Territorial Lands Act in 1971, which provided for land use regulations, it is evident that the thrust of northern lands policy to-day differs little from that described in Part One.

Chapter three attempts to outline the major forms of, and the marked increase in demand upon, northern land to-day, with the

objective of illustrating the need for a comprehensive policy which will improve decisions respecting land use and disposition.

The present structure for administering public lands in the north is discussed in chapter four. This is an area which has led to some confusion on the part of the public, primarily due to a lack of understanding of the respective roles of the federal, territorial and municipal governments. This subject is returned to in Part Three where certain recommendations are made concerning the future administration of northern public land.

Chapter five is intended to provide background material on some of the prevailing social and economic conditions in the north, as well as the development and role of local government.

#### CHAPTER ONE. FEDERAL GOVERNMENT LEGISLATION

Seventy-eight years after its enactment the Dominion Lands Act was repealed in 1950. Manitoba, Saskatchewan and Alberta had by 1930 assumed control and management of their own natural resources, and mining in the Yukon Territory, although remaining a federal responsibility, was provided for under separate legislation.<sup>(1)</sup> Hence the Dominion Lands Act which had provided the legislative base for

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<sup>(1)</sup> The Yukon Quartz Mining Act and the Yukon Placer Mining Act.

a land policy which included homesteading, the purchase of agricultural land and railway land grants, and which in turn provided the impetus for opening up the Canadian west, was by 1950 largely inappropriate for administering the residual 'Dominion Lands' to the north.

The Dominion Lands Act was replaced by the Territorial Lands Act (S.C.14 George VI, C.22) which was assented to June 1, 1950.<sup>(2)</sup> The new Act applied to all lands in the Northwest Territories and the Yukon Territory which were vested in the Crown and under the 'control, management and administration' of the Minister of Resources and Development (that is, virtually all of the land), but did not take precedence over the Yukon Quartz Mining Act or the Yukon Placer Mining Act (S.3).

(i) Territorial Lands Act

The Territorial Lands Act, 1950, was in essence enabling legislation providing for the disposition of surface and sub-surface rights to land north of 60. It provided the Governor in Council with authority to sell, lease or otherwise dispose of territorial lands and to make regulations authorizing the Minister to do likewise subject to any limitations prescribed by the Governor in Council.<sup>(3)</sup>

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(2) Territorial Lands Act, 1950, S.26, repealed the Dominion Lands Act, the Irrigation Act and the Reclamation Act.

(3) That is in addition to certain limitations which were embodied in the Act itself, e.g., S.6 stated that no more than 160 acres could be sold or 640 acres leased to any one person without the approval of the Governor in Council.

Under the Act the Governor in Council could also make regulations for the leasing of petroleum and mineral rights<sup>(4)</sup> and for the issuance of permits to cut timber and could make regulations and orders with respect to enquiries, including the examination of witnesses under oath, into questions affecting territorial lands.

Finally the Governor in Council was empowered to set apart and appropriate territorial lands for various purposes including their use for certain public works, to fulfil obligations under Indian treaties, and as national forests, public parks, game preserves or other similar public purposes.

(ii) Territorial Land Use Regulations

The current version of the Territorial Lands Act (RSC 1970, C.48) contains only one major revision to the original Act. In 1970 the Act was amended authorizing the Governor in Council, "where he deems it necessary for the protection of the ecological balance or physical characteristics of any area...to set apart and appropriate any territorial lands as a land management zone". The amendment also authorized the Governor in Council to make regulations respecting the protection, control and use of territorial lands and the issuing of permits for the use of the surface of the land within a land management

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(4) S.10(a)&(b) of the Act stated that all mines, minerals, fishery and fishing rights were to be reserved to the Crown.

zone. In addition the Land Use Regulations<sup>(5)</sup> describe the terms and conditions which may be included in a land use permit required for any operation carried out within a land management zone.<sup>(6)</sup>

The 1970 amendment to the Territorial Lands Act and the 1971 Land Use Regulations, represent a major departure from previous Canadian Government land legislation, dating back to the enactment of the Dominion Lands Act in 1872. Previous legislation was designed to transfer surface and sub-surface rights and to provide a legal basis for setting aside specific areas for particular use such as public parks. By providing for regulations designed to minimize the detrimental effects of land use operations on the land the 1970 amendment changed the spirit of the Act from that of a vehicle for allocating rights to one which also protected the land surface.

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- (5) Territorial Land Use Regulations, SOR/71-580. Other Regulations under the Territorial Lands Act (RSC 1970, C.48) include:
- (i) Territorial Land Regulations, SOR/61-1.
  - (ii) Canada Mining Regulations, SOR/61-86. Amended by SOR/62-249, 63-462, 66-80, 66-179, 68-120, 68-388, 69-61, 73-277, 73-622.
  - (iii) Canada Oil and Gas Land Regulations, SOR/61-253. Amended by SOR/63-91, 64-341, 66-486, 66-569, 67-342, 67-379, 67-614, 68-368, 69-29, 69-415, 71-662, 73-13.
  - (iv) Territorial Timber Regulations, SOR/62-276.
  - (v) Territorial Coal Regulations, 1955 Consolidation. Amended by SOR/65-368, 65-471, 67-586.
  - (vi) Territorial Quarrying Regulations, SOR/57-114. Amended by SOR/61-337.
  - (vii) Territorial Dredging Regulations, 1955 Consolidation. Amended by SOR/55-262.
- (6) See Naysmith (1973:11,12) for discussion of Land Use Regulations.

The application of the Land Use Regulations is limited in two major respects. They do not apply to mining activity in the Yukon Territory since the Territorial Lands Act does not limit the operation of the Yukon Placer Mining Act nor the Yukon Quartz Mining Act<sup>(7)</sup> and they do not apply to any lands the surface rights to which have been disposed of by the Minister.<sup>(8)</sup> The latter includes territorial lands which have been leased or sold and also those lands in either of the two territories which have been transferred by Order-in-Council to either Commissioner.

(iii) Mining Acts and Regulations

Mining and mineral leasing in the Northwest Territories is provided for under the Canada Mining Regulations pursuant to the Territorial Lands Act whereas in the Yukon Territory mining activities are governed by the Yukon Placer Mining Act and the Yukon Quartz Mining Act. In both territories "minerals" by definition includes all rock in situ but exclude coal, gravel, soil or hydrocarbons. In the Northwest Territories placer mining is also dealt with under the Canada Mining Regulations.

In both territories anyone eighteen years of age or over may prospect and mine<sup>(9)</sup> upon territorial lands subject to certain

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(7) Territorial Lands Act, RSC 1970, C.T-6, S.3(3).

(8) Territorial Land Use Regulations, SOR/71-580, S.3(6).

(9) In the Northwest Territories a prospector's licence is required, Canada Mining Regulations SOR/61-86, S.10.3.



limitations. For example, no person may enter, for mining purposes, land lawfully occupied by any person unless he has received permission of the occupant and has given adequate security, to the satisfaction of the mining recorder, for any loss or damage he may cause. (10)

Under the Yukon Quartz Mining Act a recorded holder may hold his claim (11) for a period of one year and from year to year thereafter provided he does one hundred dollars worth of work on it annually, S.53.11. The claim holder is entitled to receive a "certificate of improvements" when he has complied with certain requirements, S.64, followed by receipt of a lease upon payment of a fee, S.68.

In the Northwest Territories a claim may be held for a ten-year period if one hundred dollars worth of work is done on it annually. (12) A lease must be applied for within thirty days after the tenth year in which the claim was recorded, S.44.1, or within

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(10) Canada Mining Regulations SOR/61-86, S.10.3(a) and (b).  
Yukon Quartz Mining Act RSC 1970, C.Y-4, SS.13-1 and 14.  
Yukon Placer Mining Act RSC 1970, C.Y-3, SS.17 and 18.

(11) Claim size is the same in both territories, that is 1500' x 1500' or 51.65 acres.

(12) If claim is located south of 66° latitude; north of 66° latitude \$200 per claim annually is required for first two years and \$100 annually for next eight years (SOR/69-61, S.32(1) and (2)). By Order-in-Council dated January 16, 1975 a licensee may stake an unlimited number of claims in the N.W.T. in any area defined by a mineral claim-staking sheet. Previously the limit was 36 claims per year.

thirty days of attaining production of five tons per day, S.44.3, otherwise the land will be considered open for relocation. In both territories provision is made for "grouping" of claims prior to applying for a lease. This allows the representation work done on any one claim to be applied to the requirements of all claims within the group.

A permit system is provided for under the Canada Mining Regulations SS.26-30, applicable in the Northwest Territories, whereby large tracts of land are made available for prospecting purposes. This system provides exclusive rights, subject to the rights of any person holding a mineral claim in the area, to prospect and develop minerals within a permit area, for a period of three years. If the applicant carries out work on the claims up to an amount specified in the Regulations (SOR/61-86, S.27(1)) he may stake up to 90 claims the first year, 250 claims the second year and up to a three year total of 450 in the third year (SOR/62-249, S.27.6). The permit holder is required to release one-quarter of the total area at the end of the first year and one-half of the permit area at the end of the second year. (13)

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(13) In addition to the prospector's licence and prospecting permit systems the Canada Mining Regulations (SOR/61-86, S.29) also provide for the withdrawal of areas from disposal under the Regulations by the Governor in Council and authorizes him to grant to any person exclusive rights to explore and develop minerals under certain terms and conditions.

The mining lease in both territories is valid for a period of 21 years. In the Northwest Territories leases are renewed automatically if production has been attained (SOR/62-249, S.46.2). In the Yukon, provided the lessee has complied with all of the terms, the lease is renewable for 21 years on the same terms. For additional 21-year periods or a portion thereof, the lease is renewable subject to terms and conditions described by the Governor in Council (Yukon Quartz Mining Act, S.96).

Where surface rights have been disposed of, for example, by means of a timber licence or a petroleum, grazing, or coal mining lease, the mineral lessee, before entering the land, must, in the case of the Yukon, receive the permission of the Minister (Y.Q.M.A. S.100) and in the case of the Northwest Territories, a designated departmental officer (C.M.R. SOR/61-86, S.66.1). If the surface rights have been patented and the mineral lessee is unable to reach an agreement with the owner of the surface lands, the matter may be submitted to binding arbitration.

The intent of the Yukon Placer Mining Act and the Yukon Quartz Mining Act is basically the same with respect to questions of entry and renewal, however there is one distinctive difference in the two Acts. Under the Placer Mining Act (S.93) the Governor in Council may either prohibit entry or allow it under specific terms and conditions where the land is required for certain public works,

for a park, his sites or

national parks, historic sites or other public purposes.<sup>(14)</sup> The Yukon Quartz Mining Act contains no similar provision.

(iv) Oil and Gas Regulations

On May 1, 1975, it was announced that the Canadian Government plans to place before Parliament a bill to establish a 'Petroleum and Natural Gas Act'. The Act and pursuant regulations, including the existing Canada Oil and Gas Land Regulations, would provide for oil and gas exploration and development in the two territories and include the following points:<sup>(15)</sup>

- a ten-year production licence would be granted upon discovery, replacing the existing 21-year lease;
- when an exploration permit holder makes an application for a production licence, the Crown would have the option of a working interest, and/or a profit share in the discovery;
- a provision for a reduction in the royalty rate if it was necessary to bring a marginal discovery into production; and
- oil and gas rights in Canada Lands (which includes virtually all land in the two territories) now unalienated, that is not held under permit, lease or lease application, would be declared Crown reserves.

(14)

(14) This provision is inherent in the legislation pertaining to the Northwest Territories where the Canada Mining Regulations are pursuant to the Territorial Lands Act.

(15) The Minister of Indian Affairs and Northern Development to the Independent Petroleum Association of Canada in Calgary, Alta.

(It is possible that the new Crown corporation, Petro-Canada, could receive some initial preference with respect to Crown reserve acreage.)

At present the acquisition and utilization of territorial lands for purposes of petroleum exploration and production are provided for under the Canada Oil and Gas Land Regulations, pursuant to the Territorial Lands Act. Under these Regulations a permit to explore for oil and gas on territorial lands, not previously held under permit or lease, may be granted by the Minister (S.30.1), and in the case of lands previously held under permit or lease the Minister shall call for tenders for the purchase of a permit (S.32.1).<sup>(16)</sup>

The oil and gas exploration permit grants the permittee exclusive rights to acquire leases for half the permit area (S.56.2) and imposes a work obligation. The size of the permit varies according to the latitude but averages 45,000 acres. The term of a permit can vary from three to six years and is renewable for six one-year terms. Under S.49.1 a permittee may apply to group permit areas not exceeding two million five hundred thousand acres provided the parts are contiguous or are within a circle having a radius of one hundred miles. As with the grouping of mineral claims this allows for the expenditures made on any permit area in the group to be applied to any or all of the permit areas if the permittee wishes (S.50.1). Regrouping by the

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(16) The Oil and Gas Land Regulations also provide for the issuance of an "exploratory licence" (S.24) which pertains to no specific area; gives the licensee the right to enter on any vacant lands to search for oil and gas but provides the licensee with no option to acquire oil and gas leases.

permittee is also permitted (S.51). Grouping and regrouping provides the permittee with flexibility in consolidating his work so that high logistical costs can be applied to a single comprehensive program. (17)

A permittee, upon application to the Minister, shall be granted an oil and gas lease. The land contained in the lease must be selected from within, and must not exceed one-half of, his permit area. The term of the lease is twenty-one years (see 'production licence', above), renewable upon application by the lessee, provided the area is, in the opinion of the Minister, capable of producing oil or gas and the lessee has complied with the terms and conditions of the lease and the Oil and Gas Land Regulations.

A lessee who is a holder of a licence may carry out exploratory work, drill wells, and produce any oil or gas from the land within his lease area. If during the term of the lease commercial production begins the Minister shall, at the request of the lessee, reissue the lease for a term of twenty-one years.

Where the surface rights to any part of the lands described in a permit or oil and gas lease have been disposed of in the form of a terminable grant (e.g., timber licence or grazing licence) or have been granted under letters patent or sold under an agreement of sale,

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(17) Under the proposed 'Petroleum and Natural Gas Act' these widespread grouping privileges would be reduced in order to promote a more rapid initial appraisal and a concentration of effort on the most prospective areas. Op. cit., Buchanan 1975:12.

the permittee or lessee cannot enter upon such lands without the consent of the owner of the surface rights or holder of the terminable grant and the consent of the occupier of the lands. Failing either of these the permittee or lessee must have obtained an order for entry from the arbitrator referred to in the Regulations.

Following the permittee's selection of land to be contained in his lease,<sup>(18)</sup> the remaining 50 per cent of the permit area not selected, is surrendered to the Crown as 'Crown Reserves'. Until April 15, 1970, when it was revoked, a Land Order<sup>(19)</sup> under the Canada Oil and Gas Land Regulations provided a 60-day option in which the permittee could select additional leases from the Crown Reserve by agreeing to pay a sliding scale royalty in addition to the normal 10 per cent royalty.<sup>(20)</sup>

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(18) S.55 of the Regulations provides that oil and gas leases will not be issued to a corporation unless it is a Canadian Corporation and the Minister is satisfied that Canadians will have the opportunity of participating in the financing and ownership of the corporation or to a person unless that person is a Canadian citizen and beneficial owner of the interest.

(19) Oil and Gas Land Order No. 1-1961 of October 12, 1961 as amended.

(20) The Land Order was revoked pending possible amendments to the Canada Oil and Gas Land Regulations, which have been discussed in reference to the Petroleum and Natural Gas Bill.

Section 58 of the Regulations provides for the disposal of the Crown Reserve by stating that "the Minister may grant an oil or gas lease or call tenders for the purchase of an oil and gas lease for Canada Lands that have been held under a permit..." The Crown Reserve thus might be disposed of by public sale for cash bonus. The system whereby the prospective purchaser bids an amount equal to the exploration work he is prepared to undertake during the primary term of the permit has also been used. (21)

(v) Quarrying, Coal and Timber Regulations

Other regulations providing for the transfer of surface and sub-surface rights in the two territories include the Territorial Quarrying Regulations, the Territorial Coal Regulations and the Territorial Timber Regulations, each of which has been passed pursuant to the Territorial Lands Act.

Under the Quarrying Regulations an area up to 160 acres may be leased for the purpose of removing stone, sand, gravel, etc. After staking out the desired area and paying a lease fee an applicant may receive a ten-year lease, renewable, for quarrying purposes. The Regulations do not permit entry onto private lands and the holder of a quarry lease or permit must obtain the permission of the Minister if the area under permit or lease is already subject to a recorded mineral

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(21) Yates 1973:11.



claim or an oil and gas lease or permit.

The maximum area available for lease under the Territorial Coal Mining Regulations is 640 acres and the term of such a lease is 21 years, renewable. The lessee has the right to enter and use the surface of the land necessary to conduct his operation efficiently but he must compensate the owner of the surface rights or lawful occupant of the land for any loss or damage caused by coal mining operations on the leased area. Where coal in lesser quantities or for a shorter period is required, a permit may be applied for, which lasts until the 21st of March, next. The right of entry under a permit is the same as that for a lease but the permittee may only mine the coal up to the quantity specified in the permit.

The Territorial Timber Regulations apply to the cutting and removal of timber on territorial lands which are under the control, management and administration of the Minister of Indian Affairs and Northern Development; that is all of the land north of 60 except that contained within Commissioner's Lands (discussed below).

The Regulations authorize the Minister to issue a permit to any individual over the age of eighteen or to any corporation for the cutting and removal of timber. In addition a forest officer may issue a permit to similar parties for the production and removal of up to 2.5 million board feet per annum. The Regulations also cover the payment of timber dues, the seizure of timber unlawfully cut, reserves adjacent to public roads and lake shores and the cancellation of a

permit by the Minister or Superintendent. (22)

Federal officers of the forest services also administer territorial legislation in the form of Forest Protection Ordinances through appointment by the two Commissioners. The Forest Protection Ordinances deal with such matters as the burning of slash and debris during right-of-way clearing; closed seasons, burning permits and fire-fighting assistance.

(vi) Territorial Land Regulations

The Territorial Lands Act provides for the sale, lease or other disposition of territorial land north of 60 and the Territorial Land Regulations deal specifically with the administration and disposal of these lands. All dispositions are subject to certain reservations, some by virtue of the Act, for example, all mineral, fishing and water rights are reserved to the Crown as is the bed below any body of water and a one hundred foot wide strip along the shoreline of any navigable water. Under the Territorial Land Regulations other reservations and conditions apply. For example, in every agreement of sale or grant, other than surveyed land in a townsite, a part of the land may be appropriated for the purpose of a public road and every lease shall contain a reservation of all mines and minerals, whether

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(22) Superintendent of the Yukon Forest Service, Whitehorse, Y.T., and Superintendent of the Northwest Forest Service, Fort Smith, N.W.T.

solid, liquid or gaseous, and full power to use and occupy the lands in order to extract them. Section 12 of the Land Regulations also stipulates that all leases contain a reservation: of all timber; the right to enter upon and remove any rock outcrop required for public purposes; right-of-way and of entry as may be required to construct and maintain facilities for conveying water to mining operations; and the right to enter upon the land, install and maintain a public utility.

In nearly all instances the initial occupation of land is through a lease or an agreement of sale. In the latter case title is not granted until certain improvements to the land, specified in the agreement, have been completed. Such improvements usually comprise the construction of buildings and/or facilities pertaining to a particular land-use.

An agreement of sale is usually issued for a term of five years with the purchase price of the land being paid in five equal installments. Once the conditions of the agreement have been met, the full purchase price paid, the parcel conveyed and the plan filed in the appropriate Land Titles Office, a title to the land may be issued.

Leases may be granted for any period up to thirty years. Under normal circumstances a lessee may obtain a renewal of his lease. If a renewal is not required or cannot be granted, the lessee may remove his improvements from the land and a stated period of time is allowed in which to do this.

The sale and leasing of Crown lands, other than lands suitable for grazing or muskrat farming,<sup>(23)</sup> are limited to 160 acres and 640 acres respectively to any one person unless otherwise approved by the Governor in Council.

With the enactment of the Territorial Lands Act and the revoking of the Dominion Lands Act in 1950, the legislative provision for homesteading north of 60 was removed. However if an individual wishes to farm and has sufficient capital to do so he may be provided with up to 160 acres of arable land. Initial occupation is under a lease issued for a five year term with the lessee being required to construct a house and to place a stated acreage under cultivation before the lease expires. The lease may contain an option to purchase, thus allowing the lessee, once the specified improvements have been made, to make application to have the land surveyed and subsequently purchase it.

Although the Territorial Lands Act provides for the disposition of the surface and sub-surface rights to virtually all land north of 60, except for mines and minerals in the Yukon Territory, there are several other federal statutes which may affect northern land use, such as the Northern Inland Waters Act, the National Parks Act and the

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(23) Not more than 6,400 acres of land may be leased, but not sold, to any one person for purposes of grazing or muskrat farming without the approval of the Governor in Council.

Canada Wildlife Act. (24)

## CHAPTER TWO. TERRITORIAL GOVERNMENT LEGISLATION

### (i) Commissioner's Lands

It should be made clear, however, that all land north of 60 is not administered by the federal government. Under Section 45 of the Northwest Territories Act and Section 46 of the Yukon Act<sup>(25)</sup> certain land is appropriated to the territories and is subject to the control of the Commissioner in Council. The section in each Act states:

- "The following properties, namely,
- (a) lands acquired before, on or after the first day of April 1955 with territorial funds;
  - (b) public lands, the administration of which has before, on or after the 1st day of April 1955 been transferred by the Governor in Council to the Territories,<sup>(26)</sup>
  - (c) all roads, streets, lanes and trails on public lands, and
  - (d) lands acquired by the Territories pursuant to tax sale proceedings,

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(24) For a more complete description of these Acts and the respective sections which are pertinent to northern land use see Appendix E.

(25) Northwest Territories Act, RSC 1970, c. N-22. Yukon Act, RSC 1970, c. Y-2.

(26) For the Yukon Act should read 'Territory' wherever the word 'Territories' occurs in this passage.

are to remain vested in Her Majesty in right of Canada, but the right to the beneficial use or to the proceeds thereof is hereby appropriated to the Territories and is subject to the control of the Commissioner in Council; and any such lands, roads, streets, lanes or trails may be held by and in the name of the Commissioner for the beneficial use of the Territories.

The effect of this clause is to give the territorial governments the authority to administer the surface rights of certain lands, commonly known as "Commissioner's Lands", in and around communities, subject to certain federal reservations as cited in the Territorial Lands Act.

The Commissioner's Lands in the Yukon Territory are administered under the Yukon Lands Ordinance and in the Northwest Territories under the Commissioner's Land Ordinance. The lands to which these ordinances apply are those described in the Yukon Act and the Northwest Territories Act as "remaining vested in Her Majesty in right of Canada but the right to the beneficial use or the proceeds thereof is hereby appropriated to the territories and is subject to the control of the Commissioner in Council". In both cases it is clear that it is the surface rights only to which the Ordinances apply. (27)

Subject to the Ordinances and regulations, each Commissioner

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(27) Yukon Lands Ordinance S.32. Commissioner's Land Ordinance, S.3.d.

may sell, lease or otherwise dispose of land within the "Commissioner's Lands" and he may make those regulations and orders he deems necessary in order to carry out the provisions of the Ordinance.

In each territory the Commissioner is empowered to withdraw any tracts of Commissioner's Lands from disposal under the respective Ordinance where it is considered advisable in the public interest to do so and to set apart and appropriate such tracts for public or other purpose. (28)

Title to Commissioner's Lands in the Yukon may be "transferred forthwith" or by entering into an agreement for sale subject to the terms and conditions contained in the tender call. The Regulations governing the administration and disposal of Yukon Lands (Commissioner's Lands) also authorize leasing for residential, recreational, agricultural and grazing purposes.

In the Northwest Territories the Director of Local Government administers the Land Regulations under the Commissioner's Land Ordinance and is authorized by the Commissioner to execute leases and agreements of sale. He is also authorized to issue permits for the cutting and removal of hay and timber and for quarrying. Timber permits on Commissioner's Lands in the Yukon are issued by the federal

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(28) The Yukon Lands Ordinance states in S.8.2 that the Commissioner "may designate the most desirable use of any Yukon lands and withdraw such lands from disposition under this Ordinance for any purpose other than the use so designated".

Yukon Lands and Forests Service and the responsibility for administering quarries within community boundaries has been turned over to the local councils in each case.

(ii) Area Development Ordinance

In addition to the Lands Ordinance in each territory which provides for the disposition of land under the administration of the Commissioners, each territory also has an Area Development Ordinance. This latter Ordinance has been referred to by Beauchamp (1973:97) as "land use control legislation" and he suggests that it functions as a control mechanism on land use operations at the territorial government level much like the Land Use Regulations under the Territorial Lands Act do on 'federal' lands north of 60.

The Area Development Ordinances<sup>(29)</sup> go beyond the federal Land Use Regulations in that the former authorize the Commissioner to make regulations for the orderly development of an area, respecting the zoning of the area, including the allocation of land for agricultural, residential, business, industrial, educational, public or other purposes. That is, while the Land Use Regulations under federal statute attempt to minimize alteration of the land surface by controlling the

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(29) The Area Development Ordinance in each territory applies to all land and not only those lands known as "Commissioner's Lands". The authority for the Area Development Ordinance stems from the Yukon Act (RSC 1970, C.Y-2, S.16) and the Northwest Territories Act (RSC 1970, C.N-22, S.13).



manner in which land-use operations are conducted, the Area Development Ordinance can control and specify the type and nature of certain activities in a particular zone. In order to remedy any default under this Ordinance the Commissioner or his delegate may take action which may include the destruction, alteration or removal of any buildings, structures or portions thereof.

It is apparent if one considers the balance of the Commissioner's powers under the Area Development Ordinance<sup>(30)</sup> that the intention of the legislation is to control development in and around communities. There has been one major exception to this approach, however. On January 11, 1973, the Commissioner of the Northwest Territories established the Mackenzie Development Area, by Commissioner's Order No. 2-73, pursuant to the Area Development Ordinance. The Mackenzie Development Area includes all of that portion of the Mackenzie District of the Northwest Territories which lies within four miles of each side of the Mackenzie Highway, or its proposed route, from the junction of that highway and the Hay River road northward to and including the community of Tuktoyaktuk.

In addition to establishing the Mackenzie Development Area the Order provides for Mackenzie Development Regulations. These Regulations apply to the whole of the Mackenzie Development Area and,

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(30) To make regulations respecting: the erection, maintenance, etc. of buildings; streets, parks, street lighting, etc.; public health including water supply, garbage disposal; fire protection; and animals.

in part, state that no person may, without the written consent of an Area Development Officer: cut and remove timber; erect or maintain a building; make excavations or establish camps. Considering the fact that the area involved comprises more than 8000 square miles it is not difficult to imagine the Area Development Ordinance, in this instance, functioning as regional planning legislation.

(iii) Other Territorial Ordinances

Regional planning legislation is being considered by the Yukon Territorial Government and a 'Planning' Bill is expected to be placed before the Yukon Council in the autumn of 1975.<sup>(31)</sup> This Bill, which proposes the establishment of a 'Yukon Planning Control Board', would probably utilize the Area Development Ordinance to implement plans proposed under the Planning Ordinance.

One other territorial ordinance with a definite land use connotation is the 'Territorial Parks Ordinance' of the Northwest Territories. The Ordinance refers to four types of Territorial Parks, viz: Natural Environment Recreation Parks, to preserve the natural environment for the benefit, education and enjoyment of the public; Outdoor Recreation Parks to provide opportunities for public outdoor recreational activities; Community Parks to provide outdoor

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(31) Pers. Comm., W. Billawich, Yukon Territorial Government, Whitehorse, Y.T.

recreational activities for the benefit of particular communities; and Wayside Parks to provide for the enjoyment, convenience and comfort of the travelling public.

Land required for park purposes determined by the Territorial Parks Committee set up under S.5.1 of the Ordinance may be made available under the Territorial Lands Act. Section 6.1 of the Territorial Parks Ordinance provides that "where land has been set aside under an Act of the Parliament of Canada for park purposes, the Commissioner in Council may establish a Natural Environment Recreation Park or an Outdoor Recreation Park".<sup>(32)</sup> It is important to note here that land is only "set aside" for park purposes, but the right to dispose of any surface rights to use or occupy the surface of the land or to establish, engage in, or conduct any business, commercial enterprise or industry remains with the federal government,<sup>(33)</sup> since the land is still subject to any Act of the Parliament of Canada (S.13).

The Territorial Park Committee, in examining proposals for the establishment of Territorial Parks and advising the Commissioner and the Territorial Council on matters related to the establishment

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(32) Community Parks and Wayside Parks, the remaining two park categories provided for in the Ordinance may be established by Commissioner's Order (S.6.2).

(33) Unlike the Yukon Lands Ordinance or the Northwest Territories Commissioner's Land Ordinance which transfers the administration of public lands to the territories and authorizes the Commissioner to dispose of surface rights and to withdraw tracts from disposal.

and operation of such parks, must consult with representatives of those people residing in or near the location of a proposed park and may hold public hearings on park proposals.

The Commissioner of the Northwest Territories may appoint a Superintendent of Parks, responsible for the administration and enforcement of the Ordinance and regulations within a Territorial Park. The Ordinance provides the Superintendent with authority to issue permits upon such terms and conditions as he may prescribe, authorizing a person to carry out certain activities within a Territorial Park, including: the occupying or using the surface of any land within a Territorial Park; and establishing or engaging in business or industrial activity within a Territorial Park. Although those land-use activities provided for under various federal Acts cannot be precluded from Territorial Parks,<sup>(34)</sup> the Commissioner may make regulations concerning such things as: controlling the use and development of resources in a Territorial Park and the standards to be observed in the conduct of any business in a park.

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(34) Territorial Parks Ordinance, S.13.

### CHAPTER THREE. LAND USE TODAY

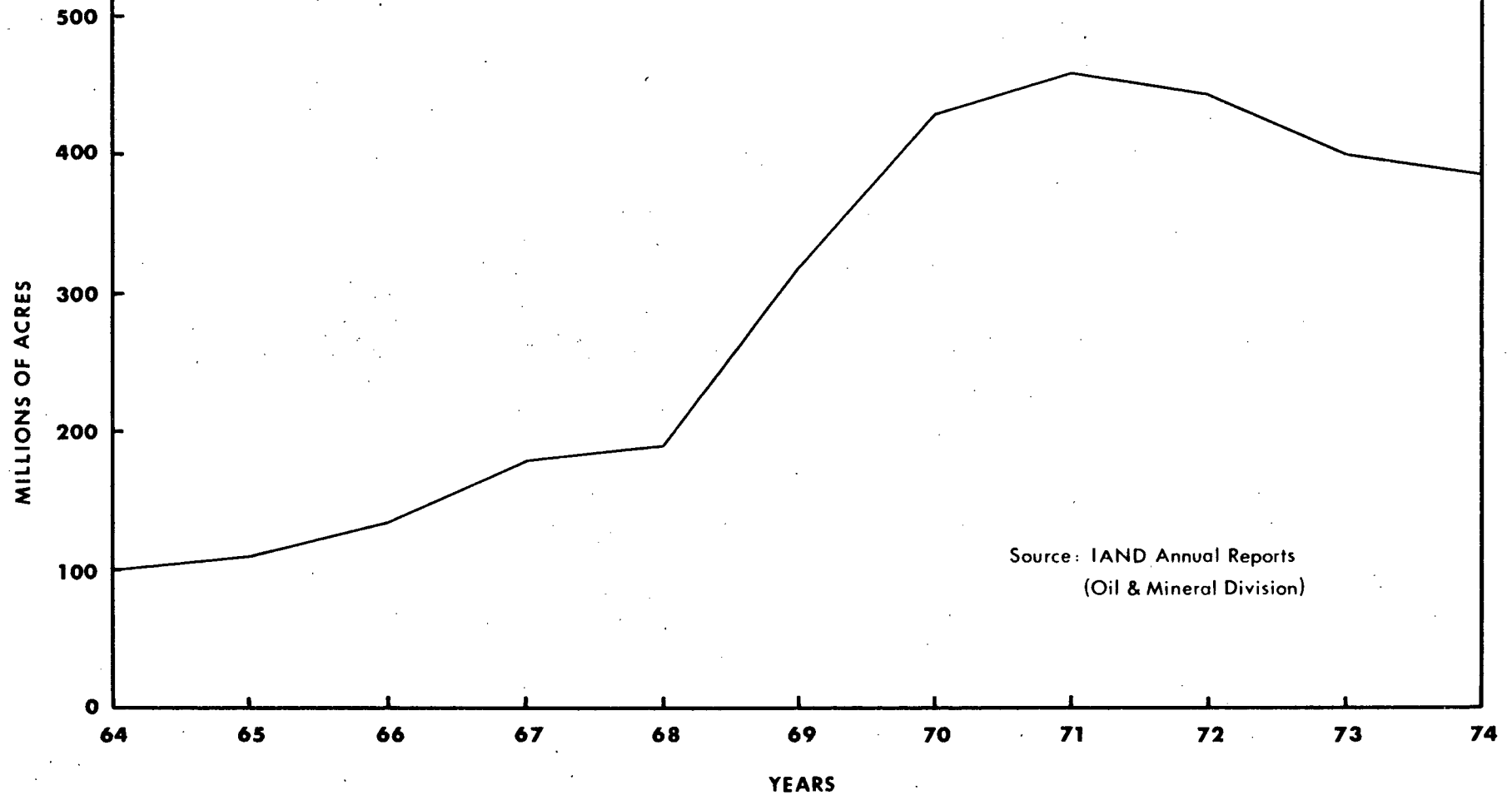
The diversity of the current demands for northern land is reflected in the wide-ranging legislation discussed above. The spectrum of northern activities requires land for such purposes as: community development; road, airstrip, pipeline and communication facilities; hunting, fishing and trapping; private, commercial and public recreation such as cottage lot development; sport hunting and fishing and territorial and national parks; timber harvesting, agriculture and grazing; mineral, oil and gas exploration and production; game preserves, bird sanctuaries and ecological reserves.

#### (i) Oil and Gas

Oil and gas exploration activities are the most extensive land use operations north of 60. Today there are more than 400 million acres held under oil and gas exploration permits in the two territories. This figure is more than double the 1968 average (see Fig. 2). During the period 1968 to 1973 the acreage held under oil and gas lease increased four-fold, from approximately one million to over four million acres (see Fig. 3).

The total number of wells which had been drilled north of 60 to the end of 1973 was 734 of which 85 were drilled in 1973. For the six-year period commencing 1968 a total of 51 oil and gas discoveries were made.

**Fig. 2**  
**ACREAGE HELD UNDER OIL & GAS PERMITS**  
**YUKON TERRITORY & NORTHWEST TERRITORIES**  
**1964 - 1974**



**Fig. 3**  
**ACREAGE UNDER OIL & GAS LEASE**  
**YUKON TERRITORY & NORTHWEST TERRITORIES**  
**1965-1974**

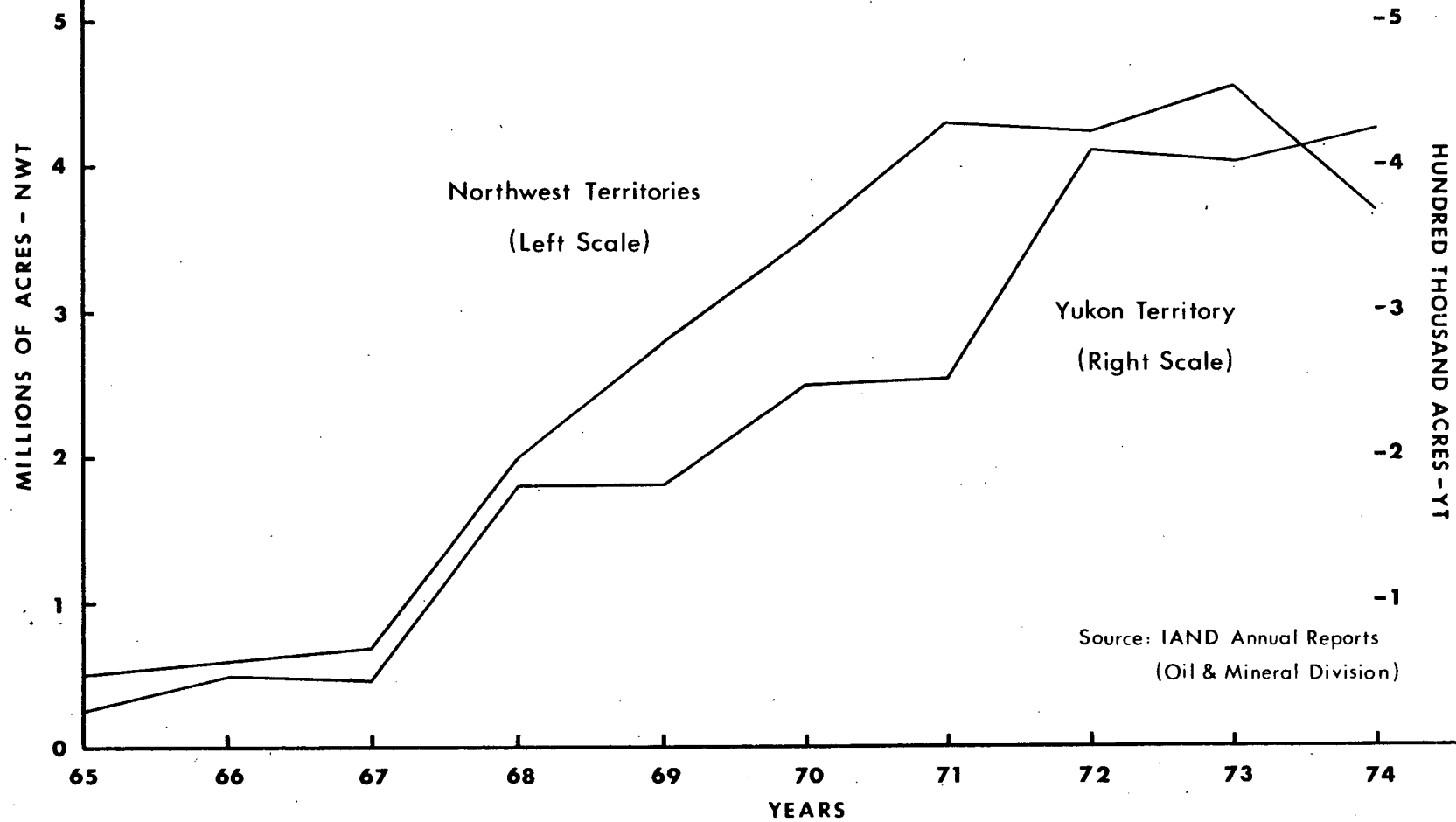


TABLE 4

Number of Oil and Gas Permits and Acreage Held  
at December 31, 1973

<u>Area</u>	<u>No. of Permits</u>	<u>Acreage</u>
N.W.T. Mainland	1,770	79,905,301
Yukon Mainland	488	20,775,676
Arctic Islands	5,024	243,599,272
Arctic Coast Marine	1,310	63,413,809
	<u>8,592</u>	<u>407,694,058</u>

Source: IAND records, Ottawa.

TABLE 5

Number of Leases and Acreage Held at  
December 31, 1973

<u>Area</u>	<u>No. of Leases</u>	<u>Acreage</u>
N.W.T. Mainland	682	4,095,569
Yukon Mainland	93	427,854
Arctic Islands	nil-	nil
Arctic Coast Marine	nil	nil
	<u>775</u>	<u>4,523,423</u>

Source: IAND records, Ottawa.



The annual revenue accruing to the federal Department of Indian and Northern Affairs from the oil and gas industry for the period 1963/64 to 1973/74 may be found in Table 6. These revenues include licence, permit and lease fees, rentals, royalties and cash bonuses.

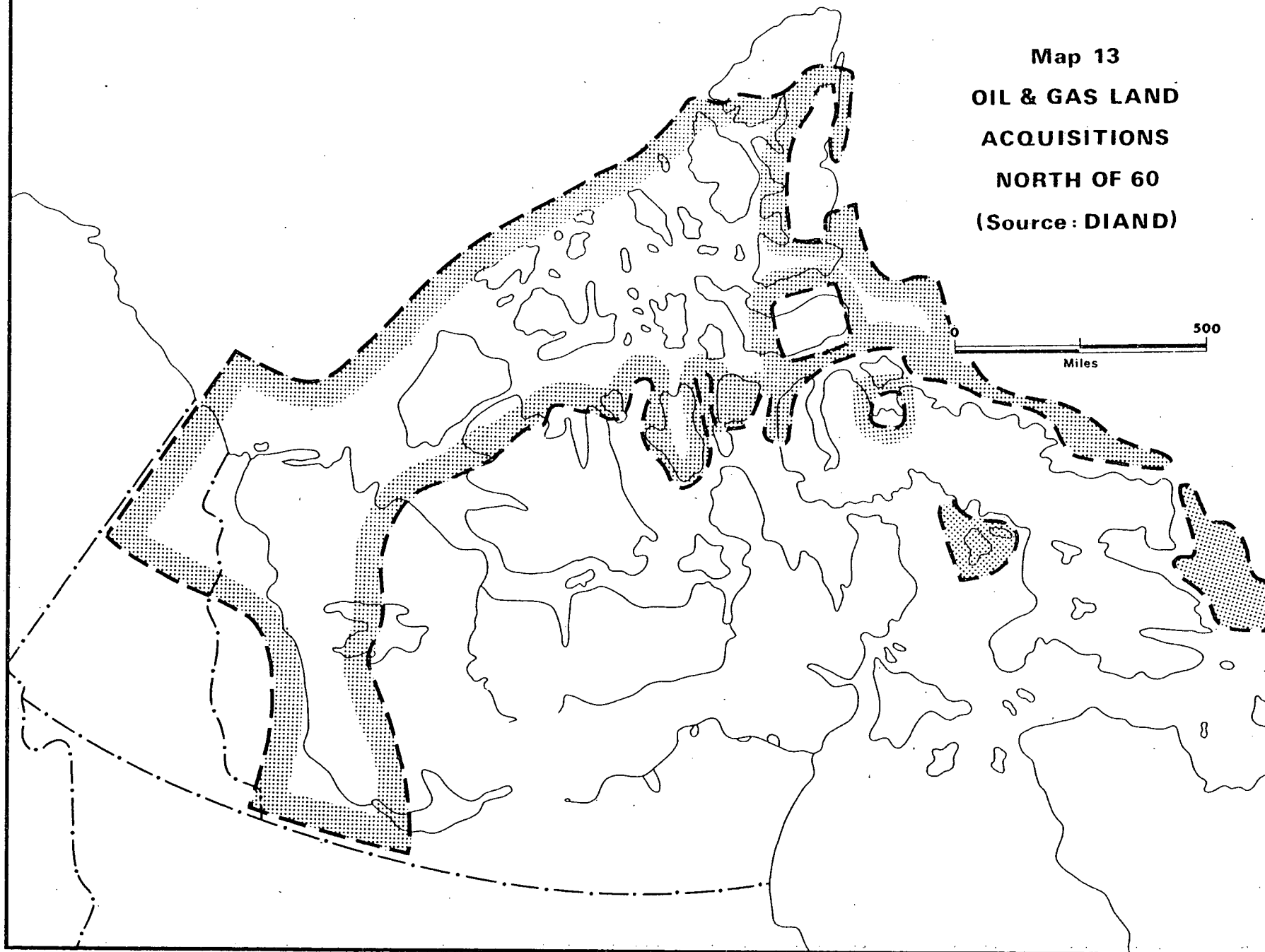
TABLE 6.

Total Annual Revenue from the Oil and Gas Industry by Year -  
Yukon Territory and Northwest Territories

<u>Year</u>	<u>Total Annual Revenue</u>
1963/64	\$1,187,499.38
1964/65	878,243.07
1965/66	6,272,298.44
1966/67	1,722,375.51
1967/68	2,087,419.52
1968/69	9,604,378.69
1969/70	2,633,320.79
1970/71	4,952,391.81
1971/72	5,645,900.57
1972/73	5,913,943.24
1973/74	6,326,022.07

Source: IAND records, Ottawa.

**Map 13**  
**OIL & GAS LAND**  
**ACQUISITIONS**  
**NORTH OF 60**  
**(Source: DIAND)**



(ii) Mining

From the standpoint of value of production and numbers employed, mining is the north's largest industry. As a 'land-user' mining and mineral exploration rank second behind oil and gas.

In 1974 there were a total of 26,000 mineral claims recorded in the two territories. This figure represents a slight increase from 1973 but is considerably less than the 1968 total of 60,000 claims (see Fig. 4). The land area covered by new claims in 1974 was 1,332,614 acres.<sup>(35)</sup> Perhaps more significant than the number of new claims recorded is the number of claims held in good standing. In 1974 this figure stood at 81,523 covering 4.2 million acres (see Fig. 5).

In addition, 18 prospecting permits were granted in the Northwest Territories in April, 1975 covering approximately 3.5 million acres of land. This brought the total number of prospecting permits in good standing to 66 which in turn cover about 12 million acres.

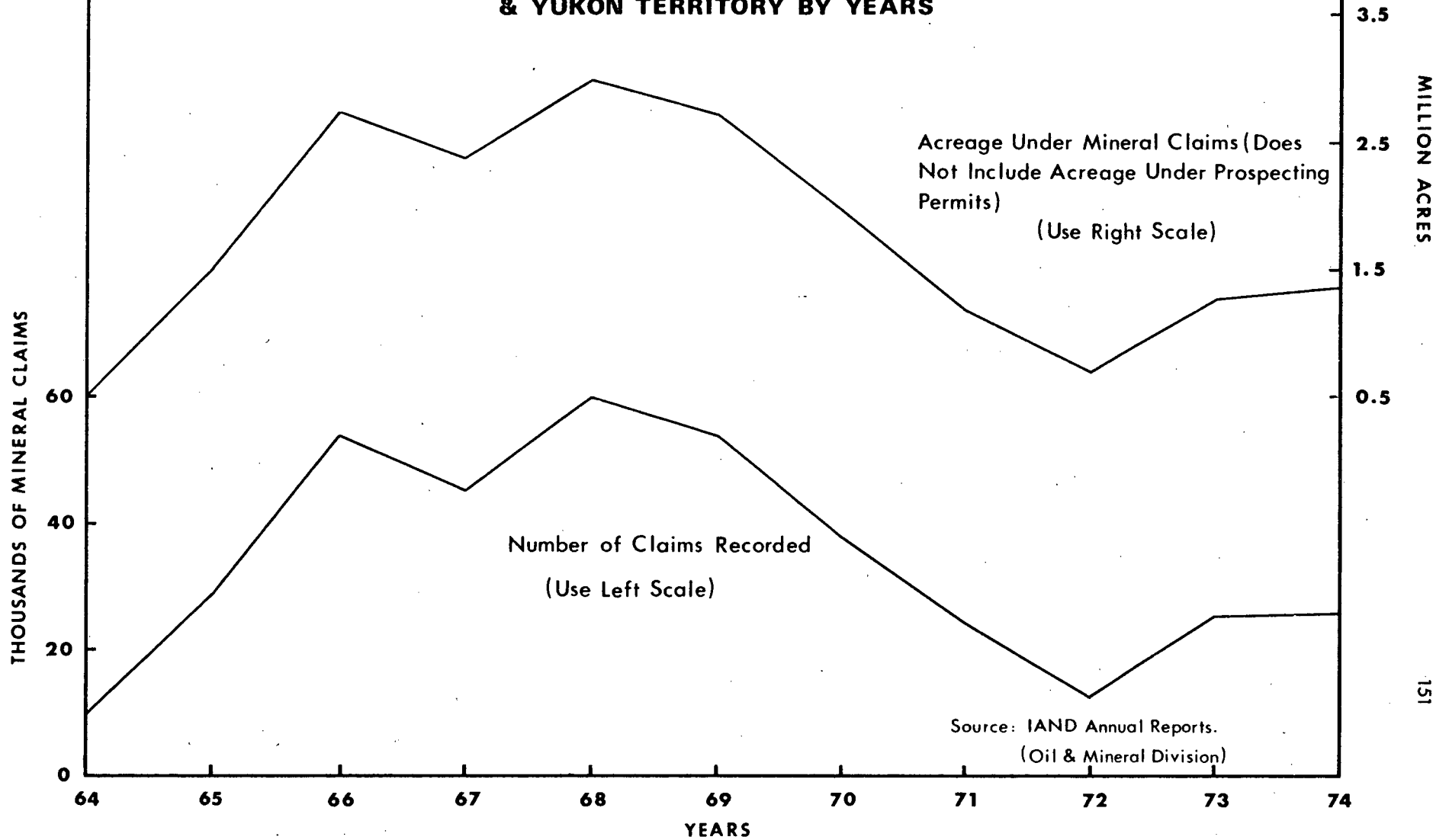
Sixty percent of the total value of mineral production in the Yukon Territory to date was generated in the past decade (1965 to 1974); and the comparable figure for the Northwest Territories is more than 80 percent. These figures, and particularly the latter, tend to illustrate the relatively recent growth of mining activity in the north.

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(35) One mineral claim covers 51.65 acres.

Fig. 4

**MINERAL CLAIMS - NORTHWEST TERRITORIES  
& YUKON TERRITORY BY YEARS**



**MINERAL CLAIMS IN GOOD STANDING  
IN THE  
YUKON TERRITORY & NORTHWEST TERRITORIES**

**Fig. 5**

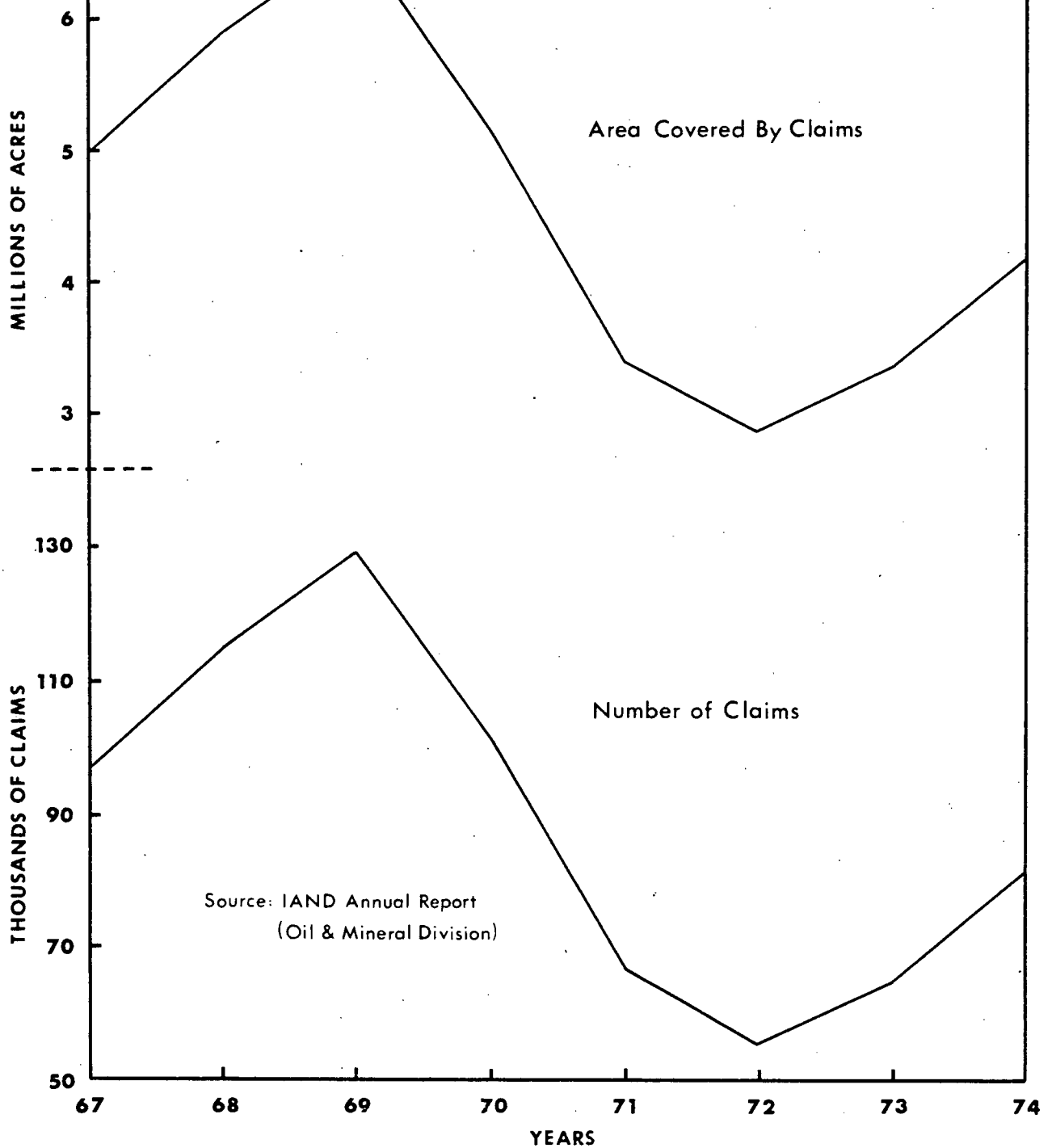


TABLE 7Value of Mineral Production

<u>Year</u>	<u>N.W.T.</u>	<u>Y.T.</u>	<u>Total</u>
1965	\$ 73,707,480	\$ 13,400,535	\$ 87,108,015
1966	110,357,883	11,975,757	122,333,640
1967	117,394,663	14,990,529	132,385,192
1968	114,711,166	21,365,555	136,076,721
1969	118,185,520	35,402,563	153,588,083
1970	132,637,613	77,511,933	210,149,546
1971	114,228,949	93,020,402	207,249,351
1972	117,905,350	106,502,067	224,407,417
1973	158,925,167	150,667,311	309,592,478
1974	223,047,000	185,041,000	408,088,000
Decade Total	1,281,100,791	709,877,652	1,990,978,443
To Date Total	1,584,800,174 <sup>(1)</sup>	1,166,848,528 <sup>(2)</sup>	2,751,648,702

Source: IAND Annual Reports, Oil and Minerals Division; for a break out by minerals, see Appendix G.

(1) Cumulative total since 1932.

(2) Cumulative total since 1886.

The \$183 million of mineral production in the Yukon in 1974 came from three underground and two open-pit mines, which together produced lead, zinc, copper, asbestos and coal.<sup>(36)</sup> For the third consecutive year the Yukon was the leading lead producer in Canada.

Mineral production in the Northwest Territories in 1974, which included lead, zinc, copper, gold, silver and tungsten valued at \$223 million, was obtained from two open-pit and four underground mines.<sup>(37)</sup> By 1976 or 1977, Nanisivik<sup>(38)</sup> Mines Ltd., an underground lead-zinc mine situated at the north end of Baffin Island, is expected to come into production.

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(36) Cyprus Anvil Mining Corporation; lead-zinc; open-pit.  
Cassiar Asbestos Corporation Ltd.; asbestos; open-pit.  
United Keno Hill Mines Ltd.; silver-lead-zinc-cadmium; underground.  
Whitehorse Copper Mines Ltd.; copper; underground.  
Tantalus Butte Coal Mine; coal; underground.

(37) Pine Point Mines Ltd.; lead-zinc; open-pit.  
Canada Tungsten Mining Corporation; tungsten-copper; open-pit.  
Con-Rycon-Val Mine; gold; underground.  
Giant Yellowknife Gold Mines Ltd.; gold; underground.  
Echo Bay Mines Ltd.; silver-copper; underground.  
Terra Mining and Exploration Ltd.; silver-copper; underground.

(38) An Eskimo word meaning "the place where things are found".

(iii) Forestry and Agriculture

The commercial utilization of northern timber is relatively small in comparison with the volume which could be cut in the two territories on a sustained yield basis. It is estimated that the annual allowable cut for coniferous species (i.e., white and black spruce, lodgepole and jackpine) which is commercially accessible is approximately 50 million cubic feet.<sup>(39)</sup>

During the past ten year period annual timber production north of 60 has averaged slightly over 3 million cubic feet (see Table 8). Timber production has been consistently higher in the Yukon Territory than in the Northwest Territories (see Fig. 6). This is probably due to the fact that the commercial stands of timber in the Northwest Territories are less accessible and farther from local markets than they are in the Yukon Territory. Timber production in the territories is intended primarily for the local market and consists mainly of sawlogs, mine timber and firewood (see Appendix H).

Although present timber utilization is less than ten per cent of the available cut it will probably increase significantly over the next decade, particularly if a pipeline is built up the Mackenzie Valley. Based on demand projections and considering Canada's potential

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(39) Based on relatively recent inventory surveys in the Teslin Forest Unit and the Upper Liard Watershed of the Yukon Territory and the Lower Liard Watershed of the Northwest Territories.



timber supply it is possible that by the 1990's the full allowable coniferous cut for the two territories will be utilized (Naysmith 1970:6).

TABLE 8

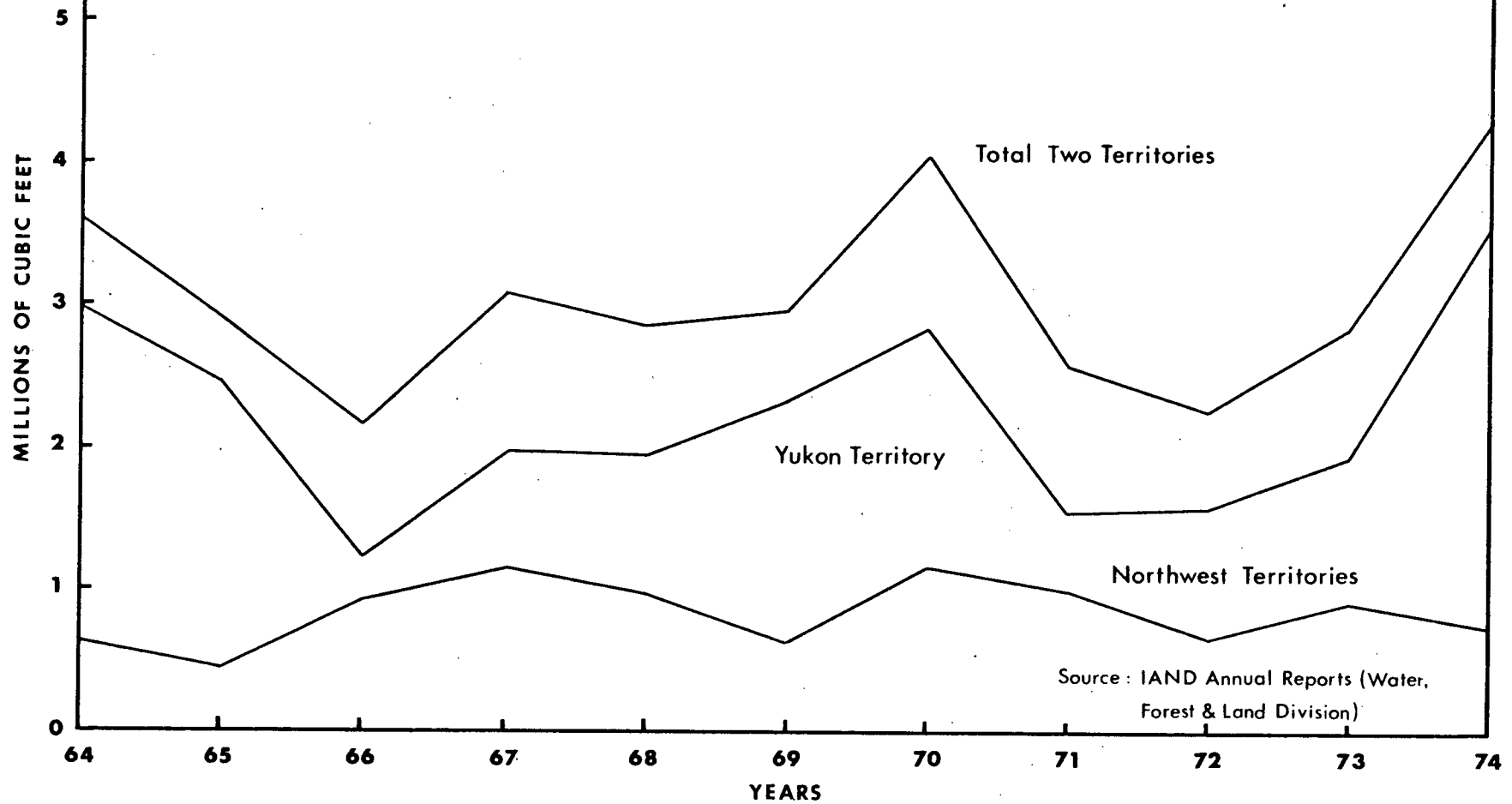
Annual Territorial Timber Production\*

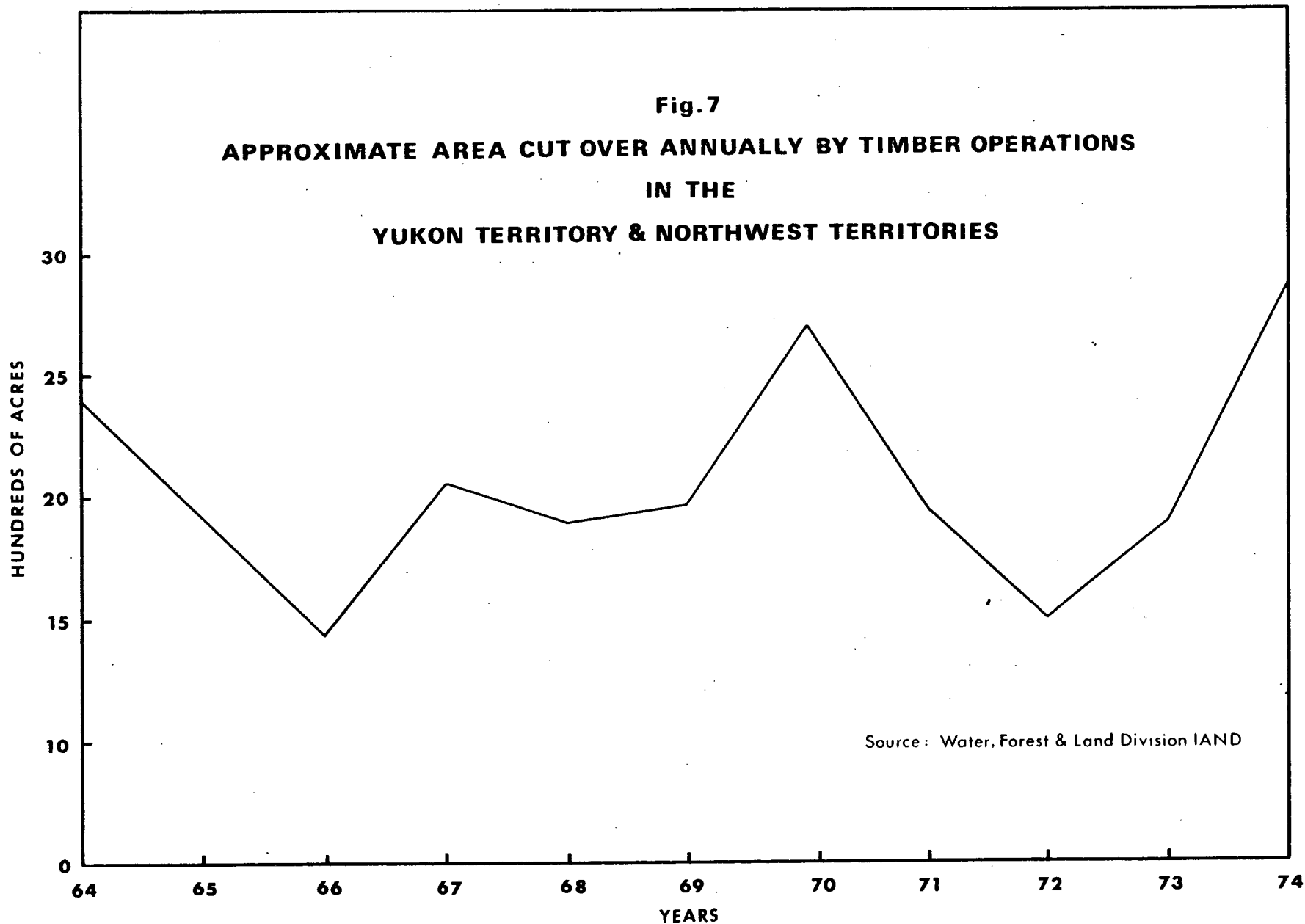
<u>Year</u>	<u>Volume (cubic feet)</u>
1961/62	1,849,710
1962/63	3,198,520
1963/64	3,618,790
1964/65	2,902,870
1965/66	2,159,920
1966/67	3,129,990
1967/68	2,867,760
1968/69	2,975,170
1969/70	4,062,690
1970/71	2,593,920
1971/72	2,273,350
1972/73	2,868,200
1973/74	4,322,030

Source: IAND files, Ottawa.

\*Yukon Territory and Northwest Territories

**Fig. 6**  
**VOLUME OF TIMBER HARVESTED ANNUALLY**  
**IN THE**  
**YUKON TERRITORY & NORTHWEST TERRITORIES**





Agriculture in the Yukon and Northwest Territories has never been a major form of land use. Climate and, in most areas, soil, impose definite limitations on the type of crops that can be grown successfully and on yields that can be obtained.

The 1931 Census showed that there were 41 farms in the Yukon Territory occupying 5,197 acres. Subsequent Censuses show a steady decline; by 1971 the number of farms in the Yukon totalled 12 (of which three were considered commercial)<sup>(40)</sup> and occupied 2,721 acres.

The 1961 Census listed 15 farms of which two were classified as commercial and showed the total sales of farm products to be \$15,610. The sale of farm products from the three commercial farms in 1971 was \$18,380. These figures would indicate that northern farming rather than being a viable industry simply provides a way of life.

In 1961 there were 33 separate parcels of land held in the Yukon Territory for agricultural or grazing purposes, either under lease or agreement of sale. The total area involved was 10,300 acres. By 1965 the area held for agricultural and grazing use (primarily the latter) under leasehold or agreement of sale, had more than doubled, rising to 27,700 acres. At the end of March, 1970, there were 55 leases for agricultural purposes, involving approximately 2,500 acres, and 76 grazing leases comprising some 35,000 acres, in force.

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(40) Commercial farms include all farms reporting \$1200 or more sales of agricultural products.

TABLE 9Farms in the Yukon Territory

	<u>1931</u>	<u>1941</u>	<u>1956</u>	<u>1961</u>	<u>1966</u>	<u>1971</u>
Number of farms	41	26	16	15	9	12
Number of commercial farms <sup>(1)</sup>	na	na	4	2	2	3
Total area of farms (ac.)	5197	2781	3997	8072	3680	2721
Improved land (ac.)	778	511	634	954	463	1418
Unimproved land (ac.)	4419	2270	3363	7118	3217	1303
Total capital <sup>(2)</sup> (000's \$)	na	na	na	372.4	121.3	478.8
Total sales farm products (000's \$)	na	na	na	15.6	22.5	18.4

Source:

Source: unpublished data from the Census of Agriculture provided by  
Statistics Canada, Ottawa.

(1) Includes all farms reporting \$1200 or more (\$2500 or more in 1966 and 1971) sales of agricultural products.

(2) Includes land, buildings, machinery, livestock.

The number of agricultural holdings in the Northwest Territories is even less than in the Yukon. For example, in 1970/71 there were, for agricultural, market gardening and grazing purposes, 27 leases and 10 agreements of sale in good standing. By March, 1974, the number of leases and agreement of sale, for the same purposes, had dropped to 13 and 4 respectively.

It should be pointed out, however, that the relatively few parcels of land being held for agricultural purposes in the north is more a reflection of the Canadian government's policy than lack of interest on the part of the public. There has been no homesteading legislation pertaining to northern lands since the repeal of the Dominion Lands Act in 1950 and since that time it has not been government policy to encourage the use of territorial land for agricultural purposes. (41)

Public interest in acquiring northern land for agricultural purposes may be illustrated by the fact that between January 1971 and June 1974 there were 43 applications for more than 100,000 acres of land in the Northwest Territories (see Table 10).

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(41) In March 1974 the Minister of Indian Affairs and Northern Development announced that land suitable for agricultural purposes in the territories would be available through lease only, pending revision of the Territorial Lands Act and Land Regulations. In March 1975 the Assistant Deputy Minister, Northern Affairs, reported to the Parliamentary Committee on Indian and Northern Affairs that pending completion of a study on northern farming no further leases for agricultural purposes would be issued.

Map 14  
SLAVE RIVER LOWLAND

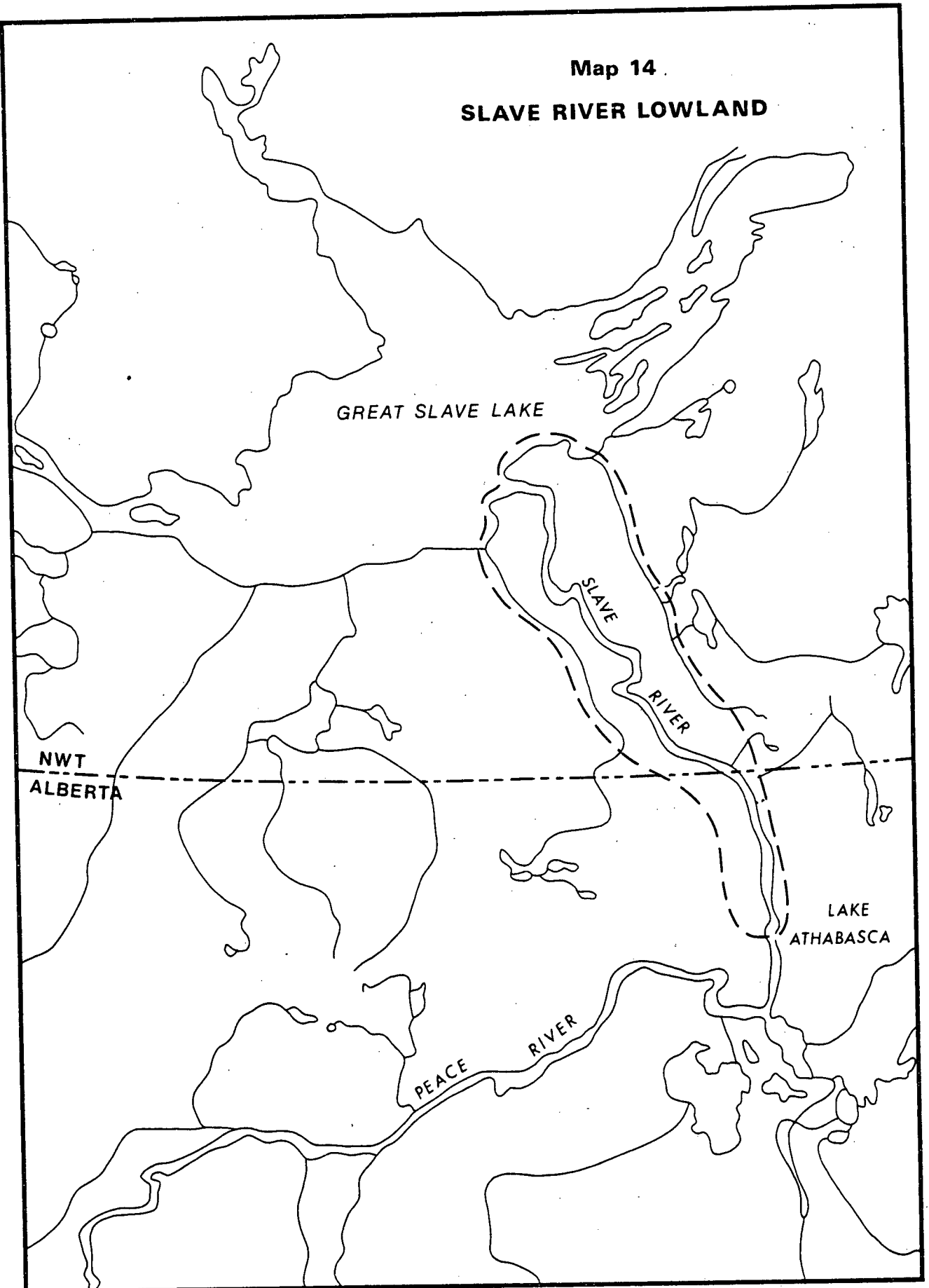


TABLE 10

Applications for Land for Agricultural Purposes in the  
Northwest Territories between January 1971 and June 1974

<u>Type of agriculture</u>	<u>Number of applications</u>	<u>Total area (acres)</u>
farming	10	1,711
ranching	2	2,280
grazing	7	21,300
ranching/farming	4	37,440
farming/grazing	11	23,360
grazing/ranching	4	24,040
residence/agric./ grazing	2	570
market gardening	33	31.5
	<hr/> 43	<hr/> 110,732.5

Source: IAND, Lands Office, Yellowknife, Northwest Territories.

In the late 1960's the Canadian Department of Agriculture undertook, at the request of the Department of Northern Affairs and National Resources, a study and evaluation of the potential for agriculture and the feasibility of developing a viable cattle ranching industry in the Slave River Lowlands (see Map no. 14). The study considered various aspects of the problem including: soil and climatic conditions; native vegetation for forage; human populations and local markets; infrastructure and social overhead costs; transportation and operating costs; general market conditions and farm production in



Canada. The report's findings could probably be applied to the north generally.

The report in its conclusion stated in part:

"Under present economic and market conditions, economic agricultural development of the area is questionable. A program to settle and develop the area would appear to not be in keeping with the policies and programs of the Canadian government to alleviate economic and social problems in many rural areas that are agriculturally marginal or sub-marginal.

"If, in spite of the foregoing, a decision is made to permit settlement, it will be highly desirable to develop detailed plans in advance of settlement."(42)

(iv) Block Land Transfers and Indian Reserves

The Block Land Transfer program is perhaps the most important aspect of northern land use in terms of the development of local and territorial government. It results from one of the recommendations of the Carrother's Commission which suggested that more autonomy and responsibility in community development be granted to the Northwest Territories government.

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(42) "Report on the Potential of the Slave River Lowlands for Agriculture and the Feasibility of Developing a Viable Cattle Ranching Industry in the Area", unpublished report of the Canadian Department of Agriculture, Ottawa, 1969.

The program is designed to enable the territorial governments to plan and control, in cooperation with local councils, the development and growth of communities throughout the two territories. Under the program the responsibility for administering blocks of territorial lands, encompassing selected communities, is transferred from federal jurisdiction to the appropriate territorial government.

The extent of the area within a Block Land Transfer is determined on the basis of the projected expansion of the community during the next ten-year period, giving specific consideration to:

- (a) the identification and protection of the watershed for community water supply;
- (b) the provision of a "buffer" zone around the perimeter of the community to control development within, and unorganized development outside, the Block Land Transfer Area;
- (c) solid waste disposal requirements;
- (d) existing or proposed highways or airstrips providing access to the community; and
- (e) areas contiguous to the settlement that are actively utilized by the community on a seasonal or continuous basis for recreation or other purposes which have property development implications.

All mines and minerals, whether solid, liquid or gaseous, and the right to work them, are reserved to the Crown out of each transfer, for continued administration under federal legislation. Other exclusions include the beds of all bodies of water and those lands which are utilized by native people for hunting, trapping and fishing.

The program commenced in 1970 with an announcement by the Minister of Indian Affairs and Northern Development of the transfer of lands around Yellowknife, Inuvik and Whitehorse.<sup>(43)</sup> To date there have been a total of 21 Block Land Transfer areas established, 13 in the Northwest Territories and eight in the Yukon Territory. The most recent is Destruction Bay, Y.T., in February, 1975 (see Table 11).

TABLE 11

Block Land Transfer Program

To the Northwest Territories Government:

<u>Settlement</u>	<u>Approx. Area in Square Miles</u>	<u>Order-in-Council Number</u>	<u>Date</u>
Yellowknife	200	P.C.1970-1221	July 8, 1970
Inuvik	100	P.C.1970-1447	August 19, 1970
Rae-Edzo	110	P.C.1970-1743	October 6, 1970
Frobisher Bay	76	P.C.1971-1523	July 26, 1971
Aklavik	7	P.C.1971-2477	November 9, 1971
Fort Simpson	144	P.C.1971-2477	November 9, 1971
Fort Smith	23	P.C.1971-2477	November 9, 1971
Fort Providence	76	P.C.1971-2477	November 9, 1971
Hay River/ Enterprise	181	P.C.1973-249	February 6, 1973
Norman Wells	167	P.C.1973-293	February 6, 1973
Fort McPherson	19	P.C.1973-4041	December 18, 1973
Fort Franklin	25	P.C.1974-388	February 26, 1974
Fort Good Hope	16	P.C.1974-389	February 26, 1974
TOTAL AREA	1,144		Continued...

(43) At that time the lands transferred were referred to as 'Development Control Zones'.

TABLE 11 (Continued)To the Government of the Yukon Territory:

<u>Settlement</u>	<u>Approx. Area in Square Miles</u>	<u>Order-in-Council Number</u>	<u>Date</u>
Dawson	20 <sup>(1)</sup>	na	1969
Whitehorse	240	P.C.1970-1448	August 19, 1970
Faro	91	P.C.1971-2531	November 16, 1971
Beaver Creek	2	P.C.1974-2319	October 22, 1974
Carmacks	12	P.C.1974-2320	October 22, 1974
Mayo	4	P.C.1974-2321	October 22, 1974
Teslin	1	P.C.1974-2322	October 22, 1974
Destruction Bay	2	P.C.1975-241	February 4, 1975
TOTAL AREA	372		

Source: IAND files, Ottawa.

- (1) Prior to the commencement of the 'Development Control Zone' or 'Block Land Transfer' program in 1970, the responsibility for administering land in and around Dawson was transferred to the Yukon Territorial Government from the federal government on a lot by lot basis, through a series of Orders-in-Council passed in 1969. Thus there is no single area identified in an Order-in-Council pertaining to the whole community.

The 21 communities listed in Table 11 are only those which have been included in the Block Land Transfer program thus far. (44) Eventually all of the communities in the two territories will be incorporated into the program. According to the 1971 Census there was a total of 93 communities north of 60 with a population of 50 or more. (45) In addition to the 1516 square miles identified in Table 11, the remaining 72 communities will absorb an area of roughly 650 square miles when they are included in the Block Land Transfer program. Therefore the total area occupied by the 93 communities, which account for nearly 95 per cent of the total population in the north, will be approximately 2166 square miles. (See Appendix K, "population by settlement".)

One of the conditions of Treaties 8 and 11, referred to earlier, is that "Her Majesty the Queen hereby agrees to lay aside reserves for such bands as desire reserves the same not to exceed in all one square mile for each family of five..."

In order to provide for this contingency the Orders-in-Council transferring the administration of land to the two territorial governments contain the following reference "...subject to the condition that the Northwest Territories (or Yukon Territory) undertake(s)

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(44) With the exception of Dawson.

(45) The two largest centres are the capitals of each territory, Whitehorse, Y.T., and Yellowknife, N.W.T. In 1971 their populations were: 11,217 and 6,122 respectively.

to retransfer to the Minister of Indian Affairs and Northern Development, from time to time, any unalienated territorial lands under the administration of the Northwest Territories (or Yukon Territory) as may be required to enable the Government of Canada to fulfill its obligations under treaties with the Indians" (for an example of a "Block Land Transfer" Order-in-Council see Appendix I).

To date only one Indian Reserve has been established in the territories. In 1974 the Hay River Band received approximately 52 square miles in the vicinity of Hay River, N.W.T., under Treaty No. 8 (see Order-in-Council P.C.1974-387, Appendix J).

Under the Territorial Lands Act, S.19, the land is set apart and appropriated, including all mines and minerals, for the purpose of enabling the Government of Canada to fulfil its obligations under Treaty No. 8. Pursuant to the Indian Act the land is then set apart for the use and benefit of, in this case, the Hay River Band of Indians.

#### (v) Roads, Railroads and Pipelines

Although not in themselves a major "user" of land (the complete road network in the two territories occupies less than 200 square miles of land), the effect of roads on subsequent land use patterns can be substantial. For example recreation camping, cottage-lot development, tourism and related services, sports hunting and fishing, invariably increase, following the construction of a road into a hitherto inaccessible area. Similarly, once an area is opened up,

the demand for land suitable for agriculture or timber harvesting may be expected to increase and mineral exploration and development, until recently the principal reason for much of the northern road network, become more attractive.

Roads, railroads and pipelines north of 60, are confined to the Yukon Territory and the Mackenzie District of the Northwest Territories; except for some "airport roads" connecting communities with adjacent airstrips, there are no such facilities in the central or eastern Arctic.

Prior to the Second World War, there were only a few short unconnected segments of road serving local community needs, north of 60. Travel between communities was by water, or wagon road in summer, and by dog sled or horse drawn sleigh in winter. During this period low standard roads were built to serve the gold mining camps of the Klondike and the silver mines in the Mayo and Whitehorse areas.

During the 1940's both territories were linked by road to southern Canada. During the Second World War three roads were constructed in or 'through' the Yukon Territory for military purposes. These were: the Alaska Highway, connecting existing roads in British Columbia with Fairbanks, Alaska; the Haines Road, providing access to tidewater from the Alaska Highway; and the Canol Road, linking the Norman Wells oilfield with a refinery in Whitehorse. In all, the three projects provided the Yukon with almost 1000 miles of roads and formed the basis for the present road network. In 1949 the Northwest Territories was linked by

road to Alberta with the construction of the Mackenzie Highway, a distance of 470 miles between Grand Prairie, Alberta and Hay River.

By 1951 a highway linked Whitehorse, Mayo and Dawson and resulted in the termination of the steamboat service on the Yukon River. Until the federal government's 'roads to resources' program in 1959, there was virtually no further road construction north of 60.

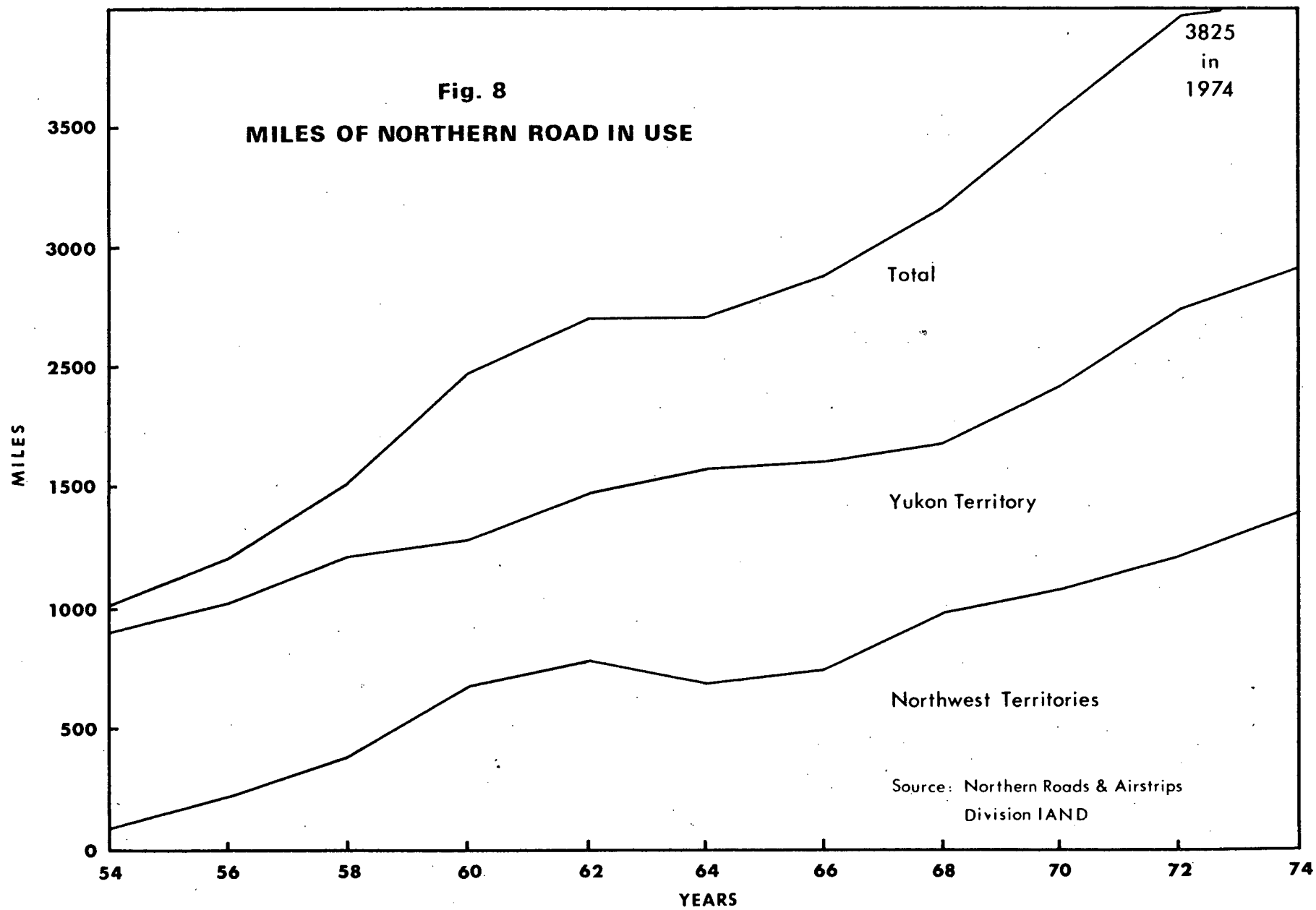
Between 1959 and 1974 the amount of northern road in use in the Northwest Territories increased by 900 miles and in the Yukon Territory by 1175 miles (see Fig. 8).

Except for the 378-mile Dempster Highway, all of the Yukon's nearly 2500 miles of road lie in the southern half of the territory (see Map no. 5). The Dempster, when completed, will link the Yukon highway system with the Mackenzie Highway, via Dawson and Fort McPherson, and ultimately the Arctic coast at Tuktoyaktuk.

The road system in the Mackenzie District of the Northwest Territories is less developed than in the Yukon Territory. This may be due, in part, to the Mackenzie River system which provides a 1600-mile, summer navigable waterway from Waterways, Alberta to the Arctic Ocean, the only interruption being 12 miles of rapids on the Slave River at the Alberta-Northwest Territories border.

The Mackenzie Highway extends northward from Grimshaw, Alberta. Construction is now completed as far as Camsell Bend on the Mackenzie River, fifty miles north of Fort Simpson and 346 miles from the Alberta border. An all-weather road is also completed from Inuvik

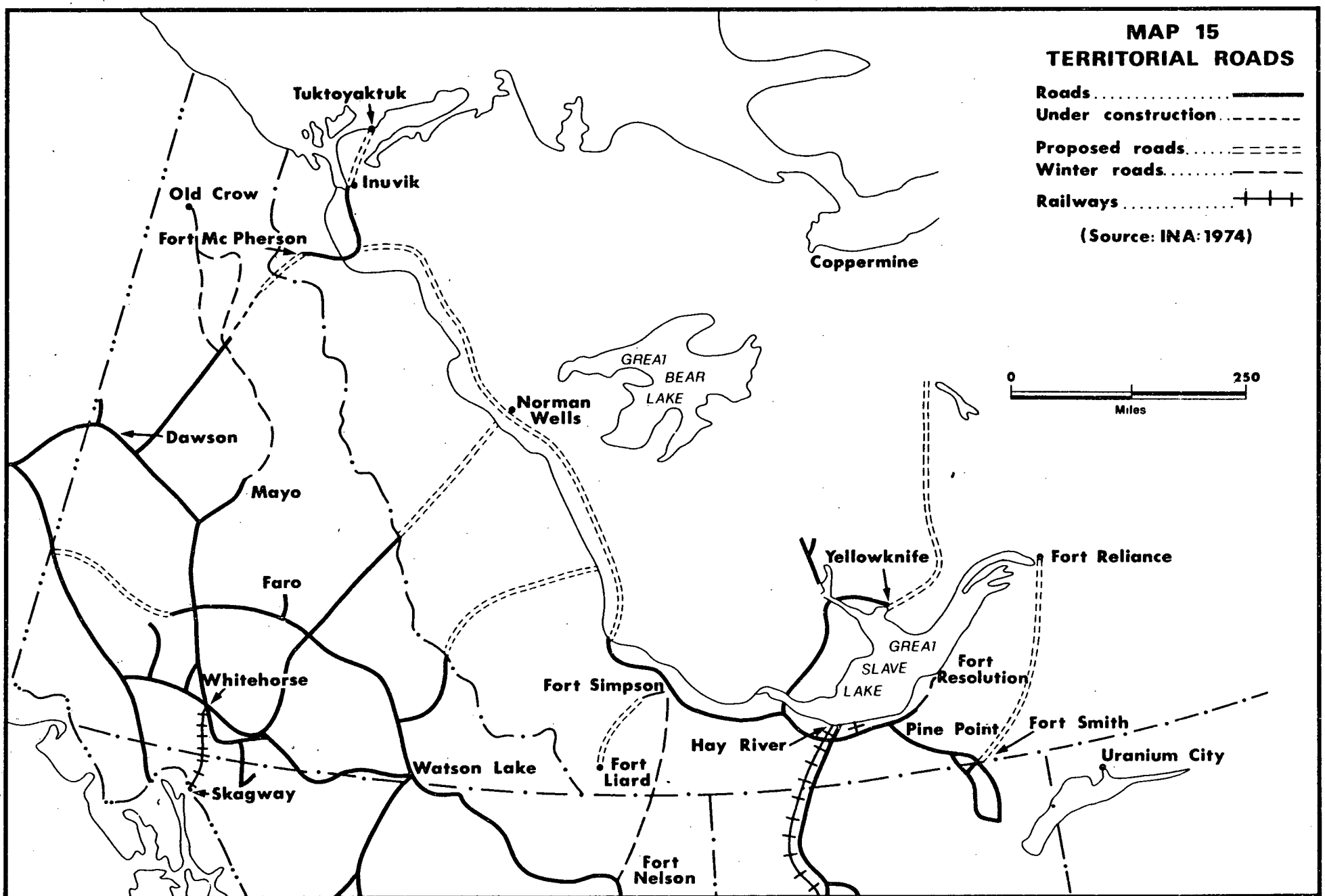




# MAP 15 TERRITORIAL ROADS

Roads .....  
 Under construction .....  
 Proposed roads .....  
 Winter roads .....  
 Railways ..... + + +

(Source: INA:1974)



south to Fort McPherson via Arctic Red River. The Mackenzie Highway when completed will extend approximately 1050 miles from the Alberta border to Tuktoyaktuk on the Arctic coast.

Three lateral highways leading from the Mackenzie Highway link Hay River, Pine Point, Fort Resolution and Fort Smith; Fort Providence, Rae-Edzo and Yellowknife; and a road to Fort Liard which is still under construction. A 700-mile winter road extending along the east side of the Mackenzie River connects Fort Providence to Inuvik.

In addition to the Mackenzie River barge system<sup>(46)</sup> and the highway, the Northwest Territories is linked to southern Canada by rail. The 435-mile Great Slave Lake Railway extends from Pine Point, N.W.T., to Grimshaw, Alberta, and is used primarily to transport lead-zinc ore concentrate, from the Pine Point mine, which is destined for smelters at Trail, B.C.

The only other rail line north of 60, the White Pass and Yukon Route, provides the Yukon Territory with access to Skagway, Alaska, on the Lynn Canal, and tidewater. Built between 1898 and 1900 (p.125) the 110-mile rail line is linked to the company's shipping operations on the west coast.

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(46) The waterway was developed in the late nineteenth century by the Hudson's Bay Company to transport furs to southern Canada (p.102). The Company also created the Mackenzie River Transport Company, which transported goods and supplies northward. In 1934, the Northern Transportation Company Limited (NTCL), a Crown Corporation, was formed to transport supplies for the Eldorado Gold Mines Ltd., which was mining a silver-pitchblende deposit on Great Bear Lake (p.128). In 1957 the Mackenzie River Transport Company was sold to NTCL.

In 1971/72 the Westcoast Transmission Company constructed 32 miles of 20-inch pipeline in the Lower Liard River area of the Northwest Territories.<sup>(47)</sup> The line connects the Pointed Mountain and Beaver Creek Gas Fields with existing facilities north of Fort Nelson, British Columbia. Total production from the Pointed Mountain Gas Field and the Beaver Creek Gas Field in 1972 (the first year of production) was: 11.732 BCF and 2.614 BCF<sup>(48)</sup> respectively.<sup>(49)</sup>

An application for approval to construct a natural gas pipeline in the Mackenzie Valley and across the northern portion of the Yukon Territory was filed with the Canadian Government in March 1974 by Canadian Artic Gas Pipeline Limited. This proposal calls for the construction of a 48-inch diameter, 1500-mile long, high pressure gas pipeline to connect gas reserved in both Prudhoe Bay, Alaska and the Mackenzie Delta, to existing facilities in Alberta, and to serve U.S. and Canadian markets. Under the Territorial Lands Act the Canadian Government has appointed a Commissioner, Mr. Justice Thomas Berger of the Supreme Court of British Columbia, to conduct a public enquiry into the regional, social, environmental and economic impact of the pipeline. The enquiry began in Yellowknife, N.W.T., March 3, 1975.

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(47) This is the first, and to date only, natural gas pipeline in operation north of 60.

(48) This represents the 7 percent of the Beaver Gas Field production which is assigned to the Yukon Territory, the balance going to British Columbia.

(49) Oil and Gas Activities 1972, IAND Publication No. QS-1510-000-EE-A1.

(vi) Hunting and Trapping

Although hunting and trapping still represent an important aspect of northern land use, particularly to the native people, the pattern of land use accompanying this activity has undergone considerable change in the last two to three decades.

Honigmann and Honigmann (1965:77) referred to the concept of 'dual allegiance to land and town'. As a hunting and trapping society becomes further exposed to western culture they see three groups emerging: those who maintain a strong allegiance to the land and oppose any action which might threaten their capability to obtain country food;<sup>(50)</sup> those who have chosen 'town careers'; and finally those who shift back and forth between a life on the land and in a community. Wolforth (1971:2) stated that in the transformation of a hunting and trapping society to an urban one there is, in addition to the social adaptation which takes place within the settlement, a spatial transformation which takes place on the land as "a dispersed pattern of resource utilization is gradually abandoned".

In discussing the Inuit of Foxe Basin in the eastern Arctic during the limited contact period prior to 1950 and the period following, Crowe (1970) referred to certain technological changes and their effect upon the equilibrium which existed between the hunter and the land.

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(50) Reference here is to hunting for country food as compared to big-game sports hunting.

Under the traditional 'camp system' each settlement group was situated in such a way as to be exposed to a full range of animal species and a full cycle of seasonal activities. With the introduction of the powered canoe some of the full-time hunters abandoned camp life, moved to Igloolik or Hall Beach and visited their camp territories at certain times of the year, perhaps working for wages in the intervening periods.

Taking this concept one step further Stager (1974:46-54) provided the following account of the Indians of Old Crow, Y.T. In the 1930's and '40's the population of Old Crow was distributed in a number of small settlements or trapping camps along the Porcupine River. A regular seasonal pattern was followed whereby winter was spent on the trapline, the spring at Old Crow Flats harvesting muskrat, followed by a period at the village of Old Crow or other Porcupine River sites for purposes of trading and visiting. In summer, people began moving back toward the traplines, stopping at fish camps and later to hunt caribou, en route. During this period the hunting and trapping areas of the Old Crow people covered approximately 25,000 square miles.

In the 1950's the village of Old Crow became more of an established settlement, people gravitated to it and built log houses in which to summer. Increasingly more time was spent in Old Crow and when the trappers and their families did leave it was to camps closer to the settlement. By 1960 the area of land utilized for hunting and trapping had been reduced to 15,000 square miles.

Between 1960 and 1973 all of the Old Crow people have moved

to the village on a permanent basis and although there are one or two winter camps located nearby they are occupied only intermittently. To-day virtually all of the hunting and trapping except the muskrat trapping on the Old Crow Flats, is done on a commuter basis from Old Crow. Although much less time is now spent on the land and considerably less area covered (approximately 1500 square miles) the importance of caribou to the community to-day is no less than "long ago"; increased mobility and efficient hunting methods have permitted the annual harvest of caribou to remain generally constant. Although winter trapping activity has declined, spring muskrat trapping has not and in recent years the number of hunters and families going to the Old Crow Flats has increased. Many who go to the Flats to-day do so as a form of 'paid holiday' from wage-earning employment in the village; similarly, caribou hunting has become a specialized activity carried out during a relatively short period of time.

Usher (1970:83) pointed out that in contrast to the older and larger fur-trade centres in the northern forest and tundra regions (such as Old Crow, discussed above), the total trapping area utilized by the Inuit on Banks Island has continued to increase. (51)

During the past 15 years the number of trappers (both part-time and full-time) in the Northwest Territories has varied from 2450

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(51) This case may be unique north of 60 and the situation described by Stager respecting the Old Crow Indians is more indicative of the overall trend.

to 3850;<sup>(52)</sup> the number of pelts harvested during the same period ranged from 109,000 to 365,000 (see Fig. 9). For the 1973/74 season the total value of fur production was \$3,067,725.03, an increase of nearly \$1.6 million over the previous year.<sup>(53)</sup>

The value of fur production in the Yukon Territory is considerably less than that for the Northwest Territories. For example, during the same 15-year period the highest value received for fur, traded in the Yukon, was \$172,936 in 1964/65.<sup>(54)</sup> By comparison the revenue from big game hunting in the Yukon is substantial. For example, in 1972/73 the estimated revenue of the 20 licensed big game outfitters was \$710,450.00 (see Table 12).

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(52) A survey by the Game Management Service, N.W.T. Government, shows that of 1104 trappers who sold furs in 1969/70, in 17 communities in the Mackenzie Valley, 901, or 82 percent, either earned less than \$1000 from trapping or spent less than two months trapping. (Regional Impact of a Northern Gas Pipeline, Vol.5, p.9, Information Canada, Cat.No.R57-4/1973-5).

(53) Source: Game Management Division, Government of the Northwest Territories, Yellowknife, N.W.T.

(54) Statistics Canada, Cat.# 23-20.



**Fig. 9**  
**NUMBER OF PELTS TRADED ANNUALLY**  
**NORTHWEST TERRITORIES 1960 - 1974**

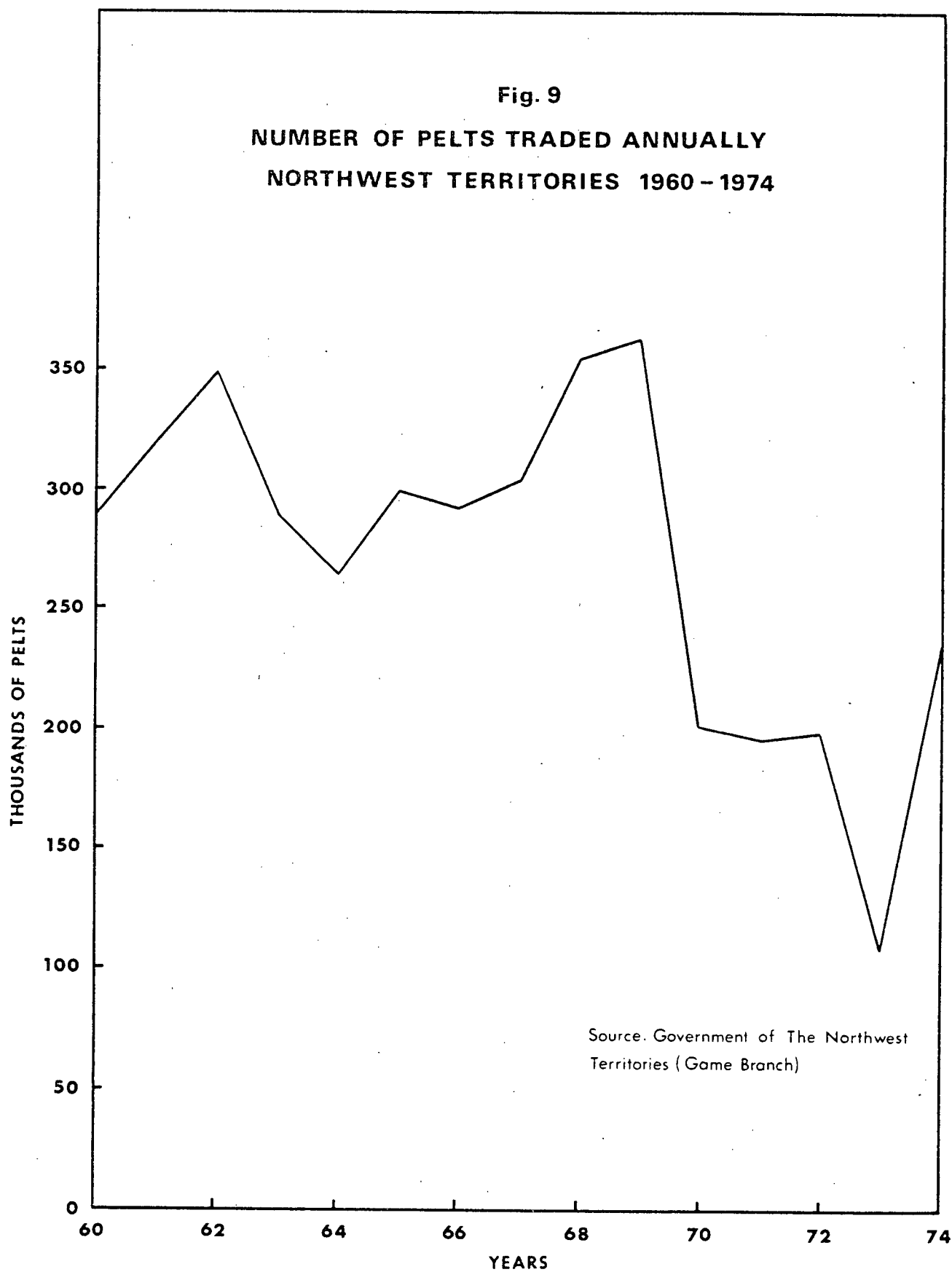


TABLE 12Big Game Hunting, Yukon Territory

	<u>71/72</u>	<u>72/73</u>
Number of licensed outfitters	22	20
Number of licensed guides	160	150
Number of non-resident licences issued:		
Canadian	36	17
Alien	381	383
Estimated revenue to outfitters	\$612,260	\$710,450

Source: Annual Reports of Director of Game, Yukon Territorial Government.

The final, and perhaps most important, aspect of land use as it pertains to hunting and trapping is the harvesting of country food. (55)

Stager (1974:79) estimates that 55 per cent of the total food needed by the 183 people of Old Crow in 1973 came from the land. Seventy-seven per cent of the total population supplied at least 25 per cent of their dietary needs, using country food and 51 of the population of 183 relied on the land for more than 75 per cent of their food requirements.

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(55) The relative values of country food and 'cash crops' in the form of fur-bearers may be illustrated by the fact that during the period 1962-1969, the average annual income earned by the village of Old Crow from trapping was \$16,500 while the value of caribou meat harvested was approximately \$50,000 annually (Naysmith 1971:21).

It is interesting to note that a similar study concerning the Cree Indians of James Bay shows a nearly identical reliance on country food. Salisbury (1972:50) stated that for the 5772 Cree Indians in the James Bay region of northern Quebec, between 50 and 55 per cent of their food comes from the land.

A third study which considered 17 communities in the Mackenzie Valley shows that in 1969/70 the value of meat and fish harvested by hunters and trappers was more than double the value of furs traded.<sup>(56)</sup>

(vii) National Parks, Territorial Parks and Ecological Reserves

The construction of the Alaska and Mackenzie Highways in the 1940's, linking the Yukon Territory and Northwest Territories with southern Canada, had by the next decade introduced another facet of northern land use. Vacationers were travelling north by automobile, and particularly in the Yukon which provided access to Alaska, tourist traffic grew rapidly and with it a demand for roadside campgrounds.

In 1964/65 the 38,163 tourists visiting the Yukon exceeded

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(56) Estimated gross value of game meat, fur meat and fish - \$766,000; value of furs traded - \$316,000. (Regional Impact of a Northern Gas Pipeline - Vol.5, Information Canada, Cat. No. R57-4/1973-5.)

the non-tourist visitors by nearly 14,000.<sup>(57)</sup> By 1965 the Yukon Forest Service of the Department of Indian and Northern Affairs was operating more than 30 campgrounds. Initially undertaken to provide a measure of control over camper activity, particularly during the forest fire season, the campground program today includes 60 public campgrounds.<sup>(58)</sup>

Tourism in the Northwest Territories has experienced a similar growth pattern although because of a much smaller road network, the absolute numbers are substantially less. It has been estimated that approximately 1000 tourists visited the Northwest Territories in 1960 and by 1964 this figure had increased to 5000.<sup>(59)</sup> Unlike the Yukon Territory the majority of the tourists who visited the Northwest Territories in the 1960's did not travel by car but flew into one of the 11 fishing lodges operating there. Between 1969 and 1971 the number of tourists to the Northwest Territories increased from 9,000 to 17,700. As the all-weather highway system grew in the Mackenzie Valley so did the number of tourists travelling by automobile and using the highway

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(57) 'The Yukon Today' IAND publication, Cat. No. R29-7268, Ottawa, 1968.

(58) In 1972 the responsibility for administering the Yukon Campground Service was transferred from the Department of Indian and Northern Affairs to the Yukon Territorial Government. Similarly the Government of the Northwest Territories assumed responsibility for the Campground Service in the Mackenzie Valley.

(59) 'The Northwest Territories Today' IAND publication, Cat. No. R29-6265, Ottawa, 1968.

campgrounds.<sup>(60)</sup> As can be seen from Table 13 more than half of the tourists to the Northwest Territories in 1971 entered by highway.

TABLE 13

Number and type of tourist visitors to the Northwest  
Territories - 1971

<u>Method of entry into N.W.T.</u>	<u>Number of tourists</u>		
	<u>Canadian</u>	<u>non-Canadian</u>	<u>total</u>
highway	6500	2500	9000
lodges & outfitters	500	3300	3800
air	3100	800	3900
others	500	500	1000
Totals	10600	7100	17700

Source: 'North of 60 - Prospectus', IAND publication, Cat. No. R72-5274, Ottawa, 1974.

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(60) By 1972 the Northwest Territories trunk highway system included the following roads and corresponding mileages: Mackenzie Highway - 297; Hay River Road - 31; Yellowknife Highway - 214; Ingraham Trail - 43; Fort Smith Highway - 166; Pine Point - Fort Resolution Road - 52; Fort Liard Highway - 27.

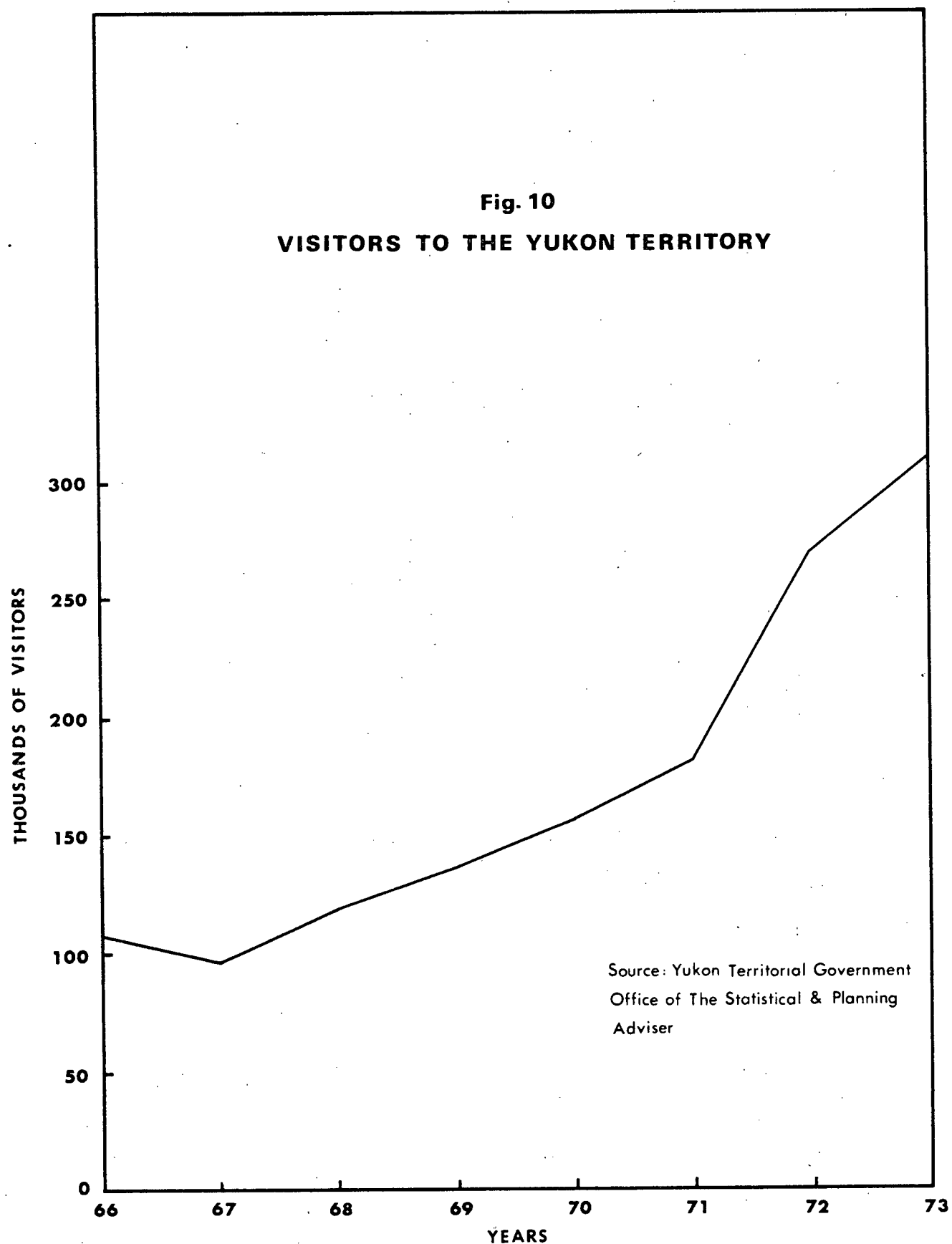
The number of visitors to the Yukon Territory increased more than five-fold during the decade 1964-1973 (see Fig. 10). Upon completion of the Dempster and Mackenzie Highways, which will link southern Canada with the Arctic coast via both territories (see Map no. 16), the demand upon territorial land for recreational purposes will increase markedly. In order to accommodate the increasing public interest in the recreational potential of the Canadian north, programs are underway to establish both national and territorial parks in the territories in addition to expanding the existing Campground Services referred to above.

Under Section 19 of the Territorial Lands Act three areas were set apart and appropriated in 1972 for national parks purposes.<sup>(61)</sup> Lands set aside for national parks at Kluane Lake, in the Yukon, and Nahanni River and Baffin Island in the Northwest Territories are specifically dealt with under Section 11(1) of the National Parks Act, R.S., C.N-13, as amended in 1974. The section reads as follows:

"... the Governor in Council may, after consultation with the Council of the Yukon Territory or the Council of the Northwest Territories, as the case may be, by proclamation, set aside as a reserve for a National Park of Canada, pending a settlement in respect of any right, title or interest of the people of native origin therein, the lands described...and upon the issue of a proclamation under this subsection, notwithstanding any other Act of the Parliament of

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- (61) (a) Order-in-Council P.C.1972-238 of 10 February, 1972, approximately 8500 square miles at Kluane Lake, Yukon Territory, to which was added an additional 10 square miles by Order-in-Council P.C.1974-2484 of 12 November 1974.  
 (b) Order-in-Council P.C.1972-299 of 18 February, 1972, approximately 8290 square miles on Baffin Island, Northwest Territories.  
 (c) Order-in-Council P.C.1972-300 of 18 February, 1972, approximately 1840 square miles at the Nahanni River, Northwest Territories (see Appendix J).

**Fig. 10**  
**VISITORS TO THE YUKON TERRITORY**

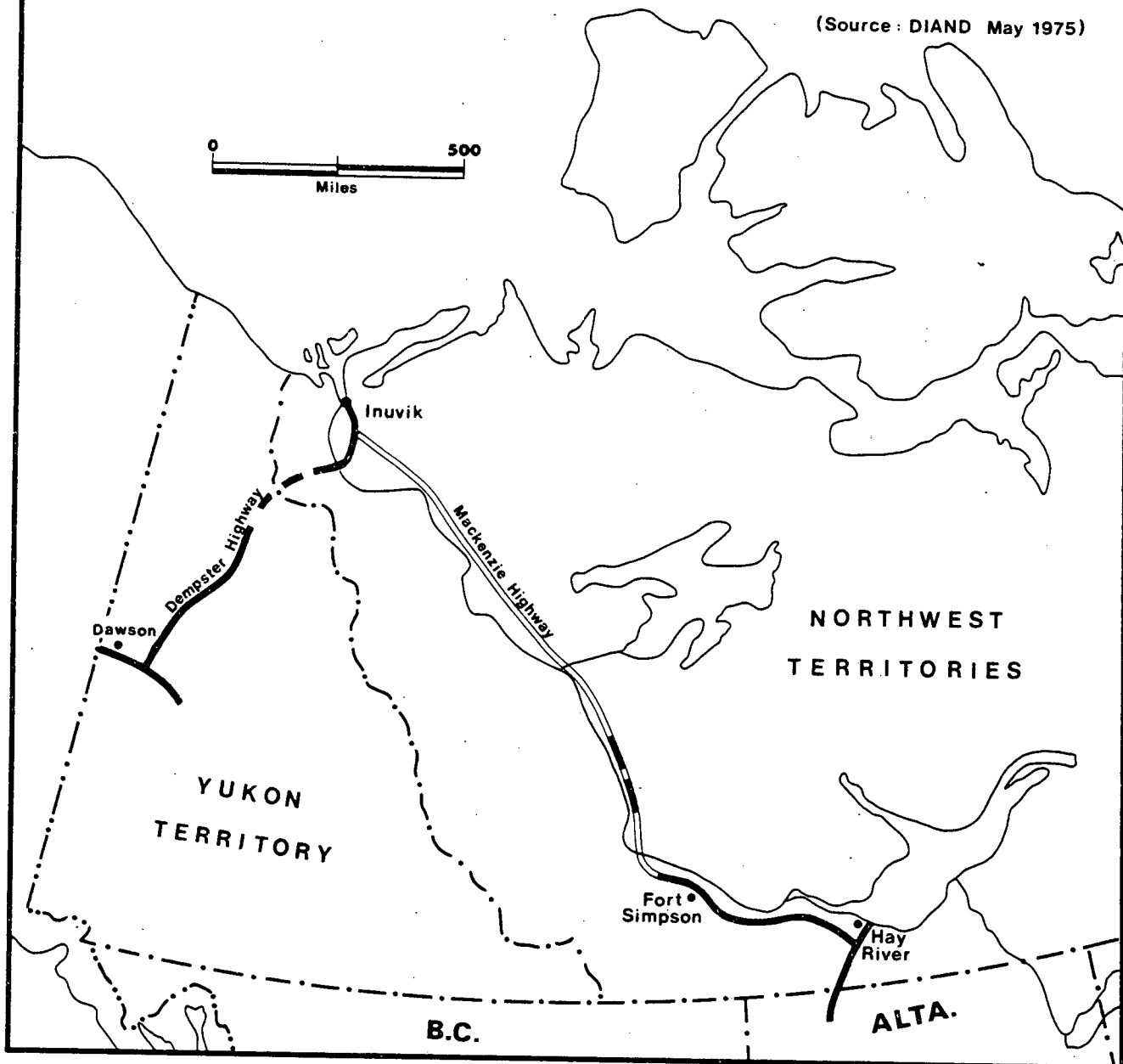


Map 16  
DEMPSTER & MACKENZIE  
HIGHWAYS

- Completed  
- - - Under Construction  
= = = Proposed

(Source: DIAND May 1975)

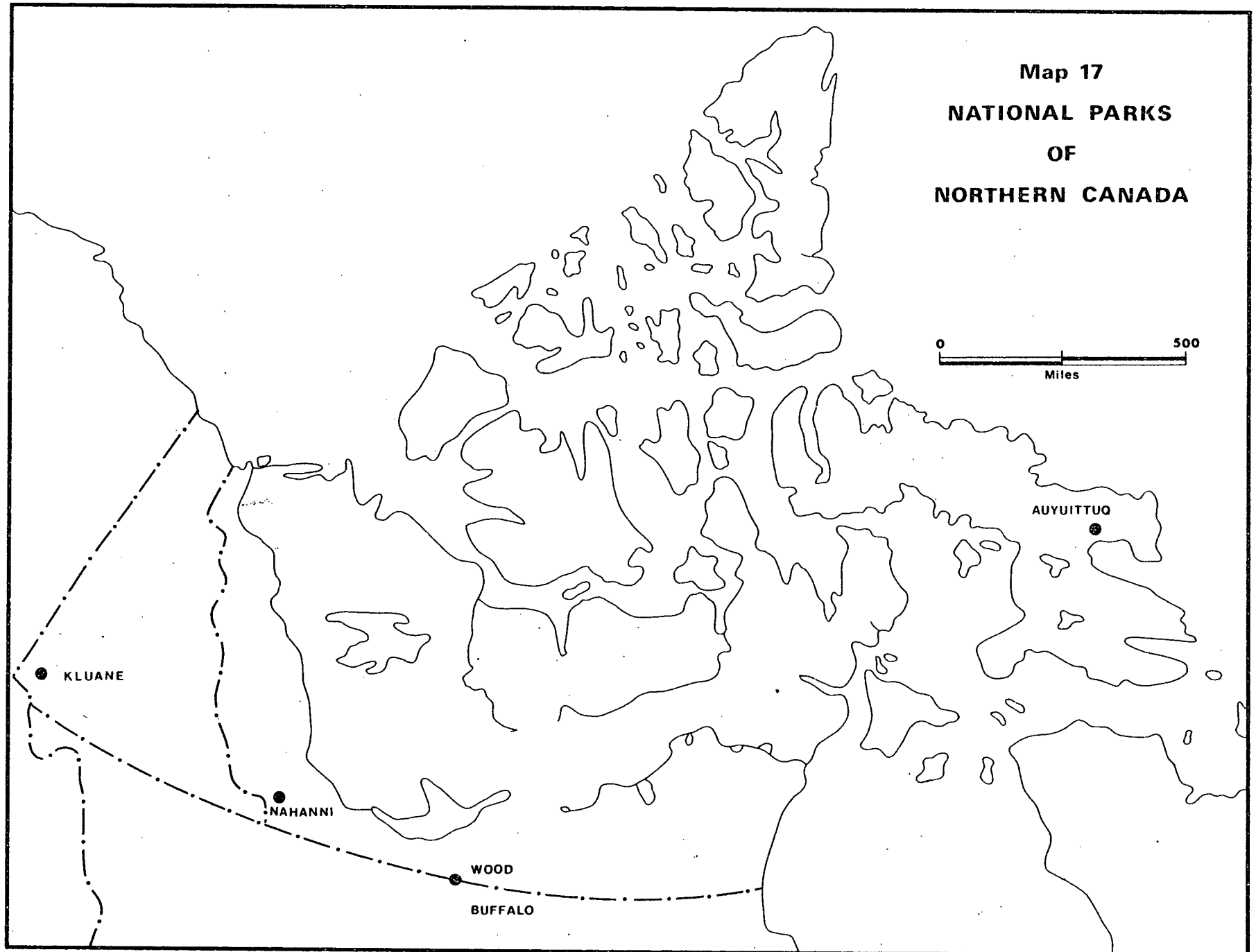
0 500  
Miles





**Map 17**  
**NATIONAL PARKS**  
**OF**  
**NORTHERN CANADA**

0 500  
Miles



Canada, and save for the exercise therein by the people of native origin of the Yukon Territory or Northwest Territories of traditional hunting, fishing and trapping activities, the National Parks Act applies to the reserve so set aside..."

The 8,500 square mile Kluane National Park in the Yukon Territory contains Canada's highest mountains, including Mount Logan at 19,520 feet<sup>(62)</sup> and extensive ice fields of the St. Elias Range which forms one of the world's largest non-polar glacier systems.

In the Northwest Territories the Nahanni National Park covers 1840 square miles of mountainous wilderness through which flows a major portion of the South Nahanni River, including the 316-foot high Virginia Falls.

~~Auyuittuq~~ Auyuittuq National Park is situated on the east coast of the Canadian Arctic and covers 8,290 square miles as it straddles the Arctic Circle. The park area includes a coastline containing deep fjords and vertical cliffs, some of which rise more than 3000 feet above the sea. (This park was formerly called Baffin Island N.P.)

Section 4 of the National Parks Act<sup>(63)</sup> states in part that "...National Parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations". Since the basic purpose of the National Park system is to preserve for all time, areas which contain significant geographical, geological, biological or

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(62) Holdsworth (1975:31).

(63) R.S., C.189, S.4.

historic features as a national heritage, activities such as the grazing of domestic stock, the mining or harvesting of the sub-surface and surface resources are not in accord with National Park policy.<sup>(64)</sup>

The territorial park program, by comparison, has been designed to provide several categories of public parks, selected in such a way as to minimize conflict with other land uses but not necessarily precluding them. Territorial parks will be formally established under a Park Ordinance<sup>(65)</sup> and will include the following: natural environment or outdoor recreation parks; community parks; wayside parks or roadside campgrounds; and territorial historical parks.

The administration of territorial parks will be the responsibility of the respective territorial governments and the examination of proposals for the establishment of the parks, which usually will be much smaller in areal extent than the national parks in the north,<sup>(66)</sup> will be by a Territorial Parks Committee provided for

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(64) In order to attain this purpose the National Parks Act includes provisions such as: S.6(1) which prohibits the disposal of, or settlement upon, public lands within a park except under the authority of the Act or regulations; and S.7(1) authorizing the Governor in Council to make various regulations including those for the preservation, control and management of the parks.

(65) The Yukon Territory has not yet passed a Park Ordinance; the N.W.T. did in October, 1973.

(66) For example the Yukon Territorial Government has suggested for consideration nine separate sites as possible territorial parks. The largest of these covers approximately 1600 square miles and the nine areas comprise 3180 square miles in total.

under the Ordinance. As part of the examination procedure the Park Ordinance provides for the holding of public hearings in order to seek the views of local residents and others who may be affected by the establishment of the proposed park.

Although no ecological reserves<sup>(67)</sup> have been established north of 60 to date, a significant amount of field work and preparation has been done toward the selection of specific areas that should be reserved. In considering ecological reserves as a form of land-use it is necessary to recognize the fundamental difference between their purpose and the role of either territorial or national parks.

Whereas the use of a specified area of public land for recreational purposes is the sole objective of national parks and the principal objective of territorial parks, it is not even indirectly contained within the concept of ecological reserves. By definition ecological reserves are legally protected natural areas established for scientific research and educational purposes, where human influence is kept to a minimum.

Ecological reserves are divided into three categories as follows:

- major ecological reserves which contain self maintaining eco-

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(67) In order to avoid the ambiguity of the word 'reserves', the term 'ecological sites' is used when referring to the Yukon Territory and Northwest Territories.

systems that include populations of large mammals, major geomorphological features, and diverse terrestrial and aquatic ecological communities;

- supplementary reserves which protect an economically and/or scientifically important component of an ecosystem, e.g., forest reserves containing representative tree populations, wintering areas of game animals or sanctuaries for endangered species; and

- special reserves which contain exceptional ecological or geomorphological features such as bird colonies or salt marshes.

Peterson (1974:21) suggested that there should also be a class of ecological reserve which will provide for the long-term monitoring of major disturbances such as mining for the purpose of assessing problems of natural recovery or reclamation.

In 1969, under the Canadian Committee for the International Biological Program - Conservation of Terrestrial Ecosystems, two Arctic panels were formed: Panel 9 (Tundra) and Panel 10 (Boreal Forest). By 1974 the two Panels had identified 140 candidate areas for establishment as ecological reserves, on federal land north of 60. Although 13 of the candidate areas are afforded some form of protection under existing statutes there is no specific legislation dealing with the establishment of ecological reserves in the north. This specific point will be addressed in Part III of this study.

#### CHAPTER FOUR. LAND ADMINISTRATION IN THE NORTH

##### (i) Territorial Governments

Within each territorial government there is a Department of Local Government which is responsible for administering the 'Commissioner's Land' or Block Land Transfer areas. For example, in the Northwest Territories the Director of the Department of Local Government appoints land agents under Section 4 of the Commissioner's Land Regulations. Regional superintendents of local government, area service officers and area clerks normally hold continuing appointments as land agents. The land agents' duties include: receiving and processing applications for land, quarrying permits and timber permits within Block Land Transfer areas; furnishing lands information and assistance to the public; land inspections; and receiving and processing territorial government revenues. Territorial government land agents also receive applications for federal land, in areas where there is no federal land agent present, such as the central and eastern Arctic. These applications along with recommendations are then forwarded to the federal land office in Yellowknife for processing.

Within municipalities,<sup>(68)</sup> land administration including planning, zoning and the sub-division of municipal land is provided for in the Northwest Territories under the Planning Ordinance (June 1974) and in the Yukon Territory under the Municipal Ordinance (March 1972). A municipality's secretary-treasurer or secretary-manager may, subject to approval of the local council, be appointed land agent, and an annual agency grant is paid to the municipality by the territorial government, to finance the operation.

(ii) Federal Government

The unalienated Crown land beyond Block Land Transfer areas (which is nearly all of the land north of 60) is the responsibility

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(68) The Department of Local Government in each territory also administers the Municipal Ordinance. Communities in the Northwest Territories are classified as either: city, town, village, hamlet or settlement. (For a detailed summary of each, their areas of responsibility and relationship to the Government of the Northwest Territories see Appendix L.) Under the Municipal Ordinance of the Yukon Territory a municipality is defined as one of the following: city; town; village or municipal district (see Appendix M). The Yukon Territorial Government has also established 'Local Improvement Districts', which in effect have replaced the village and municipal district and provide a training ground for municipal government (pers. comm. W. Billawich, Yukon Territorial Government, Whitehorse, Y.T.). Each L.I.D., of which there are now six, is administered by a Board of Trustees, who, following their initial appointment by the Commissioner, are elected by the residents of the District. The Board of Trustees manages the budget of the Local Improvement District and acts in an advisory capacity to the Commissioner and the Department of Local Government.

of the Minister of Indian Affairs and Northern Development. The northern program of the department has in each territory a 'water, forest and land' organization reporting to a regional director of resources and responsible for administering federal land policy. (69)

Applications to acquire federal land are accepted by appointed land agents in the water, lands, forest and environment program or officers of the territorial government (as discussed above). Normally land agents carry out a field investigation with respect to the application and then forward their recommendation together with the application to the appropriate supervisor of lands in Whitehorse or Yellowknife.

The operational organizations responsible for administering the various regulations and for carrying out on-site inspections are the Yukon Lands and Forest Service and the Northwest Lands and Forest Service with headquarters in Whitehorse, Y.T. and Fort Smith, N.W.T., respectively. Each Lands and Forest Service is under the direction of a regional superintendent and comprises a series of districts and resource management areas. Each area is managed by a resource management officer whose responsibilities include: land administration; land-use enforcement; timber management and forest fire control.

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(69) A description of the water, forest and land program and organization may be found in 'Toward A Northern Balance' (Naysmith 1973).



(iii) Federal-Territorial Liaison

(a) Federal-Territorial Lands Advisory Committee

Because of the need for close cooperation between the federal and territorial land programs a committee known as the Federal-Territorial Lands Advisory Committee has been established in each territory. Chaired by an officer of the Department of Indian and Northern Affairs<sup>(70)</sup> each committee, which includes representatives of the federal and territorial governments, has the following terms of reference:

(1) To coordinate mutual action and the exchange of information between the federal and territorial governments with respect to the administration of federal lands, including the review of applications;

(2) To review policy and regulatory proposals initiated by the territorial government that will have an effect on the administration and use of federal lands, and to review policy and regulatory proposals initiated by the federal government that will have an effect on the administration and use of territorially controlled lands;

(3) To provide a forum for coordination at the regional level of the interests and concerns of the native people with respect to the administration of federal lands;

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(70) In the Northwest Territories the Regional Director of Resources and in the Yukon Territory the Regional Manager, water, lands, forest and environment division.

(4) To provide a forum for the exchange of ideas related to improving the quality of land administration services provided to the general public by the adoption of complementary land administration methods, procedures, legislation and regulations by both governments and to make recommendations accordingly; and

(5) To identify and recommend areas for special management programs, located outside of Development Control Zones (Block Land Transfer areas), so as to ensure controlled growth of highway, agricultural and waterfront developments, to provide advice on the suitability of planning reports prepared for such programs and to establish guidelines for the routine processing of applications in designated areas.

It should be noted that the committee acts only in an advisory capacity to the Department of Indian and Northern Affairs. For example it cannot turn down a land application but simply provides comment which will be considered by the Department in arriving at its final decision.

The necessity for coordinated action by the territorial and federal governments in the administration and management of northern land manifests itself in several ways. As discussed above the territorial governments are responsible for land administration within Block Land Transfer areas with the remainder of the public land in the territories being administered by the Department of Indian and Northern Affairs. Which government a prospective applicant must deal with will depend on whether the land in question lies within a Block Land Transfer

area or not; a fact which usually requires going to one of the land offices to determine.

If the land applied for lies within the proposed boundaries of a Block Land Transfer area not yet formally transferred, the application is first reviewed by the territorial government and its recommendations forwarded to the federal lands office, whereupon the application is processed. In this way land disposal policy within settled areas is kept relatively uniform throughout each territory.

In addition to the above there are several other areas where federal and territorial legislative responsibilities overlap. For example an industrial operation, such as a mine, which is situated on the Arctic coast and dumps effluent into the ocean, is subject to the Canadian Government's Arctic Waters Pollution Prevention Act. Similarly, anyone using inland waters (except for domestic purposes) within a water management zone in the territories is required to have a water licence under the Northern Inland Waters Act, also a federal Act.

In either of the above cases if the operation occupied land within a Block Land Transfer area, the operator would have to obtain a land use permit, lease or agreement of sale from the territorial government under the Lands Ordinance.<sup>(71)</sup> Thus the manner in which he used

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(71) In the Yukon Territory the Yukon Lands Ordinance and in the Northwest Territories the Commissioner's Land Ordinance.

the land would be subject to terms and conditions pursuant to federal, as well as territorial, legislation. The need for consistency in such cases is obvious.

Conversely the Commissioner in each territory has the authority under the Area Development Ordinance to regulate the use of land not only within Block Land Transfer areas but also on all of the land beyond them which is under federal jurisdiction. Under this Ordinance the Commissioner may make regulations for the orderly development of an area, including the zoning of the area and the allocation of land for agricultural, residential, business, industrial or other purposes. Thus a prospective land user could obtain a land use permit under the federal Territorial Lands Act, allowing him to conduct a particular land use operation, but be effectively prevented from doing so by regulations pursuant to the territorial governments' Area Development Ordinances.

Although this Ordinance was initially established to control development in and around settlements there is nothing in the legislation limiting it in this way, for example the Mackenzie Development Area established in 1973 covers approximately 8000 square miles.

(b) Application Review Committee

In 1974 an interagency group was established in each territory to review all applications requesting land for agricultural purposes.

In the past most agricultural enterprises in the north have consisted of part-time market garden operations and hobby-farming on

small acreages. Recently there has been an unprecedented interest in large-scale farming, particularly in the Northwest Territories. For example in the 16-month period from May 1973 to August 31, 1974, 19 applications were received for more than 58,000 acres of land for agricultural purposes, by the federal land office in Yellowknife, N.W.T.

TABLE 14

Applications for Agricultural LandNorthwest Territories, May 1973 - August 1974

<u>Location</u>	<u>Number of Applications</u>	<u>Type of Use</u>	
		<u>mixed farming and gardens</u>	<u>grazing and ranching</u>
1. Slave River Lowlands	7	1377.5 ac.	7650 ac.
2. Upper Mackenzie River Valley	10	1170 ac.	47900 ac.
3. Liard River Valley	2	320 ac.	-

Source: DIAND files, Yellowknife land office.

Although the Northwest Territories Government is aware of the value of a viable agricultural industry in the north it is also aware of its responsibility to provide those services which a farming community would require. The objectives of the recently formed Northwest Territories Farmers' Association give an indication of what would be expected. They include the following:

- that the N.W.T. government will undertake to construct and maintain secondary roads connecting agricultural areas with existing territorial highways; and
- that the N.W.T. government provide grants for water and sewer systems and for the installation of irrigation systems, and assistance to electrify rural areas at rates similar to those provided to prairie farmers.

The general lack of success in northern farming to date and the preliminary reports on the feasibility of northern agriculture, prepared by the Canadian Department of Agriculture, do not support the position that large-scale farming should be considered a viable use of northern land. Thus neither the territorial governments, which are responsible for developing agricultural policy,<sup>(72)</sup> nor the Department of Indian and Northern Affairs as the agency responsible for administering the Territorial Lands Act, has been prepared to alienate relatively large blocks of land for agricultural purposes, without more conclusive

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(72) The Yukon Act, R.S.C. 1970, c. Y-2, s. 16(v).  
The Northwest Territories Act, R.S.C. 1970, c. N-22, s. 13(v).

evidence that large-scale farming north of 60 can be successful.

The Application Review Committees<sup>(73)</sup> were primarily established to review applications for agricultural land pending the completion of a comprehensive study by the Department of Agriculture on potential farm land in the north. In the review process the Application Review Committees' consideration includes the following:

- (1) the suitability of the land for the proposed agricultural operation;
- (2) the economic viability of the proposal including markets and transportation costs;
- (3) the impact of the proposal on native interests including hunting and trapping;
- (4) environmental considerations such as the possible effect of large-scale cattle grazing in valuable wildlife habitat areas; and
- (5) previous agricultural experience of the applicant and his financial resources vis-a-vis the first years of operation.

(c) Land Use Advisory Committee

There is also in each territory a Land Use Advisory Committee under the chairmanship of the regional manager, water, lands, forest and environment division.<sup>(74)</sup> This committee reviews all land use

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(73) Each reports to the respective Federal-Territorial Lands Advisory Committee and consists of members representing: the Department of Agriculture, the Department of Indian and Northern Affairs; the territorial government, and the territorial farmers' association.

(74) The regional manager is also the engineer referred to in the Territorial Land Use Regulations.

applications and makes recommendations as to the stipulations to be attached to each land use permit.

Often a land use operation is proposed which may be of concern to a particular community. In such cases the application, in addition to being reviewed by the committee,<sup>(75)</sup> is forwarded to the community where it may be reviewed and commented upon by one or more of the following: the community or hamlet council; the band council, or the trappers' association. These comments are then considered along with those of the advisory committee in responding to the application.

It should be noted that the community consultation process has enjoyed only partial success. Although sound in concept it has fallen short in execution on many occasions. When it does it is usually a case of the community receiving the application too late to provide comment, so that a land use permit is issued which fails to reflect the concern of the community.

Community consultation should probably be considered within the context of the larger question of public participation in land use planning, a subject which is discussed in some detail in Part Three of this study.

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(75) The Land Use Advisory Committees include representatives of the federal Department of Environment and the territorial government.



(iv) Research and the Administrator

The gathering of scientific and technical data in the Canadian Arctic and sub-Arctic has a relatively long history; it includes in part the work of the Geological Survey of Canada, the Canadian Wildlife Service, the National Research Council, university researchers and industry. However much of this research was not directly applicable to the administration and management of Canada's northern land.

This fact became apparent when the land use regulations were being drafted in 1970 and it was evident that as a result of the lack of certain data the degree of restriction imposed on land use operations was being set somewhat arbitrarily. To help alleviate this situation the Arctic Land Use Research (ALUR) program was established.

The basic objective of ALUR is to provide an information base for those administering northern land legislation. As part of the water, lands, forests and environment division, ALUR endeavours to bring together the researcher and the field administrator. The researcher who is considering the effect of various types of land use on terrain of different characteristics can provide useful information to the field administrator. Conversely the man carrying out land use inspections and administering regulations is able to contribute to the design of future research projects, based on his own need for information.

Two specific tools, which have been developed through the ALUR program in concert with other federal agencies, to aid land

administrators in the territories are the Land Use Information Maps and the Terrain Sensitivity Maps.<sup>(76)</sup>

The overall objectives of the Arctic Land Use Research program may be described as follows:

- (1) To detect and define environmental problems associated with northern resource development and particularly those problems associated with land use operations;
- (2) To compile base-line information, where available, on undisturbed northern ecosystems for use as control data in measuring the environmental effects of land use operations;
- (3) To devise and test alternative resource exploration and development procedures where it is found that present procedures result in unacceptable levels of damage to the land surface;
- (4) To make recommendations on the basis of data obtained from the research program respecting the type and degree of restrictions to be imposed on northern land use operations in various areas or zones of northern Canada; and
- (5) To publish and disseminate data respecting northern land use operations to:
  - (i) resource exploration industries
  - (ii) interested government departments
  - (iii) universities and the scientific community in general.

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(76) Naysmith (1972:295-312). For an example of a Land Use Information Map see map pocket, inside back cover.

The ALUR program has included the following kinds of studies thus far: (77)

- (1) effects of disturbance on various types of northern land;
- (2) effects of oil spills on land and methods of reclamation;
- (3) preparation of maps showing current land use;
- (4) preparation of maps or photo-maps showing the land's capability to withstand or recover from disturbance;
- (5) problems of waste disposal from mines and camps; and
- (6) effects of fire on the forest and on the tundra.

Some observations from the studies are being incorporated into a 'Land Use Handbook'. Written primarily for land-use inspectors, the handbook presents a set of guidelines dealing with the application of land use regulations (Strang 1975:5).

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(77) The work is done under contract, usually with university researchers. An advisory committee has been established to determine what research should be conducted and to evaluate the studies done. The committee consists of the following members: two from the oil and gas industry, one each from the mining and forest industries, three from the university community and one member from a government department plus the chairman who is a member of the Department of Indian and Northern Affairs. The latter provides the liaison between the administrators and the advisory committee.

## CHAPTER FIVE. ECONOMIC AND POLITICAL FACTORS CONSIDERED

Thus far we have considered the present setting from the standpoint of: current land use, legislation and administration. This chapter will look at some aspects of the economic and political setting in which northerners live. Reference to northern schooling and the relationship of education to personal income may be found in Appendix P.

### (i) Population

Canada north of 60 distinguishes itself from the rest of the country in several ways but perhaps most readily by its small population even by Canadian standards. With an average of 5.5 persons for every square mile, Canada is not considered to be densely populated. However its population density is nearly 150 times that of the Yukon and Northwest Territories when taken together (see Table 15).

As one might expect, the population is not evenly distributed throughout the north; a point illustrated by the fact that the city of Whitehorse accounts for 60 per cent of the Yukon population and 35 per cent of the residents of the Northwest Territories live in communities adjacent to Great Slave Lake. <sup>(78)</sup>

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(78) Yellowknife, Rae, Fort Providence, Hay River, Pine Point and Fort Resolution.

TABLE 15

Population and Area

	<u>Yukon Territory</u>	<u>Northwest Territories</u>	<u>Total two territories</u>	<u>Total Canada</u>
Population (1971)*	18,388	34,807	53,195	21,568,311
Popn. as % of Canada	0.09	0.16	0.25	-
Area (sq.mi.)	207,076	1,304,903	1,511,979	3,851,805
Area as % of Canada	05.37	33.88	39.25	-
Number of square miles per person	11.27	37.49	28.23	00.18

\* Source: Census of Canada.

Another distinguishing feature of the north's population is the large proportion of native people. In the Northwest Territories in 1971, Indians and Inuit accounted for 53 per cent of the total population. The Yukon Indian population<sup>(79)</sup> increased by 68 per cent in the 20 years, 1951-1971. The 1971 figure of 2580 is the highest since 1901.

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(79) There are no Inuit resident in the Yukon Territory.

TABLE 16  
Territorial Population, 1971

	<u>Northwest Territories</u>	<u>Yukon Territory</u>	<u>Total</u>
Indian	7180	2580	9760
Inuit	11402	nil	11402
Other*	16225	15808	32033
Total	34807	18388	53195

(\* includes Metis)

Source: Census of Canada.

The rate of natural increase in the population of the Northwest Territories is considerably higher than the Canadian average (see Table 17). The combination of natural increase and substantial in-migration since the 1960's has resulted in a rapidly rising population (see Fig. 11). The high rate of in-migration is also reflected in the fact that the proportion of native to non-native people in the north is declining. For example, the Indians and Inuit of the Northwest Territories in 1941 accounted for 81 per cent<sup>(80)</sup> of the total population; by 1971 this figure had dropped to 53 per cent.

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<sup>(80)</sup> Annual Report, Canadian Dept. of Mines and Resources, 1941.

**Fig. 11**  
**POPULATION OF THE NORTHWEST TERRITORIES**  
**SINCE 1911**

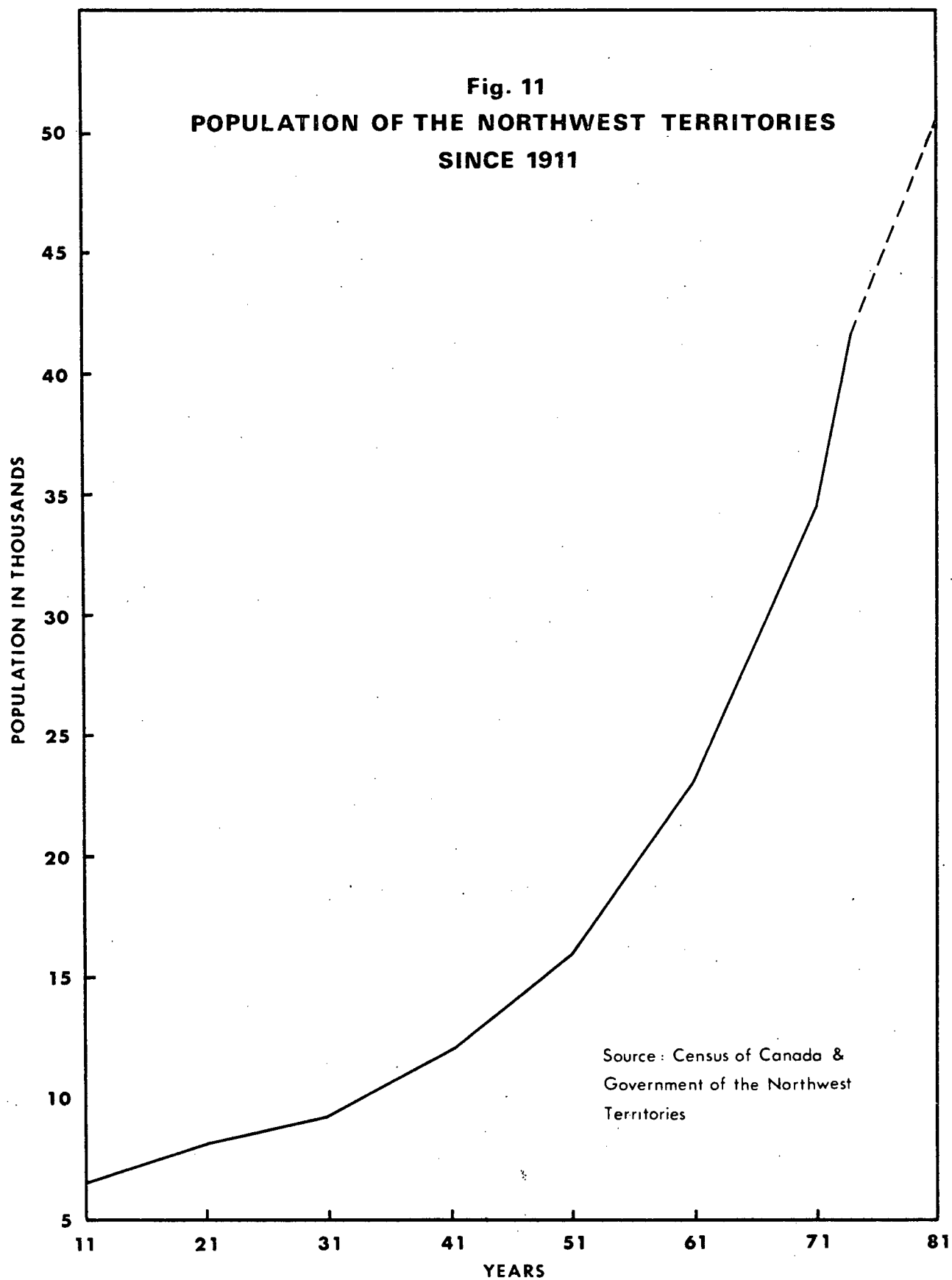


TABLE 17

Vital Statistics, Mackenzie Area and Inuvik Zone, 1971

	<u>Rate per thousand</u>		
	<u>Births</u>	<u>Deaths</u>	<u>Natural Increase</u>
Indians	34.1	6.6	27.5
Inuit	36.6	9.6	27.0
Other*	33.5	4.5	29.0
Canadian average	16.8	7.3	9.5
(*includes Metis)			

Source: T.F.N.O.D., Report No. 74-17.

(ii) Personal Income

Personal income per capita in the Yukon Territory and Northwest Territories is usually slightly below the Canadian average but above the four Maritime provinces and Saskatchewan (Econ. Rev. 1972). In order to attain a more accurate picture however it is necessary to consider personal income on the basis of native and non-native groups.

For example native people earned only 15 per cent (\$8.3 million) of the Northwest Territories' total personal income in 1970 although they accounted for more than one-half of the total population. (81)

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(81) It should be noted that for the same year, 4.6 million pounds of edible meat were harvested by native hunters, valued at approximately \$3.6 million, a figure equal to nearly 45 per cent of their cash income.



TABLE 18Total Personal Income, Residents of the Yukon andNorthwest Territories 1971

(\$'000)

wages and salaries	NWT	69,451.2
	YT	55,448.2
fur sales	NWT	1,112.6
	YT	41.7
fish sales	NWT	1,093.0
	YT	24.0
unincorporated business income	NWT	1,193.0
	YT	2,191.0
investment income	NWT	693.0
	YT	775.0
Total Income Earned	NWT	73,542.8
	YT	58,479.9
Transfers	NWT	4,184.6
	YT	2,249.1
Total Personal Income	NWT	77,727.4
	YT	60,729.0
TOTAL NORTH		138,456.4

Source: Palmer (1974).

There are also substantial differences within the native group. For example the Mackenzie District manpower survey (MacBain:197<sup>1</sup>) considered all forms of income<sup>(82)</sup> for the 12-month period, October 1969 to September 1970, and showed the following income per capita:

Inuit	\$839.64
Indian	666.89
Metis	1146.52
Non-native	3544.61

The figure for the non-native group was considerably higher than the Canadian average (\$3092), and was exceeded only by the province of Ontario (\$3584).

### (iii) Private and Public Sector Activity

Within the private sector the mining industry is the largest single contributor to the north's economy. In 1970/71, mining and services to mining<sup>(83)</sup> provided \$36.943,9 million in salaries and wages or nearly 14 per cent of the total Gross Domestic Product (see Table 19).

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(82) Including earned income from wages, salaries, hunting, trapping, fishing, and self-employment and unearned income from family allowance, pensions and other government transfer payments.

(83) Diamond drilling, exploration and engineering.

TABLE 19  
Private Sector Contribution (salaries and wages)  
to Gross Domestic Product 1970/71

<u>activity</u>	<u>salaries and wages (\$'000)</u>	<u>per cent of territorial G.D.P.</u>
1. mining and mining services	36,943.9	13.9
2. manufacturing	1,504.9	0.5
3. construction	14,418.0	5.5
4. transportation	12,783.7	4.8
5. communication	10,010.9	3.8
6. utilities	626.4	0.2
7. trade	8,764.2	3.2
8. services	7,383.5	2.8
Total private sector	92,435.5	34.7

Source: Palmer (1974).

Although wages and salaries derived from the mining, transportation and construction industries accounted for nearly one-quarter of the territorial Gross Domestic Product, growth in terms of labour force has been greatest in the trade, finance and service industries. For example, in 1971 these three sectors accounted for 35 per cent of the total Yukon Territory labour force, an increase from 28 per cent in 1961 (see Table 20).

TABLE 20  
Experienced Labour Force by Activity, Yukon Territory,  
1961 and 1971

<u>activity</u>	<u>1961</u>		<u>1971</u>	
	<u>number</u>	<u>per cent</u>	<u>number</u>	<u>per cent</u>
1. agriculture	34	0.5	5	0.1
2. forestry	42	0.6	75	0.9
3. fishing & trapping	77	1.2	25	0.3
4. mining	1010	16.3	1165	14.3
5. manufacturing	95	1.5	150	1.8
6. construction	447	7.2	555	6.8
7. transportation, communication, utilities	1228	19.7	1165	14.3
8. trade	543	8.7	890	10.9
9. finance	65	1.0	190	2.4
10. services	1153	18.5	1815	22.2
11. public admin.	1318	21.2	1035	12.7
12. unspecified	230	3.6	1085	13.3
<u>TOTAL</u>	<u>6242</u>	<u>100.0</u>	<u>8155</u>	<u>100.0</u>

Source: Census of Canada.

Wages and salaries attributable to the public sector amounted to nearly \$57 million in 1970/71. The two territorial governments accounted for \$34.9 million of this amount and the federal government \$21.9 million. Between 1970 and 1974 the number of territorial government employees increased from 2509 to 3873 (see Table 21).

TABLE 21

Territorial Government Employees

<u>Year</u>	<u>Number of employees</u>	
	<u>Yukon Territory</u>	<u>Northwest Territories</u>
1970/71	732	1777
1971/72	817	2043
1972/73	1077	2259
1973/74	1106	2427
1974/75	1143	2730

Source: IAND records.

Total gross expenditure<sup>(84)</sup> in the two territories in 1970/71 amounted to \$594.5 million (see Table 22). Investment expenditures (mining, oil and gas, construction, etc.) accounted for \$209.9 million or 35 per cent of the total and \$119.8 million or 20 per cent of gross expenditure was attributable to the federal and territorial governments.

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(84) Gross Domestic Product plus value of imports.

TABLE 22

Gross Regional Expenditure, Yukon Territory andNorthwest Territories, 1970/71

(\$'000)

1. Local consumption . . . . .	109,506.1
2. Investment expenditures . . . . .	209,979.0
mining	43,300.0
oil and gas	114,369.0
other primary and construction	8,810.0
other capital formation	43,500.0
3. Government expenditures . . . . .	119,876.3
wages and salaries:	
federal gov't	21,911.0
territorial gov't	34,917.1
operating and maintenance:	
federal gov't	25,482.4
territorial gov't	37,565.8
4. Exports, tourism and non-resident expenditures . . .	155,164.4
exports	123,714.0
tourist spending	15,330.0
non-resident expenditures	16,120.4
	<hr/> 594,525.8

Source: Palmer (1974).

(iv) The Status of Territorial Government

The Government of the Northwest Territories and the Yukon Territorial Government are provided for under federal statutes,<sup>(85)</sup> therefore they are, unlike provincial governments, ultimately under the control of the Parliament of Canada.

The executive authority of each territorial government is vested in a Commissioner who is appointed by the Governor in Council, that is federally, hence the territories may be said to have representative, but not responsible, government. In each territory there is an elected legislative council<sup>(86)</sup> comprising 12 members in the Yukon Territory and 15 members in the Northwest Territories.<sup>(87)</sup>

Each territorial administration contains several departments including: local government (discussed in the previous chapter in connection with land administration), education, health and public works. Natural resources, except for game and land within Block Land Transfer areas, remain a federal government responsibility.

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(85) The Yukon Act, R.S.C.1970, c.Y-2, with amendments. The Northwest Territories Act, R.S.C.1970, c.N-22, with amendments.

(86) Prior to April 1974, the Northwest Territories' Council comprised 10 elected and four appointed members.

(87) At present each territory is also represented by one Member of Parliament; Bill C-51 was passed in the House of Commons, February 28, 1975 providing for a second M.P. for the Northwest Territories. There is also before the House of Commons, Bill C-3, An Act to amend the British North America Act, which provides for representation of the Yukon Territory and Northwest Territories in the Senate by one member each.

The first substantial change in the executive of territorial government (policy direction is controlled at the Commissioner and Deputy or Assistant Commissioner level) took place in 1970 when a combined elected/appointed executive committee was established in the Yukon Territory. Today that executive committee is made up of the Commissioner, two Assistant Commissioners and three elected Councillors. The latter serve full time and each is responsible for a department of the territorial government. A comparable executive committee was established in the Northwest Territories in June, 1975, comprising the Commissioner, the Deputy Commissioner, an Assistant Commissioner and two Councillors. In each territory the executive committee advises the Commissioner on the administration of the territorial government. (88)

The other significant feature of the Yukon Territorial Government and the Government of the Northwest Territories, particularly the latter, is their financial dependence on the federal government (see Figures 12 and 13).

The territorial governments contribute toward their budgets through local taxation and the territorial share of income tax. (89)

Income under the heading of recoveries is principally related to the

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(88) Executive authority lies in Section 4 of the Yukon Act and the Northwest Territories Act which state: "The Commissioner shall administer the government of the Territory(ies) under instructions from time to time given by the Governor in Council or the Minister".

(89) Accounted for in the Dept. of Indian and Northern Affairs' estimates as a 'grants and contribution' item; see p.10-42 of 'Canada Estimates' for fiscal year ending March 31, 1975.



**Fig.12**  
**NORTHWEST TERRITORIES**  
**EXPENDITURES & FUNDING**  
**1974/75**

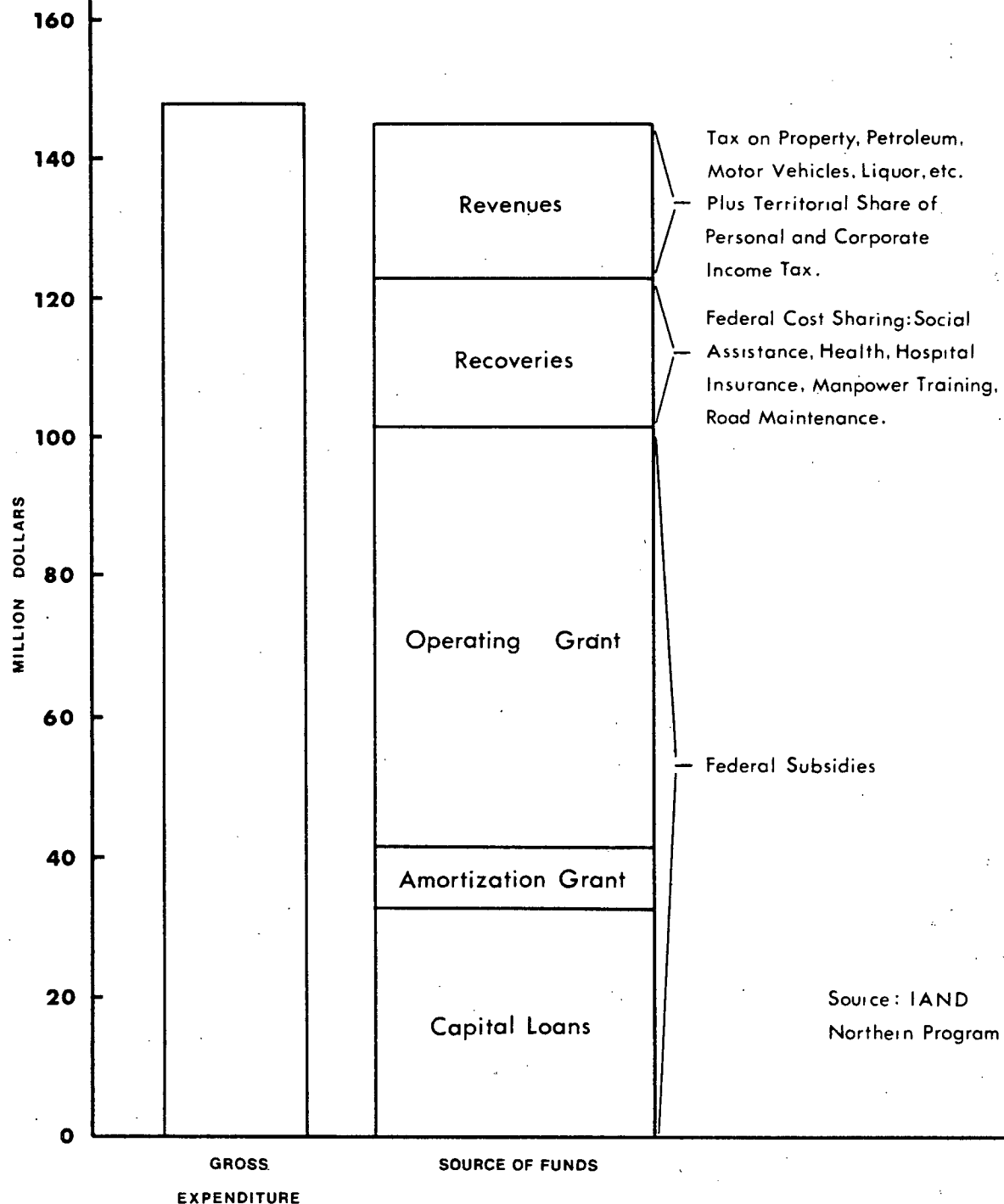
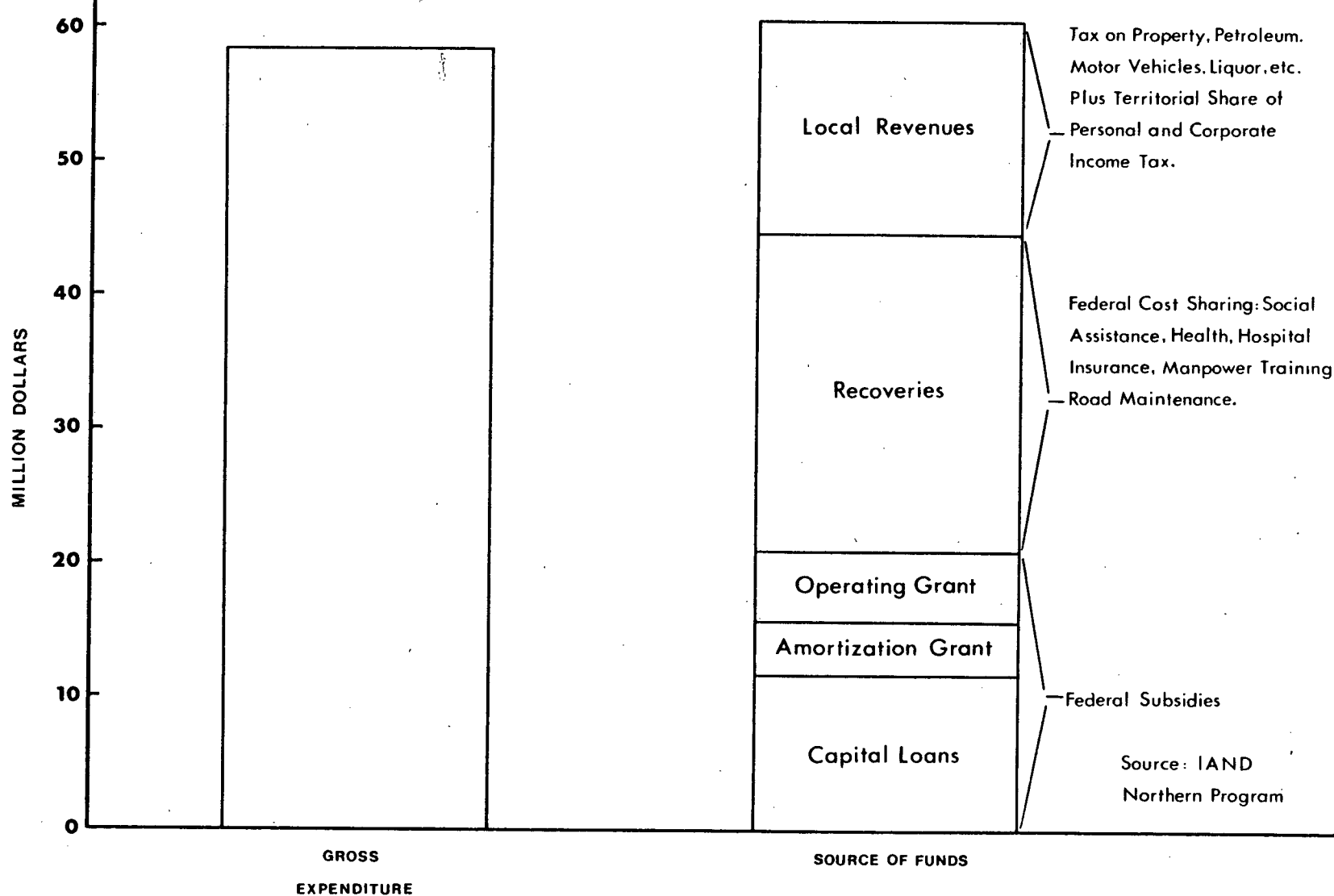


Fig. 13

**YUKON TERRITORY - EXPENDITURE & FUNDING 1974/75**



federal cost sharing of social assistance, health and insured hospital services where the territories are treated exactly as a province and receive federal funds under an agreed formula. (90)

The remainder of the funding for the two territorial budgets comes from the federal government through financial agreements arranged through the Department of Indian and Northern Affairs. All territorial capital funds are provided under agreement as federally amortized loans. Beginning in 1975/76 these loans will become capital grant items without amortization and the current item 'amortization grant' will be deleted. (91)

With all capital funds provided for under agreement this leaves the territorial revenues, including the territorial share of income taxes, to be applied against the cost of operating the territorial governments. The agreements provide for an operating grant to cover the deficit between territorial revenues and operating costs. For example, in 1974/75 the operating grant for the Northwest Territories was \$60 million or 42 per cent of the total budget and in the Yukon Territory it was \$5.2 million or nine per cent of the territorial government budget (see Figures 12 and 13).

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(90) One of the major items under 'recoveries' is road maintenance. The Department of Indian and Northern Affairs provides 85 per cent of the cost of maintaining most of the roads in both territories. One exception is the Alaska highway in which case the Yukon Territorial Government recovers 100 per cent of the maintenance costs from the federal Department of Public Works.

(91) Pers. Comm., D.A. Davidson, IAND, Ottawa, 1975.

Perhaps the salient issue concerning the present political structure in the north is the control of the natural resources. (92)

The attitude of many northerners on this issue is not unlike that of Louis-Edmond Hamelin, one of the four appointed members of the Northwest Territories Council, prior to the present all-elected council.

Hamelin (1974:4) stated:

"Ottawa has provided the Northwest Territories administration with some political sovereignty, but not with any significant economic transfer. Natural resources, which provide the basis of most economic operations, are still in federal hands. Such a split in responsibilities is not in the best interest of the North."

The Minister of Indian Affairs and Northern Development recently made a statement favouring the principle of resource revenue sharing and noted that it would be an important step towards fiscal autonomy. (93) Since then 'revenue sharing' discussions have taken place between the Yukon Territorial Government and the federal government.

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(92) In 1973/74, federal revenues in the north, mainly derived from natural resources, were estimated at \$1.7 million for the Yukon Territory and \$7.1 million for the Northwest Territories. For the same period, federal expenditures for provincial-type programs in the north were \$7.4 million and \$46.1 million, for the Yukon Territory and Northwest Territories respectively. These expenditures are not included in Figures 12 and 13. (Source: IAND records, Ottawa.)

(93) Speech to the Whitehorse Chamber of Commerce, February 1975.

PART THREE. A FUTURE COURSE

A northern lands policy should have as its dominant theme the maintenance, and where possible the enhancement, of the inherent productivity of the land.

## A FUTURE COURSE

### Introduction

The future course of northern land policy must be viewed in the long-term. Because we tend to focus more on the present than on the future, the development of long-range policy requires a concerted effort.

Part Three begins by looking at northern land policy from the standpoint of land values; those which are natural and inherent as well as those which are human and attributed. Here is the first challenge; if land policy is to have a long-term orientation then it must reflect the natural values and physical properties of the land-base. In discussing the living resources of the north, Cowan (1972: 108) referred to them as perpetual assets only if managed wisely and within their capacity for replacement.

What is the nature of the land we are dealing with? Hare and Thomas (1974:129) referred to the Arctic and Boreal climates as low energy environments where growth proceeds at a slow pace. Roughly one-half of the mainland area of the territories is tree covered but only a very small proportion contains timber comparable to that found in southern Canada. Even in the best timber producing areas, such as the Lower Liard Valley, much of the ground is permanently frozen. Northern terrain varies from the icy soils of the western Arctic, where the occurrence of massive ground ice is widespread (Mackay 1973:223),

to the arid rock desert landscapes of Axel Heiberg and Ellesmere Islands in the Arctic Archipelago.

In addition to the natural characteristics and properties, society historically has held various views and attitudes concerning land. Hence a wide range of land values has developed including those of a social, economic, psychic and political nature. Some of these are discussed both in and out of the northern context and several approaches to land management are reviewed.

Public policy is defined as a set of goals and a course of action designed to attain them, which together will maintain or improve the well-being of the general public. Within this context, consideration is given to a northern lands policy which includes a set of goals based on a series of underlying principles, and the means for attaining them. The latter is discussed under three broad headings, viz: planning, legislation, and administration.

Definition of the principles of land use.

## CHAPTER ONE. LAND VALUES

### (i) Natural

From the majestic St. Elias Mountains in southwestern Yukon, across the prairie-like lowlands of interior Keewatin, to the spectacular fjords and glaciers of Baffin and Ellesmere Islands, one is struck by the diversity and natural splendour of the Canadian north. The Yukon Territory and Northwest Territories, which together cover an area larger than India, comprise more than one-third of Canada's land mass.

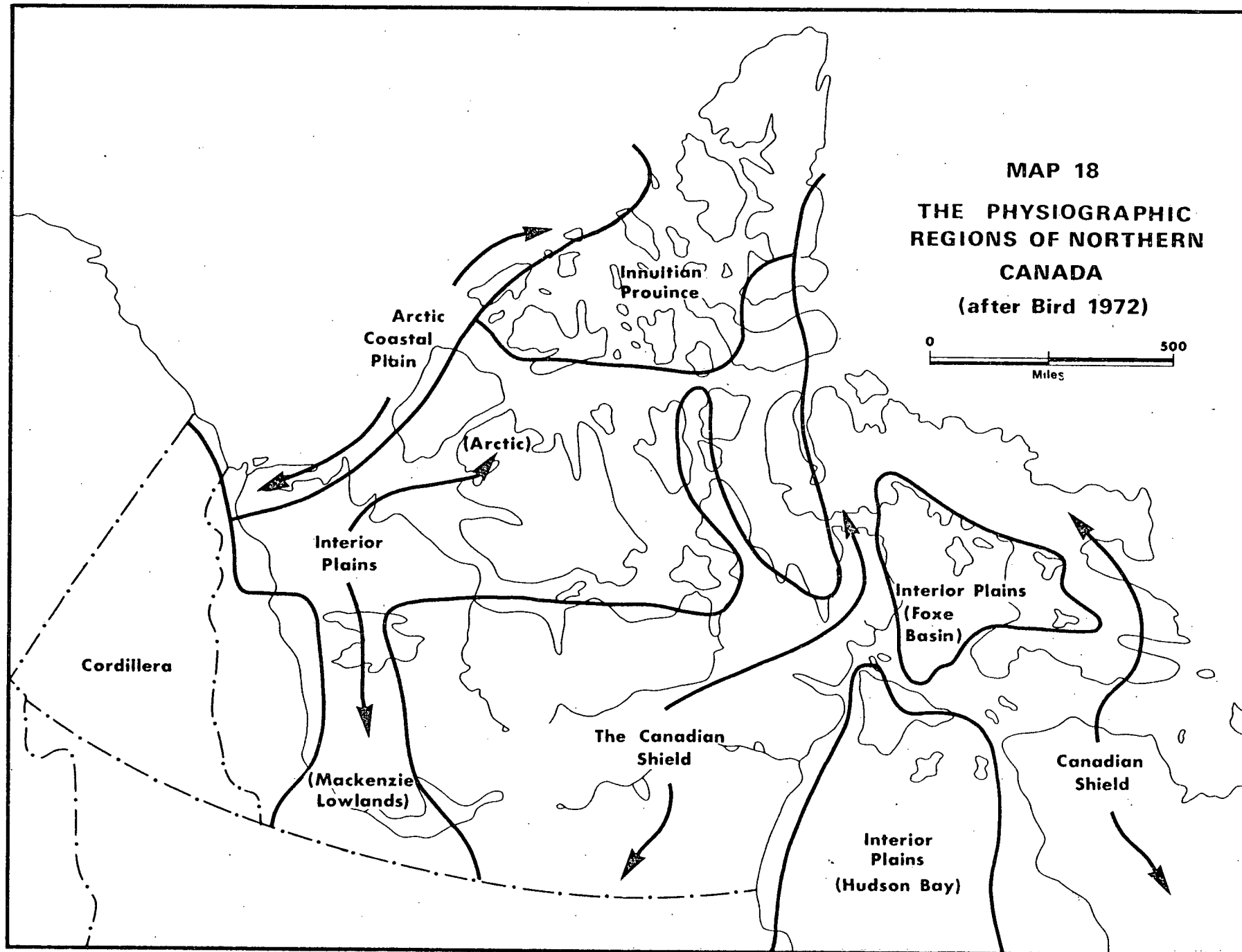
Westward the Yukon is a rugged land of plateaus and mountains cut off from the Pacific by the Coast and St. Elias Ranges which form a natural barrier to maritime influences from the Pacific. The mountains of the Yukon form the northern part of the Cordilleran Region of North America. To the east, the Mackenzie Mountains, with ridges of about 8000 feet, provide a physical boundary separating the Yukon and Northwest Territories.

In addition to the Cordillera of the Yukon Territory, the Northwest Territories contains four major physiographic regions (see Map no. 18), the Interior Plains, the Precambrian Shield, the Arctic Coastal Plain, and the Innuitian Province. The Plains, a continuation of the Great Plains that stretch from the Gulf of Mexico northward, are dominated by the Mackenzie River which flows out of Great Slave Lake northward to the Beaufort Sea, a distance of about 1100 miles.



**MAP 18**  
**THE PHYSIOGRAPHIC**  
**REGIONS OF NORTHERN**  
**CANADA**  
(after Bird 1972)

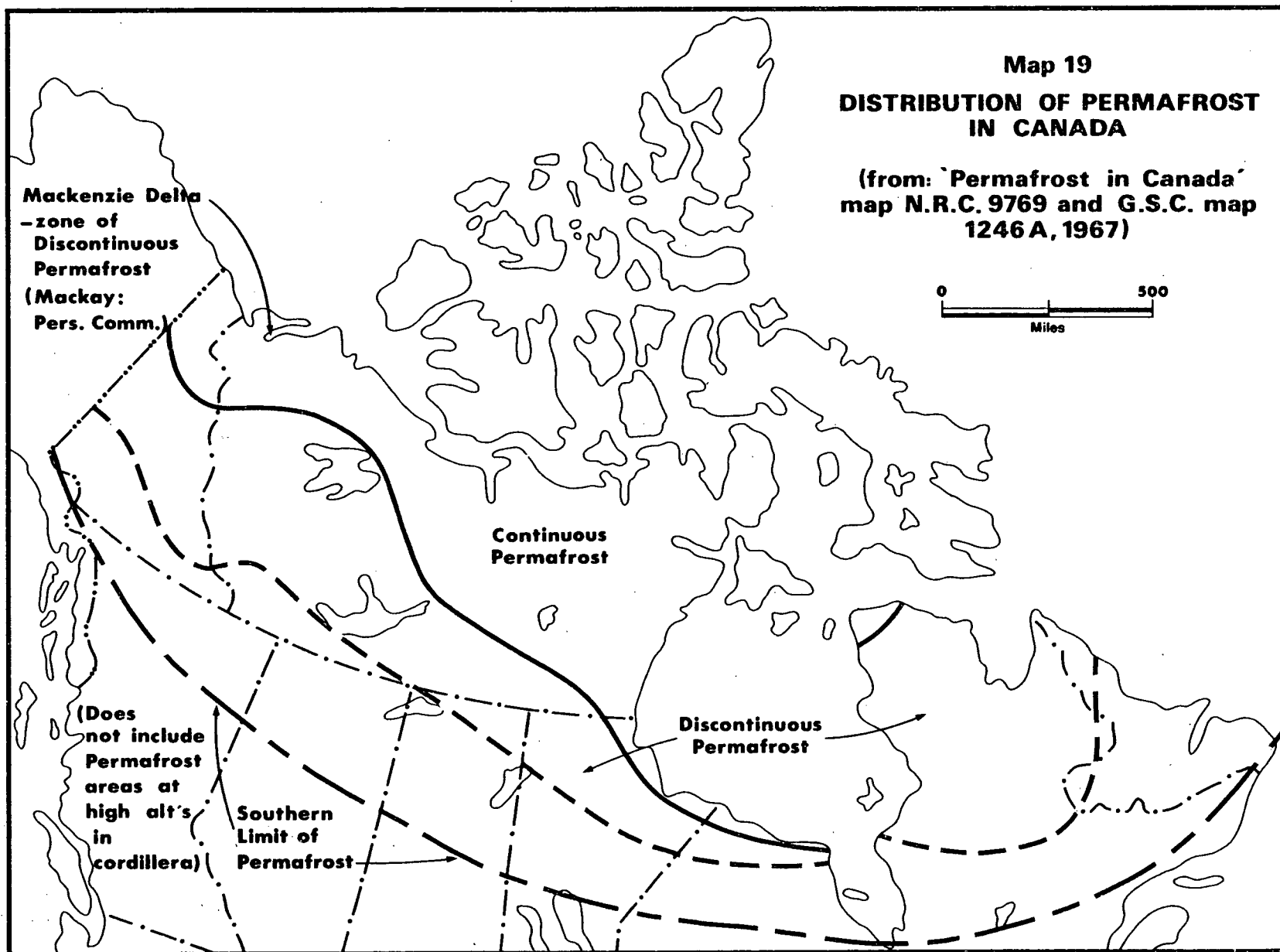
0 500  
Miles



The Precambrian Shield extends from Great Bear and Great Slave Lakes in the west, to Baffin Island in the east and northward into the archipelago across Prince of Wales and Somerset Islands. In the eastern Arctic, Precambrian rock forms a spine of mountains from Baffin Island to Ellesmere Island which rise to heights of 10,000 feet with spectacular vertical cliffs and deep fjords along the eastern coast. The Innuitian Province covers most of the rest of the Queen Elizabeth Islands except for the Arctic Coastal Plain, a shelf of sedimentary rock along the Arctic Ocean coast.

Ground which freezes one winter and remains frozen through the following summer and into the next winter is by definition permanently frozen ground or permafrost (Brown and Péwé 1973:72); at the other end of the scale some permafrost is thousands of years old. Permafrost varies in thickness from a few inches at the southern limit (see Map no. 19); 200-300 feet at the boundary of continuous permafrost; and approximately 3500 feet in the Canadian Arctic Archipelago.

In northern Canada permafrost is found everywhere beyond the tree line (continuous permafrost) except beneath large bodies of water. In the forested area permafrost occurs as areas of permanently frozen ground separated either vertically or laterally by patches of unfrozen ground and is referred to as discontinuous permafrost. The boundary separating continuous from discontinuous permafrost is transitional (Mackay: Pers. Comm.), and generally coincides with the  $-8.5^{\circ}\text{C}$  mean annual air temperature isotherm, which corresponds with a mean annual ground temperature of  $-5^{\circ}\text{C}$ .



Permafrost occurs throughout all of Canada north of 60 and indicates low temperatures and low biological productivity. But it is ground ice and not permafrost which creates the terrain problems associated with northern land use. The nature, location and extent of ice in permafrost are particularly important when considering problems of bearing strength and slope stability.

Mackay (1973:223) stated that "massive icy beds which range from 2 metres to 40 metres in depth and up to one square kilometre in surface area, occur widely in the western Canadian Arctic."

Much of the territories is underlain by fine grained soils such as the Pleistocene and Recent deposits along the Arctic Coastal Plain and inland deposits of glacial and post-glacial origin. Such soils generally have a high ice content so that excess water is released if thawing occurs. In discussing ground-ice Mackay and Black (1973:186) pointed out that permafrost may be said to be undersaturated when ice does not fill all pores; saturated ground has all pores filled with ice (by volume the ice content of saturated material ranges from 10 to 15 per cent); and supersaturated, with ice volumes approaching 100 per cent.

If subsidence is to be avoided in such soils they must not be subjected to conditions conducive to thawing. In undisturbed areas of permafrost, a delicate condition of temperature equilibrium exists between the top of the permafrost and the ground surface. Changes in the natural insulating cover can upset this thermal balance and start

the permafrost thawing.<sup>(1)</sup>

The Arctic climatic zone covers all areas north of the tree line including parts of the Yukon Territory and Mackenzie District and all of the Keewatin and Franklin Districts.<sup>(2)</sup> The Boreal climatic zone, which is related to the Boreal forest zone, covers most of the rest of Canada north of 60. The mean annual temperatures in both these zones are usually near or below freezing. Two major controls influence northern climates: low net solar radiation (including a complete lack of daylight for part of the winter north of the Arctic Circle); and Arctic airstreams coming from the pack ice of the Arctic Ocean or from the Greenland ice cap.

Arctic airstreams dominate the tundra region year-round whereas in the Boreal zone they do so only in winter and spring. In the summer and fall they are usually replaced by westerly currents from the Pacific. Mean midwinter air temperatures range from about  $-17^{\circ}\text{C}$  in southern Boreal areas to as low as  $-35^{\circ}\text{C}$  in the Arctic.<sup>(3)</sup> Extremely low temperatures occur in the Mackenzie and Yukon Valleys

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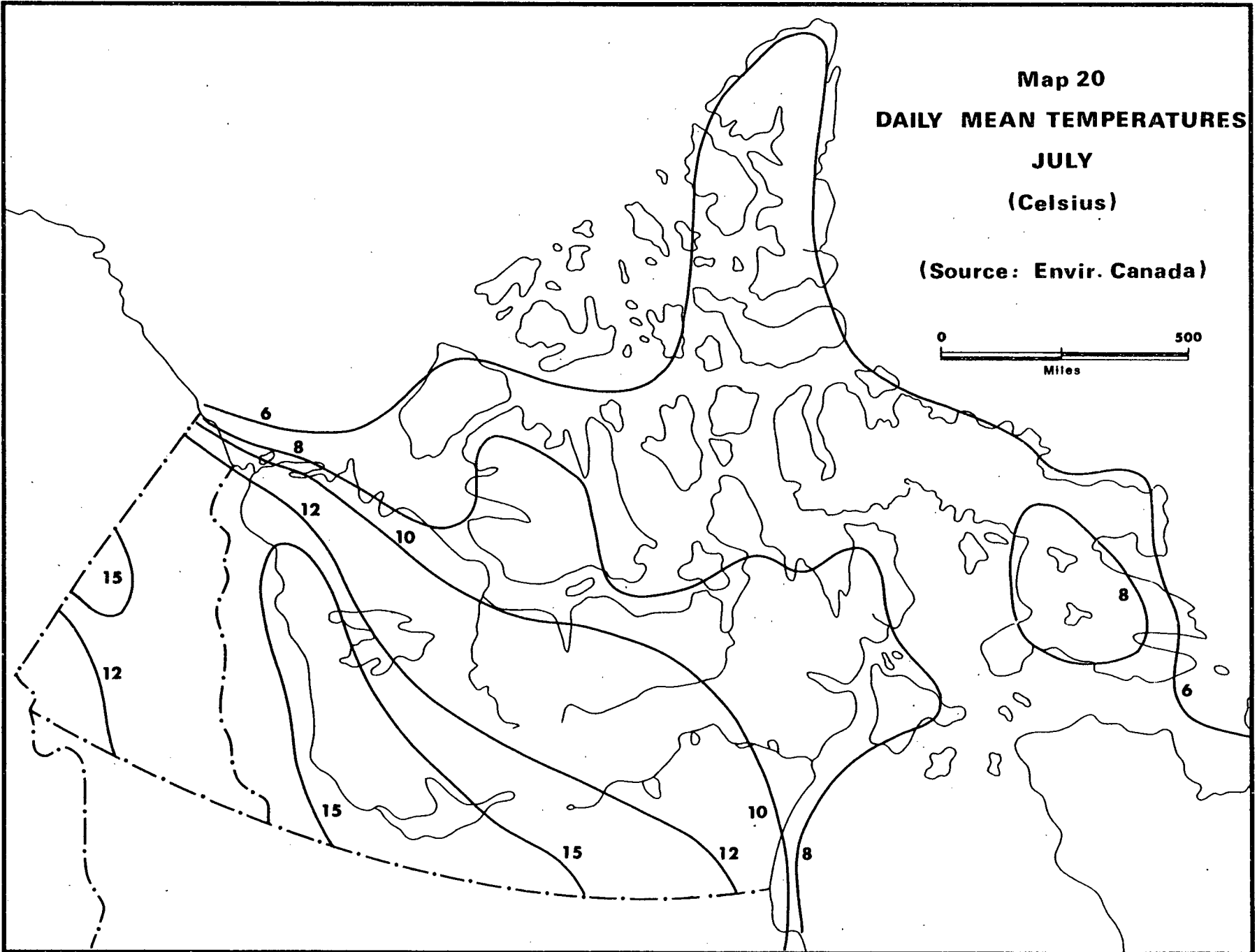
(1) For a discussion of terrain relationships including: vegetation, snow cover, soil and rock, to permafrost, see Brown and Péwé (1973:76-79).

(2) The following section on climate is taken mainly from Hare and Thomas (1974).

(3) The maximum number of frost-free days in the territories is 90 (compared with 210 in the lower mainland of B.C. and 170 in southern Ontario) and this in two small areas around Great Slave Lake in the Northwest Territories and in central Yukon near the Alaska border. In the Mackenzie Delta there are roughly 50 frost-free days.

**Map 20**  
**DAILY MEAN TEMPERATURES**  
**JULY**  
**(Celsius)**

**(Source: Envir. Canada)**



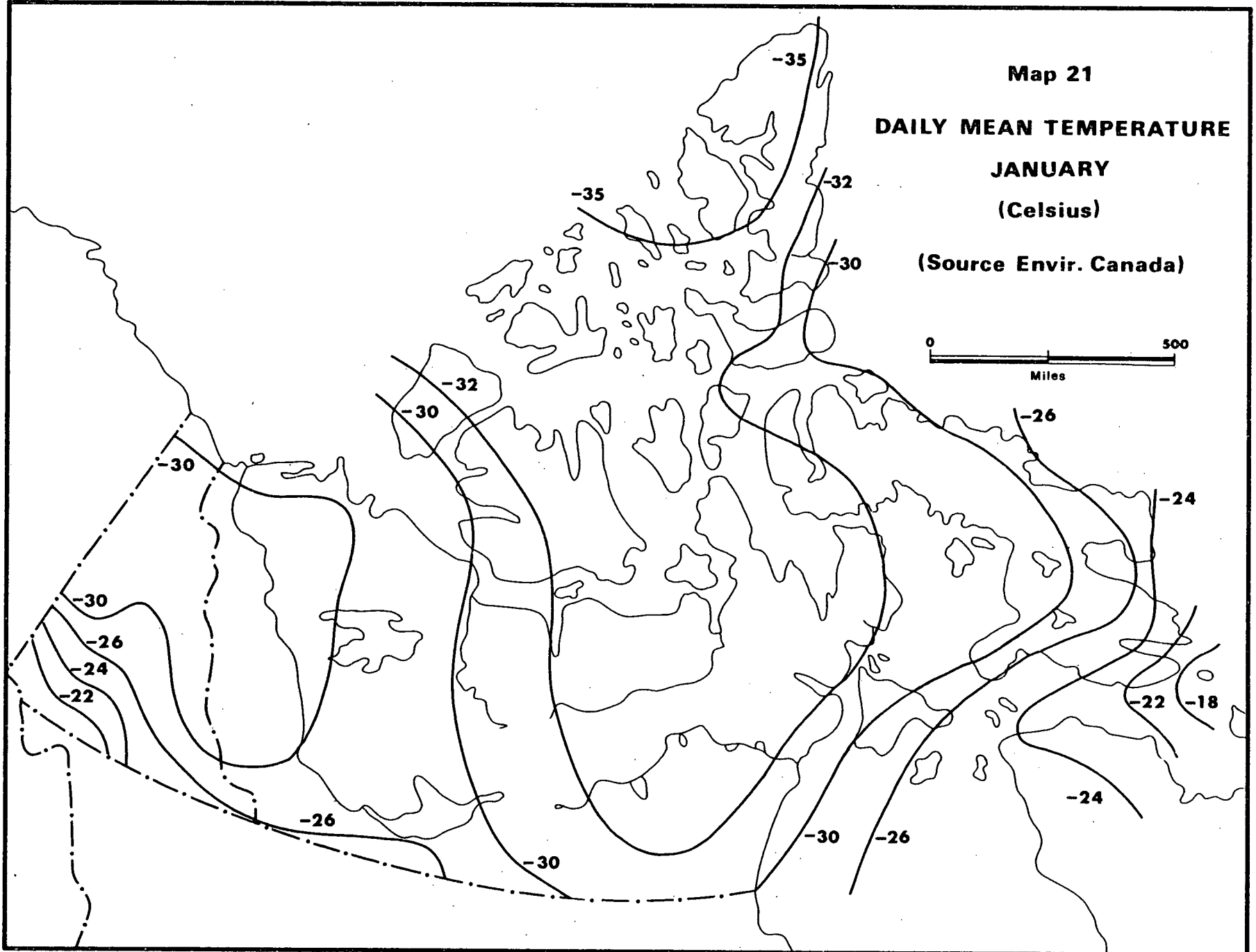
(Snag, Y.T., in 1947 recorded  $-63^{\circ}\text{C}$ ) and in the Keewatin District and the Arctic Archipelago low temperatures are often accompanied by strong winds. For example, in January 1935, Chesterfield Inlet, N.W.T., recorded a mean daily temperature for the entire month of  $-43^{\circ}\text{C}$  and a mean wind speed of 9.9 m.p.h.

Hare and Thomas (1973:133) warned that due to problems of measurement, available precipitation figures for the north may be underestimated and for this reason did not provide any precipitation measurements. However, the following may serve as indicators of northern precipitation patterns. In the Yukon Territory precipitation ranges from approximately 9 to 18 inches and in the Mackenzie Basin from 9 to 16 inches. Annual snowfall south of the tree line is about 55 inches and in the Arctic region is less than 35 inches. The annual precipitation in the Arctic Archipelago is very low, averaging less than 5 inches over the islands north of the Parry Group with Fosheim peninsula on Ellesmere Island having an average of 3 inches.

The low net radiation totals of the Arctic and Boreal climates, frozen soils and low precipitation have considerable impact on plant and animal productivity. Only a relatively small portion of the Yukon and Northwest Territories is tree covered. The boreal forest region as classified by Rowe (1972) covers the lower third of the Yukon Territory and extends eastward into the Northwest Territories as far as the Slave River and northward to Great Slave Lake (see Map no. 24).

In the Yukon Territory white spruce, Picea glauca (Moench) Voss

**Map 21**  
**DAILY MEAN TEMPERATURE**  
**JANUARY**  
**(Celsius)**  
**(Source Envir. Canada)**





and lodgepole pine, Pinus contorta Dougl., are the most prevalent coniferous species. Mixed stands include trembling aspen, Populus tremuloides Michx., balsam poplar, Populus balsamifera L., and white birch, Betula papyrifera Marsh., with the spruce and pine. At the higher altitudes alpine fir, Abies lasiocarpa (Hook.) Nutt., is found; the absolute timber line varies between 4000 and 5000 feet depending on latitude. The balance of the Yukon consists of alpine forest tundra containing stands of stunted white spruce mixed with patches of grassy or shrubby vegetation up to the tree line at about 3600 to 4000 feet.

In the Northwest Territories the southern portion of the Mackenzie District is mainly forested. In the Lower Liard watershed white spruce forms dense stands on the sites adjacent to the main river and tributaries while black spruce, Picea mariana (Mill.) B.S.P., and larch, Larix laricina (Du Roi) K. Koch, dominate the poorly drained muskeg terrain. Eastward toward the Slave River, jackpine, Pinus banksiana Lamb., is predominant on the sandy sites. North of Fort Smith and extending to Fort Simpson, prairie-like patches of grasslands are found.

North and east of Great Slave Lake the stocking of trees decreases and they become stunted in growth. In this transitional zone between sub-Arctic forest and tundra the primary species are white and black spruce and larch accompanied by alder and willow shrubs. In this region the 'forest' is patchy and stunted and is usually confined to the shores of lakes and rivers. North and east of the tree line there

# Map 22

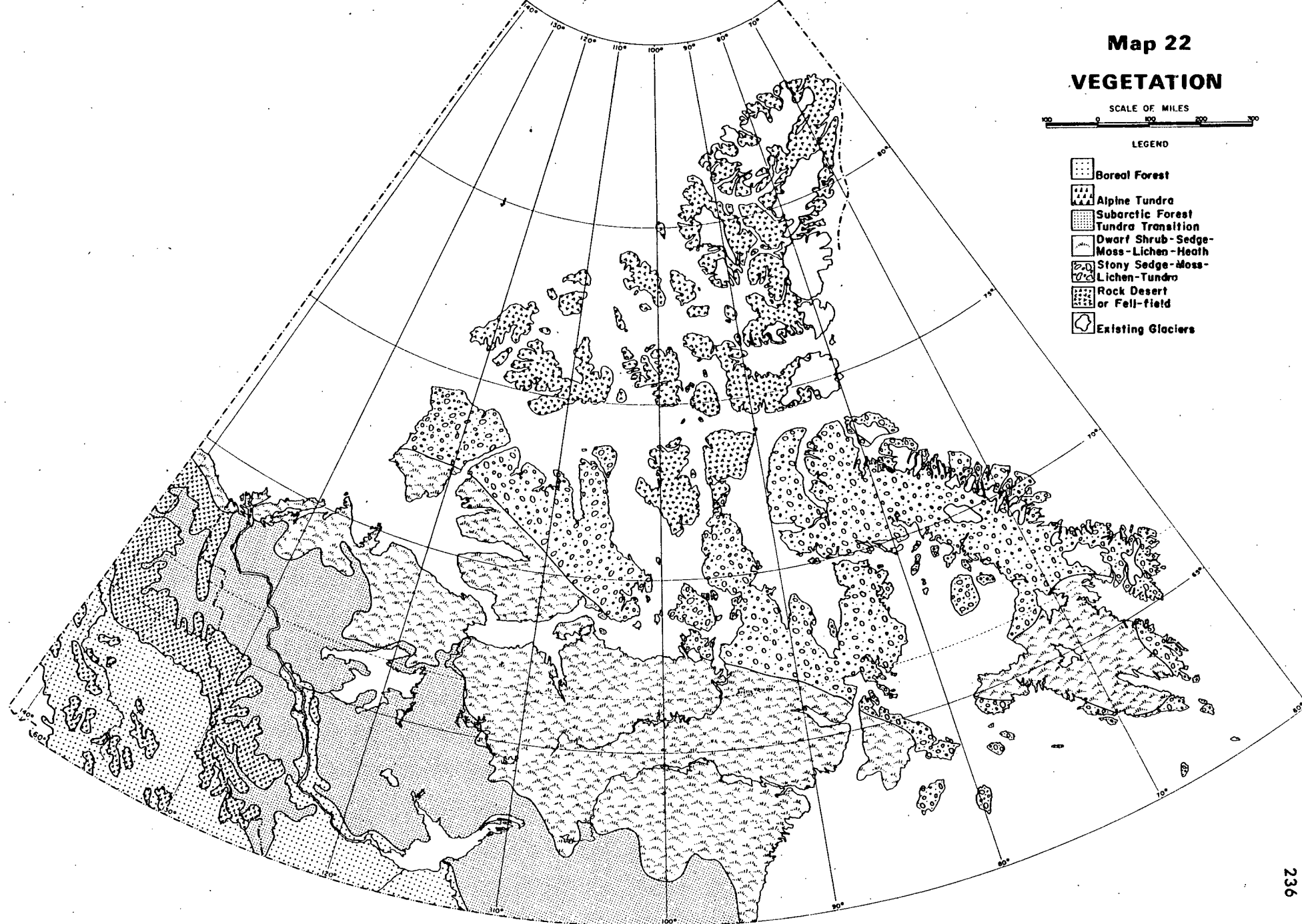
## VEGETATION

SCALE OF MILES



### LEGEND

- Boreal Forest
- Alpine Tundra
- Subarctic Forest
- Tundra Transition
- Dwarf Shrub-Sedge-Moss-Lichen-Heath
- Stony Sedge-Moss-Lichen-Tundra
- Rock Desert or Fell-field
- Existing Glaciers



is a vast treeless expanse ranging from wet, marsh and hillock tundra to heath and dwarf bush tundra in the drier regions. South of the Parry Channel where surface moisture is available to plants, tundra communities are present. In the northern Arctic Islands, aridity and low temperatures restrict vegetation to the damper protected valleys with the majority of the area being rock desert.

Cowan (1972:108) has stated that the limitations on the production of renewable resources in the north are more a function of marketing and social constraints than of productive capacity. This is certainly the case with northern timber. Due to the limited local market, the amount of timber harvested annually is less than 10 per cent of the allowable cut based on sustained yield (p.177).

The importance of fish and wildlife in the north, particularly to the native people, was discussed earlier. The following passage which deals with the harvesting of these northern resources, is taken from a paper by Cowan (1972:108-110):

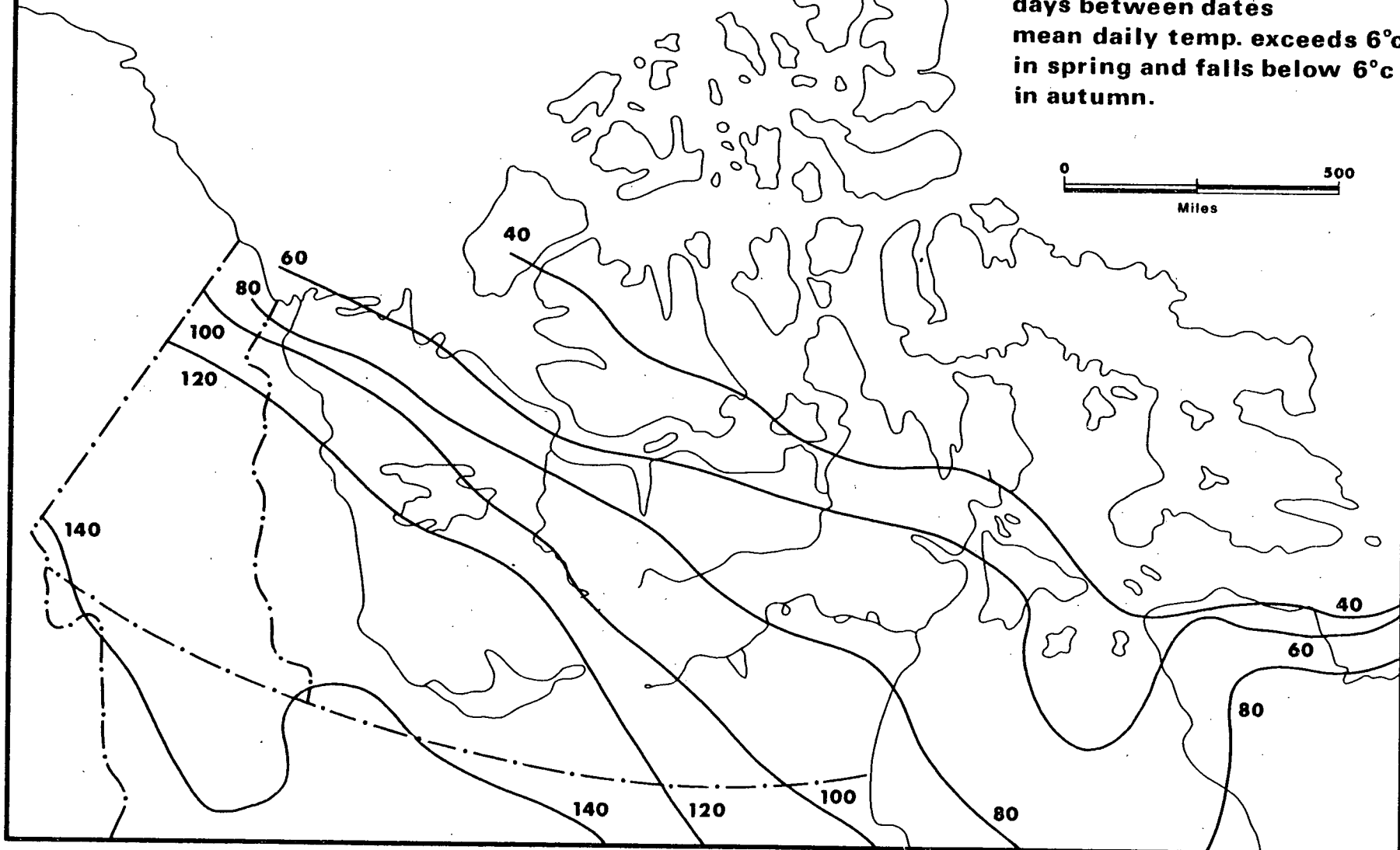
"The present harvest of freshwater fish in northern Canada is about 7.5 million pounds per year, which is about 38 per cent of what is considered to be the potential yield. The potential yield of northern freshwaters is about 10 per cent per year or one-half of that derived from southern waters. Ten or more species of northern fish are of a size and productivity to be of importance to man and of these, six are of interest as sports fish.

"The usable wildlife species of the North include caribou, muskox, moose, bison and sheep. In addition there is a wide variety of birds and eight species of fur-bearer mammals of which three are found in the high North. A unique feature of northern populations of mammals and birds is the great fluctuation in reproductive success from

**Map 23**

**MEAN ANNUAL LENGTH  
of  
GROWING SEASON \* (DAYS)  
(after Rowe: 1972)**

\* days between dates  
mean daily temp. exceeds 6°C  
in spring and falls below 6°C  
in autumn.



year to year. For this reason the concept of sustained yield management is inappropriate to northern wildlife.

"For many species of wildlife, survival and continuing productivity is absolutely dependent on the maintenance of certain critical components of the environment; for example caribou calving grounds, concentration points in migration routes, nesting and staging areas for geese, polar bear denning grounds and sea bird nesting colonies. It follows that a high priority should be assigned to identifying these critical sites and establishing them as inviolate to disturbance by man.

"Caribou are no longer present in numbers approaching the apparent carrying capacity of the range to support them. They could be increased by sensitive management. On the Arctic Islands the range resources have been the major limiting factor for caribou from time to time, and harvest requirements could and in some areas should be more carefully studied so as to prevent range exhaustion. The same can probably be said of muskoxen.

"There seem to be few opportunities for increasing the natural production of the large wildlife species. Furthermore few if any of the species are known to be limited in numbers by the natural production of plant resources.

"There are interesting possibilities for the culture of wild species or cultures from them. Where year-round plant resources are available and caribou are absent, reindeer culture still remains a possibility for productive use of the land. The long experiment with this species in the Mackenzie delta has been studied in detail. In general, it is fair to conclude that the problems limiting its success have been largely social and cultural. With a changed social climate it could still be successful.

"Muskoxen culture for meat and wool also has potential where terrain and climate are suitable. In pasture confinement supplementary feed has to be supplied, but the technology is known.

"It seems to (me) that the southern attitude against

the killing and processing of game meat for human consumption is probably inappropriate to the North, and acts to inhibit the development of the potential of northern meat resources. This should be critically examined by those with minds unhampered by conventional concepts..."

It might be appropriate to apply the challenge contained in the last statement to not only game management but indeed to the broader issue of northern land management.

(ii) Values Attributed

To consider land simply in terms of its monetary worth or marketable price is to ignore the fact that land comprises values not all of which can be quantified and provides benefits not all of which flow through the market system. Thus a broader concept of land is required, perhaps one which interprets value to mean relative worth, utility or importance. Considered in this light, value implies the capacity to satisfy individual wants. Public land policy must reflect the fact that land value is based partly on personal evaluation and attitude.

The material importance of land is self-evident since from the beginning it has provided man with food and shelter. However, throughout history the importance of land to man has been expressed in various ways.

In the second century B.C. the value of land for the

attainment of social and political goals was articulated by Tiberius Gracchus, a Roman tribune (Riddle:1970). Gracchus recognized that Rome's strength prior to the Hannibalic war had lain in its system of small farms held by individual land owners.

In an attempt to strengthen the state's economy Gracchus in 133 B.C. introduced a policy of agrarian land reform. Included in the reform were measures limiting the amount of land which an individual could hold and redistributing to individual farmers land occupied by 'possessores', unauthorized occupants of large tracts. Although faced with stiff opposition Gracchus' land bill was passed and the measures implemented. However, further legislation, passed a few years later, successfully stopped the reform program short of its objective.<sup>(4)</sup>

Between 42 and 30 B.C., Virgil through his poetry, discussed Rome's contemporary social and political conditions including the importance of land to the well-being of both the individual and the state. The recurring pastoral theme in much of Virgil's poetry underscored the value of restoring Italian agriculture and with it some of the traditional ways of life.

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(4) Although this pattern of small farm holdings was probably more characteristic of Greek than Roman agriculture, the case provides an historic example of public land policy which attributed certain social and economic values to land.

Two prevailing institutions in Roman society contributed to the concept of feudalism, which by the end of the 10th century A.D. extended across most of Europe. Patrocinium, whereby the landless freeman offered his services in exchange for shelter and support, and precarium, a form of land renting. Out of the latter developed the concept whereby the small Roman landowner surrendered his holding to a relatively powerful landowner who in turn offered protection to his 'tenants'. With the major landowners rather than government assuming responsibility for the protection of the citizen, the system of land tenure which developed during the feudal era served political as well as economic objectives.

By the 13th century the feudal customs relating to land had been documented by members of the judiciary and this in turn provided the basis for regulating land transactions. As a result of this body of law, certain feudal institutions persisted into 18th century Europe although the feudal era had drawn to a close several centuries earlier. It was in part these lingering feudal institutions which Adam Smith addressed in 'The Wealth of Nations', published in 1776.

Smith considered the economic value of land from the standpoint of both the individual and the state. He, like Ricardo and Mill after him, associated economic value with the cost of production and considered the market price of a commodity to be a function of wages and profit. Land rent, or the income which a landlord receives for the use of his land, on the other hand, was considered to be an effect, rather than a cause, of market price. Ricardo's opposition to the Corn



Laws in 1815 was based on the position that low-priced imported 'corn' would reduce the demand for local land and subsequently reduce rents.

Smith noted that in most of the 18th century monarchies of Europe there were still large tracts of land belonging to the Crown, which for the most part suffered from either a complete lack of, or very little, management. He observed that the sale of these crown lands would be beneficial in two ways. The immediate revenues could be applied to the public debt and, in the long term, increased revenues would also accrue to the state as a result of increased productivity of the former Crown land under private management. In essence he believed that the economic value of Crown land would not be realized until it became private property. On the question of the government's role in land management he considered that the crown should retain ownership of only those lands to be used for public parks and other similar purposes.

While Smith was considering the question of maximizing the economic value of land the authors of the American Declaration of Independence were subordinating material well-being, national wealth and power to the quality of life<sup>(5)</sup> (Marx 1968:126). However, America's rapid technological progress in the 19th century did not entirely reflect this ideal. Writers of the period such as Thoreau

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(5) John Locke had enumerated the rights for whose protection government is instituted as "life, liberty and property"; in the American Declaration of Independence this was altered to read "life, liberty and the pursuit of happiness".

and Emerson, and later Frost, wrote in much the same vein that Virgil had 20 centuries earlier, stressing the value of the countryside to the well-being of society.

Thus from time to time throughout human history different values have been assigned to land including those of a social, economic, psychic and political nature. The role of attitude and perception in determining the way one views and evaluates nature, including land, has been examined by Tuan (1974). For example, attitude, which Tuan defined as a cultural stance formed by a long series of perceptions, substantially accounts for the difference in how a visitor and one who is native to the area view the same scenes. The visitor's viewpoint is based chiefly upon what he perceives at a particular moment whereas the native's more complex attitude toward the same setting is conditioned by a series of personal experiences.

Tuan also observed that most people make only limited demands on their perceptual powers. To illustrate he compared the difference between an Eskimo and a non-Eskimo concept of space. He suggested that the attitude of the latter toward space is, that it is empty if it is without boundaries or objects whereas to the Eskimo the same scene (for example an expanse of treeless tundra) is not pictorial or finite, but is always in a state of flux. At times when an Eskimo hunter cannot distinguish landmarks, or is unable to see the horizon for a point of reference, he relies on shifting relationships such as snow contours, snow conditions and wind, and during such periods he lives in an acoustic and olfactory environment.

As one might expect there are at present several attitudes and divergent points of view concerning Canada's northern land. Perhaps the one most explicitly stated is that of the northern natives. To them, the land is and always has been theirs<sup>(6)</sup> and any non-native using northern land is doing so without the consent of the native people.

The president of the Northwest Territories Indian Brotherhood has stated that the native people feel they own the land (Wah-shee 1974:5). For this reason the Indian people of the Northwest Territories are seeking the formalization of those rights through the creation of Aboriginal Title which will recognize the ownership of traditional lands rather than an agreement whereby they will surrender their aboriginal land rights.

At the same time as the native people in the north maintain that the land belongs to them they obviously see the land comprising a range of values which extend beyond those associated with subsistence living. For example, the Inuit envisage a land settlement which would include the following: land with clear title to the surface and subsurface

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(6) For example Johnny Jean-Marie Beaulieu, a Treaty Indian born in 1887, who was present at the signing of Treaty 11 in 1921, testified before Justice Morrow during the Caveat hearing in Yellowknife in 1973, that: "...the Chief told the Treaty party (in 1921), this is our country, our land, and just because you give us that money, we don't want you to forbid us from killing anything, any game...The Treaty party then said: 'I am paying out this Treaty to the people and it has nothing to do with the land'." (Book Number 5, pp.321-323.)

rights; land already under development to which the Inuit would have title and from which they would receive a share of the royalties now accruing to the federal government; and land where the Inuit would share with other Canadians certain rights such as hunting and fishing.

Many of the non-native people living in the territories are there because they feel the north offers considerable scope to live and work in a milieu where land is still available to the innovative. The elected Council in each territory sees the transfer of northern land from federal to territorial government jurisdiction as a vital step in the evolution of local government and the north's political autonomy.

Searle (1973), an elected member of the Council of the Northwest Territories, in discussing provincial status for the north said:

"...the Federal Cabinet must reverse its position that provincial status shall not come to either Territory for the foreseeable future and must further reverse its position that the Government (of Canada) should continue to manage and develop the natural resources of the Northwest Territories and Yukon Territory."

The question of the respective roles of the federal and provincial governments in the field of natural resources, was addressed by four members of the faculty of law at Dalhousie University. They saw the federal government acting with undue caution, and the provinces, by virtue of provincial constitutional claims, enjoying virtually a free rein to dispose of nationally important resources. Several examples were cited where it was felt that Ottawa did not protect

Canadian interests, including the Columbia River treaty and the export of Alberta's natural gas (McDougall et al:1972).

Most southern Canadians who express an interest in northern land do so on the basis of possibly acquiring land for 'homesteading' or recreational purposes. Although there is now a growing awareness of the north as a result of such issues as the native land settlement and the possibility of a Mackenzie Valley Pipeline, probably few southern Canadians have well-formed opinions on the subject of northern development.

Obviously there are Canadians who do. In February 1971 the Mid-Canada Conference, which was organized and directed by Richard Rohmer and ran from 1969 to 1971, delivered its findings to the Prime Minister. Principal among them were that it is urgent that long range policies and plans be created for the future orderly development of the Mid-Canada region and that a body should be constituted for that purpose forthwith (Rohmer 1973:192).<sup>(7)</sup>

With respect to northern Canada, Rohmer saw the natural resources there, particularly the oil and gas, as being the opportunity for the Canadian Government to create policies which will attract manufacturing and secondary industry capital to Canada.<sup>(8)</sup> By comparison,

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(7) Kierans (1973) advocated that crown corporations in Manitoba should undertake all exploration, development and mining to the primary metal stage.

(8) Resources Incentive for Manufacturing program (Rohmer 1973:216).

Walter Gordon, a former Liberal cabinet minister, envisaged the production of all Canadian Arctic oil and gas under the control of a crown corporation (Watkins 1973:108).

In 1971 the Canadian Arctic Resources Committee, a non-profit citizens' organization was formed, its membership drawn largely from faculties of Canadian universities.<sup>(9)</sup> CARC, which was described by its first chairman as a 'social experiment', was established, in the words of its organizers, because:

"...we were convinced that Canada badly needed an organization which could provide a pair of eyes to look in on the North in a more perceptive way than any existing citizens' organization was capable of doing; which could act in an Honest Broker capacity to attempt to ensure that the things that needed to be done in advance of development of whatever type, got done; which could help to bring to the surface the question of what was to be done about the claims of the native people; and which could help to overcome the barrier to factual information existing between the Canadian public and the Government on matters that pertained to development, the native people and the environment."

The long-term objective of CARC as expressed in 1973:

"is to ensure that all interested parties work together to prepare a comprehensive land use plan for the development of the North that takes into account the physical, biological, social and economic aspects of northern development."

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(9) The Committee's organizers decided against inviting members of government departments or of the two resource industries, mining and petroleum, to be members of the Committee (Pimlott 1973:8).

It is probably fair to suggest that these four aspects of northern development describe what CARC considers the composite value of northern lands to be.

The Chairman of Canadian Arctic Gas Pipeline Limited, W.P. Wilder, recently spoke<sup>(10)</sup> of the general complacency in Canada concerning her domestic energy supply vis-à-vis future demand. Referring to the prospect of a 'national energy crunch' in Canada during the next decade, he stated that although circumstances can change rapidly, perceptions often change more slowly. It is apparent that Wilder saw Canada's northern land as a source of considerable material and economic good for all Canadians. In this regard he suggested that Canada's potential energy resources, of which a substantial portion are in the Arctic, are capable of re-establishing Canada's energy self-sufficiency,<sup>(11)</sup> thereby eliminating the need to rely on external sources and reducing the growing deficit in Canada's balance of international payments by eliminating the need to purchase energy.<sup>(12)</sup>

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(10) In an address to the Canadian Club in Winnipeg, April 17, 1975.

(11) Wilder predicted that by 1976 Canada will be a net importer of crude oil and by 1977 a net importer of energy.

(12) There are also potential economic problems associated with the financing and construction of a large diameter pipeline which would be necessary to move oil or gas out of the Arctic, for example: an increase in the exchange rate; disruption of capital markets; and inflationary pressures on wages and certain commodities.

It is evident that the composite value of northern land to-day reflects the historic and universal relationship existing between man and land. In developing a northern land policy it is important to ensure that it incorporates the social, economic and cultural values which have been identified.

Here the challenge is to not ignore objective scientific values inherent in the land, while recognizing subjective human values attributed to the land. Individual aspirations satisfied in the short-term may be inconsistent with the long-term public good.

## CHAPTER TWO. SOME BASIC APPROACHES TO LAND MANAGEMENT

What are some of the ways public land is managed today and which, if any, is best-suited to meeting the challenge contained in the above statement? This chapter will look at current approaches.

### (i) 'Laissez-Faire'

What might be called the 'laissez-faire approach' is one alternative to the management of northern land. Here, public policy would be limited to providing a legal device for the orderly transferral of public land to private ownership, whereupon the new owner would assume the role of land manager.



Inherent natural values in the land, including productive capacity, would be considered only to the extent that the private owner would have the right to convert these values into economic or social good on his terms and to satisfy his own needs.

The royal charter which established the Hudson's Bay Company in 1670, and transferred to that company sole rights, both surface and subsurface, is an historic example of this approach (p.50).

Later the Dominion Lands Act which applied to those lands previously under the jurisdiction of the Hudson's Bay Company, reflected government policy of the 19th century which was to encourage the settlement of western Canada and its integration into the nation. In order to achieve this political objective much of the Act dealt with homesteads, pre-emption rights and railway land grants; it also made surveyed land, up to 640 acres, available to individual purchasers at one dollar per acre and mineral claims at five dollars per acre. It would be fair to say that public policy of the day took little cognizance of the composite value and inherent properties, now recognized, in land.

Today the Territorial Lands Act, like the Dominion Lands Act which it replaced, is essentially a mechanism enabling the Government of Canada to dispose of Crown land and various rights to its use. The 1970 amendment to the Territorial Lands Act, although providing a measure of control over land use operations, contains, for example, no management provisions related to natural productivity but is simply a device for minimizing alteration of the land surface.

Thus what we have in the north today is a legislative and regulatory base for the disposition of public land and, in some cases, protection of the land surface.

(ii) Bureaucratic Management (Government)

The antithesis of the laissez-faire approach would be a series of government measures controlling land use and disposal practices. Such measures might include the discontinuance of land sales to be replaced by the leasing of rights for a specified use and the widespread application of regional land zoning. Government intervention could also take the form of direct involvement in the management and utilization of surface resources, for example northern timber.

The latter would require terminating existing timber leases, with the lessees receiving guarantees of future wood supplies. This approach has been followed in special situations for several years by the province of Saskatchewan and more recently, the province of New Brunswick has established the New Brunswick Forest Authority and the province of Ontario, the Algonquin Forest Authority. In each case a government agency or Crown corporation is responsible for the management of public forests which includes harvesting timber and supplying forest companies with their roundwood requirements.

In December 1974 the Quebec National Assembly passed Bill 27, an Act to amend the Quebec Lands and Forests Act. It provides for a

basic revision in the province's traditional system of providing timber to the forest industry. Under the new legislation companies will no longer hold exclusive cutting rights in particular areas (concessions), but will negotiate wood-supply agreements with the ministry. It is expected that by 1982 all timber limits now held by forest companies in Quebec will be withdrawn. The amendment is an attempt to 'reconcile competing commercial and social interests'.

The report of the Public Land Law Review Commission of the United States (1970) recommended the formation of a federal timber corporation to manage forest lands in the public domain which would be financed directly from timber sales. The recommendation has not yet been adopted and in fact has been widely criticized.<sup>(14)</sup>

The direct involvement of government in land management has not been limited to public land. For example, in the province of Quebec where 30 per cent of the annual cut comes from private forest land (Lafond:1974) the provincial government has introduced a policy for private woodlot management. The woodlot owner may enter into an agreement with the government whereby he will be paid to carry out silvicultural practices on his property provided he will not harvest the timber until directed to do so under a predetermined management plan.

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(14) See Frome (1970:23-32) and Stoltenberg (1970:13-22).

Land policy embracing either the concept of laissez-faire or bureaucratic management does not necessarily recognize the natural and attributed values of the land nor does it deal with the various uses to which they could be put.

(iii) Multiple Use

An approach to land use which does attempt to recognize the composite value of land is the multiple use concept. The objective of multiple use land management is "to maximize net public benefit".

The Ontario Ministry of Natural Resources (1966) defined multiple use of forest and related resources as "the deliberate and carefully planned integration of various uses so as to interfere with each other as little as possible and to complement each other as much as possible". The United States 1960 Multiple Use and Sustained Yield Act for the national forests provided that decisions be made "...with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output" and the Act goes on to define sustained yield as "the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources...without impairment of the productivity of the land".

From these definitions it is clear that the multiple use concept recognizes that land comprises diverse values and that in

managing them, non-economic, as well as economic, factors should be considered.

The fact that a land area possesses composite resources such as soil, water, vegetation, wildlife, fish, birds, scenery and minerals makes multiple use possible. What the manager must do is consider those basic elements from the standpoint of such values as: water supply, flood control, timber, subsistence and sports hunting, fishing, agriculture and recreation, and determine that mix which will maximize net public benefit.

It is at this point that implementation runs afoul of conception. Who is the 'public' for whom the benefits are being maximized? Is it those who live in the immediate area, the region, the territory or the nation?<sup>(15)</sup> The multiple use concept implies a need to coordinate two or more activities in the same area. But what is its geographic extent and how is it determined? The size of the area is inversely proportional to the possibility of conflict. But obviously the area can be so large that two or more simultaneous activities within it will have little or no relation to multiple use.

It is possible to have two non-competing uses within the same area which create demands at different times of the year, such as

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(15) Jeffrey (1970:7) spoke of the need to define the 'referent-group' so that a given area could be managed for the benefit of a described population.

a winter snow road adjacent to bird nesting grounds. It is also possible to have simultaneous and complementary activities such as recreation and flood control measures.

Alston (1972:34) in discussing the United States' Multiple Use-Sustained Yield Act and the question of 'relative values' of resources said:

"It is apparent that in the struggle to get the legislation through the Congress by enlisting the support of diverse interest groups, it was necessary to guarantee that no priorities would be specified in the act. No priorities does not mean equal priorities; it means the absence of any specified priorities...The weights to be assigned to each of the resource values appear to have been left for determination on a local or regional basis".

There are situations where the possible uses are conflicting, rather than complementary. Assuming the manager has given the relative values 'equal consideration', as suggested by Alston (1972:34), what then? Which use gets the nod?

According to the Society of American Foresters (1973) priorities of use on both public and private forest lands administered under the multiple use strategy are generally determined by the land administrators or managers, governed by the objectives of the landowner. When substantial doubt or controversy arises concerning such land use priorities, these priorities may best be established by the landowners themselves. The application of the multiple use strategy involves managing a specific forest area for a number of benefits and may result in: exclusive uses in some portions; the emergence of primary and

secondary uses in other portions; and a general use category in still other portions where no one use justifies an exclusive or primary designation. (16)

Multiple use land management embodies the 'equal consideration' principle whereby the maximum net public benefit is attained through harmonizing the production of various land values. The illustration of the snow road and the bird nesting grounds, two uses of the same area, in this case separated by seasons, is an example of the 'general use' category referred to above.

The second aspect of multiple use management identifies primary and secondary uses of the same area and permits the secondary activity provided it is compatible with what is considered to be the primary value of the area. Ontario's Algonquin Park is a case in point. The primary value of the area is considered to be recreation including hiking, canoeing and camping. However, under the Algonquin Forest Authority a management plan is being developed which will provide for timber harvesting operations within the park, compatible with the recreation activities.

Finally, exclusive use is defined as a use for which an area is reserved and managed which excludes other managed uses. The most common example of this category is a national park.

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(16) From a statement approved by the Council of the Society of American Foresters, June 25, 1973.

(iv) The Ecological Approach

Natural resource policy based on ecological criteria has been discussed by several authors including: Caldwell 1970; Schultz 1967; Van Dyne 1969; and Watt 1968.

Ecologically based land policy takes a holistic approach which goes beyond the objective of harmonizing the production of various land values. Caldwell (1970:203) discussed it from the following perspective:

"...public land policy is based upon a set of historically derived assumptions - legal, economic, and political - that provide no means for taking the fundamental ecological context of land use into account. It is, of course, necessary to cope with land problems within the conventional context of public attitudes, laws, and economic arrangements, inadequate though they may be to encompass all of the land related needs of contemporary society. But it is also important to know that there is a larger context for policy with which laws and governments must ultimately reckon: it is the condition of the land as the physical base for human welfare and survival. If human demands upon the natural environment continue to mount, it will become necessary as a matter of welfare and survival to abandon present land policy assumptions for a policy of public management of human environment on ecologically valid principles."

The Pacific Northwest River Basins Commission (1973) attempted to incorporate ecological factors into a long-range plan for an area covering portions of four states in northwestern United States. The study included an evaluation of the 'carrying capacity' of the region's resources and attempted to relate per capita income and quality of life to natural resource productivity and appropriate



pollution levels. The following statement from the Commission's (1973:77) report serves to summarize this approach to regional planning and land use:

"carrying capacity is the achievement, and management in perpetuity, of annual or regular periodic outputs or other functions of the various renewable natural resources without permanently impairing long term productivity, ecosystem integrity or the quality of land, air and waters and their environmental values. Within the above limitations, the quantity and quality of outputs or other functions can be varied in accordance with the quality and intensity of the management and technology inputs".

The 'carrying capacity' approach recognizes the necessity to incorporate scientific criteria into social and economic objectives but is hampered, like the multiple use concept, by subjective issues, such as 'appropriate pollution levels' and 'quality of life'.

#### (v) A Northern Approach

Considering the four alternatives just discussed what should be the basic approach to a land policy for the 1.5 million square miles of Canada lying north of 60? It may help to frame the response to this question by first considering the following:

(1) although nearly all North American public land management agencies and many professional societies, such as the Society of American Foresters, espouse multiple use land management, it is interesting to note that in the view of both a forest economist

(Zivnуска 1961) and a forest ecologist (Rowe 1974) multiple use is more of a slogan than a system. Although addressing the question of multiple use in a more positive vein, Smith (1974), a forest manager, spoke conditionally when he said:

"I believe that the idea of multiple use can become a 'dynamic management tool, flexible and adaptable' provided the planning process actively seeks public participation and takes into account changes in attitudes and social goals."

(2) Based on the objective of 'maximizing values and benefits', both the doctrine of equal consideration and dominant use<sup>(17)</sup> are reduced to subjective calculations. As we have seen, what is considered valuable and beneficial will vary depending on who the evaluator and beneficiary are and will also alter over time.

(3) Northern Canada is distinctly different from southern Canada and a northern lands policy should reflect that fact. For example Canada's Arctic and sub-Arctic are low-energy environments and the potential yield from northern land and water is considerably less than in southern Canada (Dunbar 1972 and Cowan 1972).

It seems unlikely that northern Canada will ever be heavily populated even by Canadian standards. At present its population density of one person per 28 square miles is 150 times less than the national average.

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(17) 'One Third of the Nation's Land' (1970:48).

Commercial forestland, cropland, pasture and grazing land comprise less than five per cent of the land area north of 60. However, those areas, as with the fish and wildlife resources which are broadly distributed throughout the north, are important to northern residents. Considering the long term, possibly the greatest potential of northern land will be its capacity to meet the recreational needs of the nation's growing population, in terms of open space, natural landscapes, aesthetic and perceptive values.

In returning to the question "what basic approach to land management will best serve the north?", the comfortable response is "multiple use" - with all of its options. It rings with a quiet confidence that all will be well. Thus far, however, multiple use has been more of a concept than a management tool. Tysdal (1973:78), in a comprehensive study of the practice of multiple use in North America, concluded by saying:

"...multiple use as a concept has been widely accepted by the Canadian professional foresters and the public at large. But problems still exist over implementation practices as is the case in the United States."

The Canadian Institute of Forestry official statement on the subject of forest land policy was altered in 1975 by the deletion of the term 'multiple use' and its replacement by the term 'integrated use'. Within this context, the statement was further altered by the addition of the following:

"The correct balance of uses on an area should be based on optimum social and economic returns and must be subject to the necessity for maintenance of productivity and environmental quality."

At least two factors currently favour an ecologically based land policy in the north. At present there is very little alienated land; privately-held land accounts for less than one-quarter of one per cent of the total area. When the native lands claim issue is settled (a subject to which I will return), the amount of alienated land will increase substantially. This could pose a problem to comprehensive land management but for the present I assume it would not. The second, and equally important, point is that the north, although vast, is unencumbered by political boundaries which tend to inhibit a holistic approach.

Although relatively little northern land has been sold, surface and subsurface rights covering extensive areas have been issued by the Crown. Notwithstanding this and Caldwell's (1970) warning that it is necessary to cope with land problems within the conventional context of laws and economic arrangements, the clear alternative for a northern lands policy is one based squarely on scientific criteria.

A northern lands policy should have as its dominant theme the maintenance and, where possible, the enhancement of the inherent productivity of the land. It would focus upon the natural values of soil, water and vegetation and might be described as policy based on the natural principles of land use.

### CHAPTER THREE. LAND USE PLANNING

#### (i) Why Plan?

'Public policy' may be considered to be a set of goals and a course of action designed to attain them, which in sum will maintain or improve the well-being of the general public.

Based on that definition, public land policy in northern Canada originated with the people of prehistoric times. Because the supply of available food was limited, it was necessary to husband the productivity of the land in the name of the camp, group or community. Thus, for example, no individual could acquire an interest in land nor could a group hunt in another's area without first obtaining permission to do so.

During the 18th and 19th centuries the traditional patterns of land use changed and so did the policy governing them. In order to meet an external demand northern land use diversified to include the search for valuable fur. The cohesiveness which was characteristic of the group or band during the precontact period was reduced; in some cases the communal concept of land rights gave way to individual rights and the concept of land ownership developed. Simultaneously an exogenous form of land policy was developing in the north through the Hudson's Bay Company which had acquired from the British Crown formal rights to Canada's northern land.

The acquisition of the territories by Canada in 1870 and the passage of the Dominion Lands Act two years later, provided the basis for

formulating northern land policy under Canadian law. Federal land policy since 1872 has been essentially one of providing a mechanism for alienating Crown land and associated resources.

In Part Two we saw that the demands made on territorial lands today are diverse, sometimes conflicting, and rapidly increasing. Essentially, the administration of public land is a question of allocating a finite resource amongst several competing and sometimes conflicting uses, without reducing its value. From this it is clear that present northern lands policy must be expanded so that future decisions respecting land use and allocation can be made within the context of a technically sound land use plan.

Although it would be difficult to deny that some public planning is necessary, it is, nevertheless, not a concept which meets with universal enthusiasm. This is no doubt accounted for by the fact that as Clawson (1973: 34) stated

"if planning is to mean anything then it must be effective, this means it must prevent some people from doing what they would otherwise choose or push others into doing what they would prefer not to do, or both--unless planning and zoning are opposed to the interest of some landowners and users they are worthless."

Why Plan? Barlowe (1972: 506) answered this question by saying that

"unguided individual action often results in resource exploitation, social waste, and a shifting of costs to other members of society. They (the public) discover that social goals in land-resource use frequently involve extramarket considerations that cannot be achieved without social action and that public action can often be

used to attain a higher or more nearly optimum level of resource development than would be feasible with purely private developments."

In more specific terms Bauer (1973: 165) has suggested that land use planning is an important element in the administration and management of public lands for the following reasons:

"A plan is essential, first of all, to reduce general objectives, the impacts of which can only be vaguely perceived, to specific development proposals, the impacts and implications of which can be precisely perceived and readily understood."

That is to say the general objective "to safeguard critical wildlife habitat..." only becomes significant, for example, when specific areas have been delineated and the prohibition of certain forms of land use and restrictions on others have been specified.

"Second, a plan and the planning process that produces such a plan, is essential to monitor and evaluate the progress that is being made toward the attainment of the agreed-upon objectives.

"Third, a plan is essential to assure the proper coordination of land use development with the development of supporting transportation, utility, and community facility systems...

"Finally and perhaps most importantly, a plan is essential for coordinating and guiding land use development and redevelopment within multi-jurisdictional regions having essentially a single community of interest."

These last two points are particularly germane to the north. For example a decision made by the federal government respecting the development of a mine on federal land can have a substantial impact upon a community and its facilities, which are the responsibility of

the territorial governments. In this case, land use planning would provide a mechanism for areawide coordination between the two levels of government and in turn would mitigate the problem of unscheduled demands upon the territorial government's budget and the provision of community services.

(ii) The Planning Process

Although we have discussed some of the reasons why land use planning is an important element in the administration and management of public land, several questions remain unanswered. For example: planning for what? how is it accomplished? by and for whom? what factors are considered?

Land use planning as it pertains to public land has been defined as an effort to systematize decision-making affecting land uses so as to bring about the orderly allocation of resources to fit society's demands (Stoddard, 1970: 145).

The land use planning process consists of a number of steps which fall into one of three phases, viz:

- the determination of goals or targets;
- the formulation of a plan for attaining them;
- the implementation of the plan.

(a) Goals

The determination of a set of goals, whether by an individual, a family, a corporation or a public body, is not a process void of conflict, and establishing goals for the use of public land is no exception. It is perhaps this very point which illustrates the importance of the



goal-determining process.

Phase one provides the opportunity for reconciling conflicting views and goals. Capitalizing on this opportunity will not only provide more likelihood of the plan's success, but will reduce the potential conflict during phase three, when decisions respecting land disposal and use have to be made.

The question 'who does the planning?' may also be partially answered at this point. To be of any consequence, the determination of goals requires considerable citizen participation, particularly by those resident in the area under consideration. Land is viewed differently by different sectors of society, a point which was discussed earlier. A land use plan which recognizes this, by considering and incorporating local knowledge, attitudes and goals, will probably enjoy more success and contribute more effectively to the administration and management of public land.

Land policy goals can be developed at various levels of abstraction. For example Schickele (1950: 6) in discussing objectives in land policy referred to the 'maximization of social product over time' and the 'optimization of income distribution among people'. Johnson and Barlowe (1954: 8) however pointed out that "in outlining goals or objectives it is not always easy to distinguish ends from means; the more specific the objectives considered, the more likely they are to be means toward more highly generalized objectives".

In using a less abstract approach they went on to discuss the following goals for public lands: military security; political stability; maximum national production; maximum income; economic security and

stability; individual freedom; conservation of human resources;<sup>(17)</sup>  
and the conservation of natural resources.

Vlasin (1973: 46) approached the question of land policy goals by suggesting that they could address such interrelated issues as economic growth, population settlement, population dispersion, rural-urban balance, selective growth and limitations on growth.

A less economic-oriented approach is discussed by Bauer (1973: 164) who felt that public objectives for land use development should be concerned not only with the proper amount and location of land devoted to the various uses but also with "the protection of the underlying and sustaining natural resource base".

In determining a set of goals, or targets, for the use of public lands, it is necessary to follow a sequence which leads from the general to the specific. This applies particularly to the north which contains a vast area of unalienated public land now being administered without any reference to a land use plan.

The first level of planning should account for the natural values and properties of the land base, provide for their maintenance and protection and consider the potential uses of the land and its capability to meet various demands on a sustained basis. This provides a framework within which second stage refinements such as the location of transportation routes and the siting of new communities are considered. It is the first level of planning which should be applied to northern

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<sup>(17)</sup> For example the reduction in the rate of unemployment.

lands at this time.

(b) Formulation and Implementation

The next step is the formulation of the plan within the context of, and for the purpose of attaining, the agreed-upon goals. Camp<sup>(18)</sup> suggested that first-level planning involves the consideration of a geographic area in terms of its resources and includes:

- the inventory and assessment of the region's resources including current use and potential;
- a determination of the needs and aspirations of the population associated with the region;
- a consideration of the use of the land and associated resources in terms of the population's needs and aspirations;
- proposing, and assessing the consequences of, implementing the best alternatives for achieving the desired patterns of land use;
- documenting the history of land use in order to compare the expected and experienced consequences; and
- repeating the process continuously in order to account for changing technology and human wants.

The second level of planning is more restrictive, and is concerned with attaining comparatively limited objectives. The planning process at this point includes decisions respecting such items as the routing of transportation facilities, the siting of an industrial complex or the acceptability of a particular form of land use.

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(18) Camp, Harry W., Pacific Southwest Forest and Range Experiment Station, Berkeley, California. Unpublished paper.

Although it is desirable that specific land use decisions be made following, and in the context of, an adopted land use plan, the real world seldom cooperates to make that sequence possible. Land use decisions usually have to be made under less than ideal conditions and against a background of incomplete data and analyses. The objective then is to develop within the planning process a systematic method of collecting, storing and retrieving data, designed so that the decision maker will have access to all relevant information in a form which he can use. Burgar (1974: 108) in discussing land planning suggested that there are at least three levels for which an information system can be designed, viz: the researcher; the inventory interpreter; and the administrator-decision maker.<sup>(19)</sup>

Planning, however, calls for more than the collection and presentation of data, the analysis of demands, and the projection of trends. It also includes the consideration of alternate means for achieving goals, the determination of a course of action and recommendations as to what should be done. Nor does the process end with the production of a land use map and a set of proposals. To be of any value the plan must be implemented.

Reference was made earlier to the importance of public participation in determining goals for the use of public land. It is equally important during the formulation and implementation of a land use plan. For example the production of a map which contains a series of land use

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(19) For a report on the nature, use and development of geographic information systems in Canada, with particular reference to the Canadian Geographical Information System operated by the Lands Directorate of Environment Canada, see Massam (1975).

classifications, should incorporate the knowledge of local residents and others who are familiar with the area. The challenge lies not so much in assimilating data derived from informed citizens, but in selecting representative views and balancing local needs against national interests.

Although citizen participation is important in the planning process, that a plan be fully acceptable to the public is not a valid objective. Indeed universal acceptance is perhaps the best indication that a land use plan is of little value.

In addition to presenting a balanced view of the facts, a plan must be administratively feasible and legal and sufficiently flexible so as not to render it obsolete when goals and objectives change; Bauer (1973: 169) approached the question of land use planning by suggesting that the preparation of a good land use plan and its effective implementation would be assured by the use of the following criteria:

"that the process produce a definite land use plan that can be legally adopted as a basis for implementation:

- that the process meet stated national as well as local land use objectives;

- that the plans produced be based upon adequate inventories, analyses, and forecasts of the pertinent factors affecting land use;

- that those plans be prepared at an adequate level of detail and be of a long-range nature;

- that the planning process illuminate and describe the alternatives considered, including the advantages and disadvantages of each alternative as compared to the selected plan;

- that the process be carried out for a rational planning area;

and

- that the process provide for adequate involvement by elected public officials."

#### CHAPTER FOUR. POLICY INTO PRACTICE

##### (i) Introduction

In this chapter an attempt is made to provide a basic structure from which a policy for northern lands can be developed and implemented. This framework, which applies to more than one-third of Canada, contains features peculiar to the north, reflects many of the issues discussed throughout the study, and endeavours to face the current challenges inherent in northern land use.

Based on six underlying principles, a set of goals for territorial lands is suggested. Within the context of those principles and goals, three aspects of implementation are considered, viz: planning, legislation and administration.

##### (ii) Underlying Principles

A northern lands policy must ultimately reflect regional

differences and the physical diversity of territorial lands. Nevertheless it is possible to identify, initially, certain underlying principles which will characterize land policy throughout the north. These may be stated as follows:

- (a) territorial lands are capable of meeting a variety of needs;
- (b) northern lands policy recognizes the native peoples' legitimate claims with respect to land;<sup>(21)</sup>
- (c) improved land use practices do not automatically ensue from a policy which restricts the sale of Crown land nor which provides for direct government administration of resource harvesting;
- (d) northern lands policy will serve the public best if it endeavours to maintain the productive capacity of the land;
- (e) land use planning reduces the number of decisions made on an ad hoc basis or as political compromises among conflicting users; and
- (f) northern lands policy is consistent with the Canadian Government's national objectives and priorities for the North (see Appendix N).

### (iii) Goals in Northern Lands Policy

The next step is to determine a set of goals which is consistent with the above principles. It was pointed out earlier that the selection of public land policy goals requires considerable citizen participation, therefore the following should be considered as a possible basis for that

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(21) Land settlement negotiations are currently underway between the Canadian Government and the Yukon Indians and are expected to begin with the Indians and Inuit of the Northwest Territories later this year. For a review of the legal position of the Canadian native see: Hawthorn (1966: vol.I: 211); Cumming, Mickenberg et al. (1972); and Appendix O.

discussion.

(a) The transfer of land and associated resources to the native people of the territories in accordance with their legitimate claims;

(b) the disposition of land in a manner which takes into account natural, social and economic values;

(c) the distribution of land occupancy and use rights to northern residents and others who wish to exercise those rights;

(d) the conveyance of rights to the use of land and associated resources for industrial and commercial purposes under arrangements that encourage efficient use and create economic opportunities for northern residents and Canadians generally;

(e) the protection of the natural resource base and the maintenance or improvement of the land's productive capacity;

(f) the allocation of land for a variety of public purposes, such as national and territorial parks, wildlife preserves, ecological reserves, archaeological and historic sites; and

(g) the efficient administration of northern lands, recognizing the goal of the Canadian Government to further the evolution of the territorial governments.

#### (iv) Northern Land Use Planning

##### (a) Planning Areas

It was suggested earlier that one of the criteria for an effective land use plan is that the planning process be carried out



for a rational planning area. It would be necessary for a region of 1.5 million square miles to have many such areas.

These zones or sub-regions could be related to potential uses, such as a transportation corridor; alternatively they could be determined on the basis of the inherent physical and biological characteristics of a particular area. They might also be delineated in such a way as to include a particular group of settlements or communities which tend to share certain common interests or objectives.

An example of each of the alternatives cited would be, respectively:

- the 8000 square mile 'Mackenzie Development Area', established in 1973 by the Northwest Territories Government, to control development along the proposed Mackenzie Highway (p. 140);
- Baffin Island or a group of Arctic Islands; and
- the four Mackenzie Delta communities of Aklavik, Inuvik, Arctic Red River and Fort McPherson, plus the coastal community of Tuktoyaktuk.

#### (b) Data Collection Within a Conceptual Framework

If northern lands policy is to have as its dominant theme the maintenance, and where possible the enhancement, of the natural productivity of the land, several things are essential, including:

1. a clear understanding of the physical and biological properties of the land;
2. recognition that the planning area, as a geographical region, is a part of a larger integrated natural system; and
3. that regional development, as it pertains to land use, must

take into account the natural limits and potential of the land base.

Implicit in all three above is the necessity to develop a data base pertaining to the land in question. In discussing the question of an integrated approach to studies and data collection, for environmental management, Rowe (1974: 123), stated that

"...In order to collect the relevant data in an integrated way, the cooperators (in the collecting process) must be in agreement on basic concepts and approaches. They must recognize the same systems and subsystems, from the largest to the smallest, and agree on what anatomical and functional features are important. In the north the functional aspects that are central to all systems and all studies may, for example, be stream flow, permafrost degradation, erosion and biological production....Given a comprehensive conceptual approach that accepts the wholeness of environment and the hierarchical relationship of its parts, base line data collection can be directed in a meaningful way...."

In considering northern Canada there appears to be no consensus concerning integrated approaches to base data inventories (Romaine, 1974: 4). Several approaches have been developed and tested including the biophysical land classification system, Lacate (1969), Jurdant et al. (1973), Romaine (1974); the ecological land survey, Jurdant (1974) and the integrated landscape survey, Dirschl (1974).

The latter was designed initially to produce an integrated landscape classification related to the potential route of a gas pipeline from the Canadian Arctic Archipelago to southern Canada. In pointing out that the system could also be adapted to the needs of land management throughout the territories, Dirschl (1974: 268) stated:

"...a landscape classification and mapping system which integrates the relevant components of the natural system...must therefore incorporate, evaluate and portray the following:

- (1) The land surface (materials and landforms) and the processes that are active in it;
- (2) The relationships of water to the land (surface and ground water);
- (3) Vegetation distribution, its relationships to the landscape, and its reaction to changes in the land; and
- (4) Wildlife distribution and its relationships to vegetation, water and land.

The resultant integrated maps (at a scale of 1:125,000) subsequently provide a base from which, in conjunction with supplementary data, interpretive maps can be derived to portray the following ratings...

- (1) Land capability for wildlife...
- (2) Esthetic considerations, outdoor recreational potential...
- (3) Land capability for other renewable resources...
- (4) Land performance suitability for engineering development...
- (5) Terrain sensitivity to natural and man-made disturbance..."

(c) A Six-Step Approach

Based on this approach it is suggested that northern land use planning consists of the following steps:

Step One. The inventory and assembly of data, based on the integrated landscape mapping system described above, plus supplementary data, pertaining to several subject areas, including:

soils;

ground ice;

geology (bedrock and surficial);

water (surface and ground water);

vegetation;

climate; and

landforms.

Step Two. In establishing a policy for the disposition and use of public land, current institutional arrangements, forms of tenure and land use, must be recognized and accounted for. Since it is necessary to cope with land problems within the context of prevailing conditions, it will help if those conditions are recorded and systematically presented. Included in this category would be the following:

- block land transfer (BLT) areas;
- communities and community services not in BLT areas;
- areas reserved for native people;<sup>(22)</sup>
- registered hunting and trapping areas;
- land alienations outside of communities and BLT areas;
- historic and archaeological sites;
- parks, territorial and national;
- wildlife reserves and bird sanctuaries;
- timber-lease areas;
- agricultural and grazing land in use;
- transportation facilities (e.g., roads and pipelines);
- non-renewable resources:
  - the location of proved oil, gas and mineral reserves;
  - quarries, and other areas of high potential.

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(22) To date there is only one Indian Reserve north of 60 (p. 169).

(23) The inventory process described above would include the use of satellite photography (Thie, 1974: 90), and the identification and eventual correction, of deficiencies in the data base.

Step Three. Following the data collection and assembly phases described above, a set of maps and a series of overlays, would be produced at a scale of 1:250,000. The preparation of mapped data for effective storage, retrieval and utilization, is an important element in the planning process. In recent years various data processing and computer systems have been in use, or under study, as aids to land use planning (Ross, 1974) and the management of associated resources (Falconer, 1969; Massam, 1975).

The maps derived from steps one and two would depict the following:

- (a) land capability in terms of renewable resource production;
- (b) land performance in terms of suitability for projects such as highways;
- (c) terrain sensitivity vis-à-vis man-made disturbance;
- (d) existing institutional arrangements such as block land transfer areas; and
- (e) current land use and occupancy such as transportation facilities and industrial sites.

Using this information, and working within the framework established by the previously defined goals and approach to northern land management, it is now possible to classify the land within the planning area.

Step Four. The classification process should be viewed from the standpoint of encouraging land use in a way which, at once, takes into account the peculiar biological and physical properties of the land base and

effectively utilizes its productive capacity.

Other than recognizing current land uses and institutions (step two), this phase does not incorporate such issues as native claims, the respective roles of the federal and territorial governments, or possible future development patterns. In fact, it is important that these not be considered until after the land has been classified on the basis of its physical properties and natural values.

Land values and uses are interrelated and, in many cases, overlapping, therefore both the physical and conceptual boundaries separating them cannot be precisely delineated; nor should any attempt be made to do so. Nevertheless northern land can be seen as dividing into four broad categories, as follows:

Occupancy-use areas within which most land would be available, either under leasehold or lease-purchase arrangements.

Included in this category is land which is either used, occupied or is suitable for the following purposes:

- commercial, and industrial sites in and adjacent to settled areas;
- year-round and recreational residences; and
- farm residences and agricultural land.

Integrated-use areas within which land would not be sold, but specific rights to the use of the land and/or associated resources could be acquired under lease or some lesser authority. Integrated-use areas would comprise land having a high capability rating in terms of one or more of the following:

- forest land;

- wilderness recreation: private and commercial;
- hunting and trapping; and
- territorial parks and campgrounds.

Land management within 'integrated-use areas' would be geared to the prime value(s) identified above, and any disposition of land or resource development (including non-renewable resources), would accord with the primary values and ensure at least the maintenance of the land's natural productivity.

Natural and scientific areas. Land within these areas could not be alienated and in most cases rights could not be acquired under lease or other similar arrangements. Use of the land within 'natural and scientific areas', other than that identified by the classification, would be permitted only under exceptional circumstances. These areas would include the following:

- the various parks under the Parks Canada program including:
  - natural parks;
  - natural landmarks;
  - wild rivers; and
  - marine parks.
- historic and archaeological sites;
- ecological sites; and
- critical wildlife areas.

Extensive-management areas would comprise the remaining land not included in any of the first three classifications. The prime values in these areas would be related to sub-surface resources and the major

land users would be the mining and oil and gas industries. The objective of land management in the 'extensive-management areas' would be to minimize detrimental alteration of the land's surface resources. (24)

The criterion for distinguishing between 'integrated-use areas' and 'extensive-management areas' would be the relative capability of the land in terms of renewable resources, not the relative value in terms of non-renewable resources. Therefore an applicant who wished to establish, for example, a wilderness camp would be encouraged to do so in an 'integrated-use' area because:

- (a) recreational values are higher; and
- (b) his operation would be better protected from competing land users.

Step Five. The final phase leading to an area's land use plan would include the following:

- (1) the production of a set of maps showing the planning area tentatively sub-divided into four groups, viz:

- Group I    Occupancy-Use Areas
- Group II    Integrated-Use Areas
- Group III    Natural and Scientific Areas
- Group IV    Extensive-Management Areas.

- (2) A public review of the first-approximation maps, through a series of regional and local land use planning meetings. The information gathered at this stage would supplement the local knowledge, other public input and available data, gathered during the inventory stage.

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(24) For a discussion of the ecological impact of northern petroleum development see Bliss and Peterson (1973).



(3) The refinement of the boundaries for the four classes of land, based on the additional information, and the production of the revised maps.

(4) The allocation, and possible re-allocation, of administrative responsibilities amongst agencies and the possible revision of the legislative and regulatory base in order to implement the land use plan.

Step Six. It was stated earlier that first level planning should account for the natural values and properties of the land base, provide for their maintenance and protection and consider the potential uses of the land and its capability to meet various demands on a sustained basis.

The completion of step five represents the attainment of this first level and, in turn, provides a framework within which second stage decisions could be made. The kind of issues which would be considered at the second level of planning include:

(1) the aspirations and needs of the area's native people, for example:

- a) the allocation of land to native people under a land claims settlement;
- b) the reduction of unemployment and the improvement of per capita income;

(2) the location of industrial operations and public works, such as:

- a) natural gas gathering systems;
- b) trunk pipelines for natural gas and crude oil;
- c) roads.

(3) the allocation of land for a variety of public purposes, including:

- a) national and territorial parks;

- b) wildlife preserves;
- c) ecological sites.

(v) The Native Claim

In Part One we examined the extensive and effective manner in which land met the material and cultural needs of the northern Indians and Inuit. This relationship between man and the land has characterized the life of the north's native people until very recently. Considering this, the reasoning behind the native peoples' position that they are more interested in land than money, is not obscure. To be able to manage and husband northern land for their own benefit appears to be a logical extension of history.

There appears to be general agreement among the various associations representing native people in the Yukon Territory and the Northwest Territories, on at least two major points.

First, they are seeking a settlement which recognizes the property rights of native people in northern land, rather than one which proposes extinguishing those rights. Thus they do not favour the 'Alaskan' approach, embodied in section 4(a) of the Alaska Native Claims Settlement Act, 1971, which states in part:

"The provisions of this Act shall constitute a full and final settlement and extinguishment of any and all claims against the United States, the State and all other persons which are based upon aboriginal right, title, use, or occupancy of land in Alaska (including any aboriginal hunting or fishing rights...."

The subject of aboriginal rights has been treated in detail

by Cumming (1973: 87) (26) who said:

"Aboriginal rights are those property rights which native people retain as a result of their original use and occupancy of lands. These property rights have always been recognized by English and Canadian law. The theory of aboriginal rights originated at least as early as the 17th century as part of international law as viewed by Great Britain, Spain, the Netherlands and perhaps some of the other colonizing nations. The basic notion was that, although a discovering nation took sovereignty to the lands in question, the native peoples retained property rights. At law these property rights appear to be complete except for two incidents peculiar to aboriginal land rights. First, aboriginal title can only be surrendered to the Crown; that is, the native peoples cannot make a private sale as the Crown is the only entity which can extinguish the title, either by purchase or conquest (expropriation). Secondly, the concept of aboriginal title is one of communal rather than individual ownership...."

The native people north of 60, including the treaty Indians of the Mackenzie Valley, (27) state that the land is theirs, having never surrendered title to it, (Wah-shee, 1974: 5).

Secondly, the native people north of 60 are seeking a settlement in which priority is given to land not money. (28) In this regard the Alaska settlement which applies to approximately 60,000 Alaskan natives, contains the following provisions:

" - a total money compensation of \$962.5

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(26) see also Appendix O.

(27) see p. 81.

(28) This position has been stated by both James Wah-shee, President of the Indian Brotherhood of the Northwest Territories (1974: 8) and James Arvaluk, President of Inuit Tapirisat of Canada (1974).

million of which: \$462.5 million is to be paid from the United States Treasury over an 11-year period; and \$500 million would come from a two percent royalty on mineral revenues received from land in Alaska - the transfer of title to a total of 40 million acres (62,500 square miles), including surface and subsurface rights."

In March 1975 a plan, which ultimately took the form of a working paper, was presented by the Minister of Indian Affairs and Northern Development to the Council of Yukon Indians, outlining a proposal by the Canadian Government for a land settlement in the Yukon Territory.

It included the following:

- 128 acres per capita, or approximately 1200 square miles (roughly .6 per cent of the area of the Yukon) based on approximately 6000 persons of Indian blood. The terms of tenure to be discussed but Indians would have exclusive hunting, trapping and fishing rights;

- lots under fee simple ownership in the existing communities.

The number and conditions of use to be negotiated;

- 15000 square miles of land would be designated as areas for the use and benefit of the native population. Hunting, trapping and fishing by non-natives would be restricted on these lands;

- the government would retain all of the subsurface rights but would consider some alternatives such as giving the native people:

- 50 per cent of the gross government resource revenues earned from the 1200 square miles referred to above; and

- 25 per cent of the gross government resource revenues earned from all other Yukon lands, up to a negotiated maximum.

While the Yukon Indians were preparing a counterproposal to the government's offer, the Indian Brotherhood and the Métis Association

of the Northwest Territories met in the first round of negotiations with the Minister of Indian Affairs and Northern Development, April 28, 1975. Negotiations quickly terminated when the Minister rejected the native groups' claim of ownership of nearly 500,000 square miles of land in the Mackenzie District of the Northwest Territories.

No useful purpose would be served by suggesting, here, figures for either the amount of land or dollars upon which a land claim settlement should be based. Both the dollar and land area figures arrived at in the Alaska Native Claims Settlement Act were judgement figures, rather than precise computations, as can be seen from the records of the proceedings of the congressional committees which examined the Bill at various stages (Lysyk 1973: 332).

An examination of the basis for, and approach to, land selection under a land claims settlement is within the context of this study.

Earlier I described an approach to planning the use of northern land based on a consideration of: land capability; land performance; terrain sensitivity; existing institutional arrangements; and current land use and occupancy. Within this context it was suggested that a northern lands policy should encourage land use in a way which effectively utilizes the land's productive capacity.

The resultant classification of northern land into four groups provides a basic structure for considering a variety of issues, including land selection under a native claims settlement.

For purposes of discussion, the following assumptions are made concerning a land claim settlement north of 60:

- a settlement will formalize the ownership of certain lands by native people;

- there is a more effective way for northern native people to participate in the social and economic life of the region and the nation than by establishing a series of reserves such as is found in the provinces;
- the native people will play a more active role in the administration and management of natural resources.

It is suggested that a land claims settlement pertaining to the approximately 38,000 people north of 60 who are of native origin should be structured as follows:

Group I: land selected from this group would provide the opportunity for native people to develop commercial, entrepreneurial and service-type businesses. Title to land selected from Group I would include subsurface as well as surface rights.

Group II: land in this category is primarily valuable from the standpoint of one or more of the following: forest land; wilderness recreation and park land; hunting and trapping; and maybe valuable in terms of subsurface resources. The selection made from Group II land would provide a base for developing commercial enterprises or a source of revenue from surface and subsurface royalties charged other users, or both. The settlement would provide for the transfer of title to the selected land. It would be necessary to make a distinction between land to which clear title is transferred

and land for which native peoples would have exclusive hunting, trapping and fishing rights. In most cases the latter would be larger than the former. A native game management association would be established in each territory with broad responsibilities for the administration and management of fish and wildlife;

Group III: no selection would be made from this category since Group III land comprises those areas which have been identified as either existing, or potential, sites for national parks and ecological sites; and historic and archaeological sites.

Although no land would be allocated from Group III, the continuance of hunting, trapping and fishing activities by the native people, within national parks, would be provided for under Section 11.1 of the National Parks Act;

Group IV: a percentage of the royalties derived from mineral, oil and gas production on Group IV lands (areas whose prime value is related to subsurface resources), would accrue to native organizations, up to a negotiated maximum.

The effect of this approach to a land claims settlement would be that northern Indians and Inuit would become managers of land, comprising a broad range of values and to which they held title. Wisely managed, such land and associated resources would sustain a variety of economic activities as well as provide a basis for maintaining those particular social and cultural values which native people deem to be important to them.

## (VI) The Public's Role

Throughout this study we have stressed that the genesis of a northern lands policy should be a thorough understanding of the nature, capability and limitations of the land. It is also important to be aware of the human values respecting northern land, expressed in social, economic and cultural terms.

Although much has been said in recent years concerning the importance of public participation in the development of land policy, there have been few suggestions as to how it can be most effectively accomplished. The complexity of the problem was discussed by Clawson (1973:33) who said:

"How far should national or state land use planning be elitist? That is, how far should it be guided, or influenced, or dominated by the technical specialist or by the informed and concerned citizen? If elitist-oriented, which elite -- technical, professional, business, conservationist, or other? One may argue that all citizens should be involved in a matter as important as land use planning. But many citizens, most probably, are uninterested or unwilling to spend time and effort, or uninformed, or all of these. How far, if at all, can they be brought into the planning process and at what stage -- at the beginning, or throughout, or to accept or reject the product of the planners?...There is much loose talk in my judgment about citizen involvement in planning. I am all for it, but I think the matter is far more difficult than is often recognized."

Too, there is the fundamental question of what is meant by public participation. Irland and Vincent (1974: 182) suggested that citizen control in the decision-making process involving public lands could be divided into four categories as shown below.



A Continuum of Citizen Control in Land Use Decisions

<u>Levels of Citizen Control</u>	<u>Characteristics</u>
Weak	Bureaucratic form; decisions by technocrats; control through legislatures; public relations and administrative reports to superiors.
Nominal	Listening sessions, hearings; advisory groups selected or controlled by government.
Significant	Advisory groups selected or controlled by citizens or resource users; policy board with veto, controlled by users.
Strong	Control of policy, conduct, hiring and administration by policy board of citizens.

Adapted from: Irland and Vincent (1974: 183)

In discussing citizen participation in resource management Castleden (1973) distinguished between pseudo-participation and degrees of increasing participation by considering five models, viz:

- (1) Information: a planner makes a decision and informs the public about it;
- (2) Persuasion: a planner makes a decision then persuades the public to accept it;
- (3) Consultation: a planner defines the problem, presents it to the public, invites comments and suggestions and then makes a decision;
- (4) Partnership: a planner prescribes the limits and within these, citizens share or assume decision-making responsibility;
- (5) Citizen Control: citizens have full rights to participate in and assume the responsibility for decisions. (29)

We have suggested that a northern lands policy should first focus on the natural values of soil, water and vegetation in attempting

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(29) The citizens' role in land use planning was also discussed by Sharpe (1973: 127-132).

to ensure the maintenance of the land's productivity. Implicit in this approach then is the need to understand the physical and biological relationships inherent in the land. Here the process must depend heavily on the scientist to systematically describe, in a usable form, the nature, capability and limitations of the land base.

While determining how the land may be used and how it might respond if used in certain ways, there is also the concomitant need to document present land use patterns, both natural and man-made. For example, in developing the land use information map series for the Northwest Territories and Yukon Territory, information and data <sup>(30)</sup> were derived from hunters, trappers, other local residents, university researchers and industry representatives, as well as resident government officers such as territorial government land agents. Public participation at this stage is informal and, other than providing a partial basis upon which to determine future policy, has few policy implications.

Following the production of the first-approximation land use planning maps, there is a second opportunity for citizen participation. At this stage the land use planning commission would:

- (1) give the tentative maps and supporting documents wide distribution;
- (2) conduct land use planning meetings within the planning area,

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(30) including: the location of hunting and trapping areas; traditional hunting and trapping practices; location and characteristics of important and critical wildlife areas and migration routes; domestic, commercial and sports fishing areas; fish migration routes; parks and points of recreation - tourism interest; location of resource industry development and settlement data.

at which the maps and tentative classifications would be discussed; and

(3) within a reasonable period of time expect to receive proposed amendments to the tentative land use planning maps, based on refinement or modification of the stated goals and/or additional knowledge concerning the region.

Another avenue for citizen participation would be through the proposed regional planning boards to be established under territorial ordinances. The land use planning commissions would expect the boards to provide regional views on such questions as the consequences of various forms of development and alternate patterns of land use, and periodically provide the commissions with projections on future possible development patterns, based on stated assumptions of growth.

And finally, the proposed land use planning commissions would have authority to conduct public hearings in connection with any matter related to its objects and in doing so, would have all the powers of a commissioner appointed under Part I of the Inquiries Act. This would represent the most formal aspect of public participation in the administration and management of northern land.

#### (VII) A Planning Authority

In his discussion of boards and commissions, Corry (1941) distinguished several types on the basis of their functions, viz.:

- (1) public ownership or operating boards;
- (2) marketing agencies;
- (3) those with purely advisory functions;
- (4) those with judicial but no regulatory function; and

(5) those with powers to make rules and regulations which have the force of law.<sup>(31)</sup>

The proliferation of such boards and commissions, particularly the latter two classes, have evoked some apprehension (Finkleman: 1939; Corry: 1941; Carr: 1941).<sup>(32)</sup> The principal causes of concern are their widespread discretionary powers and ability to make laws and regulations while, at the same time, not being responsible to the electorate.

Institutional procedures for determining and designating how public land is to be used vary widely. In the province of Alberta the Minister of the Department of Lands and Forests may by order classify public lands and declare the use for which he considers them to be adaptable.<sup>(33)</sup> Within the department the 'land use assignment committee',<sup>(34)</sup> is charged with the responsibility of determining, and recommending to the Minister, broad land use zones for the province's Crown land.<sup>(35)</sup> The zoning process in this case is an administrative tool,

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(31) Boards or commissions may also combine two or more functions, e.g., the National Energy Board and the British Columbia Energy Commission each have advisory, judicial and regulatory functions.

(32) Others who have warned of the 'encroachment of bureaucracy' include: the Lord Chief Justice of England, Lord Hewart of Bury, *The New Despotism* (1929: 16) London; and Sir William Mulock, former Chief Justice of Ontario, in 12 Can. Bar Rev. 1934: 18).

(33) The Public Lands Act of Alberta, R.S.A. 1970, c. 297, s. 12.

(34) comprising a senior representative of: each of the four main divisions of the Department of Lands and Forests; the Department of the Environment; and the Department of Agriculture.

(35) Crown land is divided into two land use zones, viz.: a forestry, wildlife and recreation zone (the Green Area), and an agriculture or settlement zone (the Yellow Area or White Area). In the Green Area no disposition is made without reference to the Forestry Division and only land suitable for the purposes applied for is disposed of in the Yellow or White Areas.

used to assist in the coordination of land management among various provincial agencies.

Ontario's Planning and Development Act, passed in 1973, broader in scope than Alberta's administrative land zoning process, is entirely discretionary. Under the Act the Minister<sup>(36)</sup> may by order, establish a 'planning area' anywhere in the province (S.O. 1973, c.51, s. 2(1)). Upon establishing a planning area the Minister must:

- direct that a development plan be prepared;
- establish two or more advisory committees;
- appoint one or more hearing officers who will conduct hearings;
- and
- following the receipt of advice from the committees and the report(s) of the hearing officer(s), submit the proposed plan with his recommendations to the Lieutenant-Governor in Council.

The development plan may include the following: the identification of major land use areas; policy concerning the acquisition of land; and policy concerning the management of land and water resources. Following approval of the plan, or a modification thereof, by the Lieutenant-Governor in Council, any by-law, improvement or other undertaking within the planning area must conform to the development plan.<sup>(37)</sup>

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(36) The Treasurer of Ontario and Minister of Economics and Intergovernmental Affairs. (R.S.O. 1970, c. 380).

(37) Under the Public Lands Act of the province of Ontario the Minister of the Department of Lands and Forests may establish classes of zones and may define the purposes for which public lands of each class may be administered (s. 16).

The British Columbia Land Commission, established under the British Columbia Land Commission Act (B.C.S. 1973, c. 46) represents a third kind of planning authority. The Land Commission was initially envisaged (Bill No. 42, B.C. Legislative Assembly) as having power to classify Crown or private land within the province as agricultural, green belt, park land or land bank. In its final form the power of the Commission to designate private land as one of the latter three was deleted. Under the Act the Commission must purchase, by negotiated price, land it wishes to designate for any of those purposes.

By using the regional district structure which was in place at the time the Land Commission Act was passed, and conducting mandatory public hearings within each district, a series of land reserve plans has been developed. If the Commission believes a plan carries out the intent of the Act it must, after approval of the Lieutenant-Governor in Council, designate the agricultural land shown on the plan as agricultural land reserve (s. 8.5). Once land is designated as an agricultural land reserve it may not be used for any purposes incompatible with agriculture without approval of the Commission.

The Commission, which comprises no less than five members appointed by the Lieutenant-Governor in Council, is authorized under the Act to dispose of, by sale, lease, or otherwise, Commission land and Crown land that is an agricultural, green belt, park or a land bank land reserve, subject to terms and conditions set by the Commission.

#### A Northern Land Planning Authority

In the administration and management of public land in the north

a planning authority is envisaged as fulfilling an advisory role. It is recommended that a land use planning commission be established in each territory, under federal legislation, which would:

(1) undertake the northern land use planning process described earlier, viz.:

(a) Implementing the collection of data and developing tentative land use maps, on a planning area basis. This would require the effective coordination of several government agencies, as well as drawing on the expertise of non-government agencies and researchers;

(b) Conducting public hearings and utilizing the regional planning boards which are to be established under territorial ordinances, thereby providing a forum for direct public participation in the planning process, by both residents and non-residents of the planning areas;

(c) Making recommendations concerning the classification of land within a planning area, including specific recommendations, for example, concerning: agricultural land subdivisions and cottage areas which would be available for purchase, in Group I; the acquisition of timber rights in Group II; and the retention of specific ecological sites and critical wildlife areas in Group III.

(2) Review, hold public hearings if necessary, and make recommendations concerning applications for major land use proposals by the private sector, such as the construction of a gas gathering system or major public works proposals such as the construction of a trunk highway.

(3) Through the use of commission staff and facilities, assist the various native associations within each planning area, in their

selection of land to be allocated under a native claim settlement;

(4) Prepare studies and reports on any matter related to northern land management, requested by the Governor in Council, or the respective Commissioner in Council of the territorial government;

(5) Consider the use of land and associated resources in terms of regional needs and aspirations; and assess the consequences of implementing various alternatives; and

(6) Document the history of land use in order to compare the expected and experienced consequences.

A Land Use Planning Act would contain authority for:

- (1) the establishment in each territory of a land use planning commission, consisting of not less than five members, of whom not less than three would be appointed by the Governor in Council and not less than two would be appointed by the respective Commissioner in Council;
- (2) the Governor in Council ~~who~~ name one of his appointees as the federal co-chairman and the Commissioner in Council ~~to~~ name one of his appointees as the territorial co-chairman, both of whom would be employees of the public service and full-time members of the commission;
- (3) the Minister, responsible for administering the Act, to provide each commission with such officers and employees from within the public service and such professional and technical advisers as are necessary for the commissions to function effectively;



- (4) the commissions to conduct public hearings in connection with any matters related to their objects and terms of reference, where they are satisfied that such a hearing would be in the public interest;
- (5) the Minister to establish classes of land and to define the purpose(s) for which each is to be administered, and, with the approval of the Governor in Council, to designate land within a planning area on the basis of such a classification;
- (6) a procedure by which application could be made to the Minister for amendments to delineated zones and the making of such amendments;
- (7) the land use planning commissions to study and keep under review matters related to northern land over which the Parliament of Canada or the respective Territorial Councils have jurisdiction and to recommend to the Minister or the respective Commissioner such measures as it considers necessary or advisable in the public interest for the management and utilization of northern land; and
- (8) studies, reports and recommendations of the land use planning commissions to be made public with the approval of the Minister.

(VII) Other Considerations

The current body of land law in the north will, with some alteration, meet most of the requirements beyond the planning stage.

Group IV.

The major, and in most cases only land use to take place on Group IV lands would be related to the exploration, development and production activities of the mining and petroleum industries. Here the territorial land use regulations (p. 121) provide a measure of control over land use practices.

It was pointed out earlier that although those regulations apply to most land use operations throughout the north, they do not apply to mining in the Yukon Territory. To rectify that situation from a legal standpoint (in fact most of the mining industry in the Yukon has accepted the principle of the land use regulations), the present Yukon mining legislation would have to be amended.

The proposed Yukon Minerals Bill, if passed by the Parliament of Canada in its present form, will provide for the application of the territorial land use regulations. Section 8 of the Bill makes entry upon Yukon land for purposes of prospecting and locating minerals subject to section 3.2 and paragraph (i.1) of section 19 of the Territorial Lands Act. Section 31 (1) of the Yukon Minerals Bill would make the holder of a mineral claim wishing to develop a mine on his claim(s) subject to the same sections of the Territorial Lands Act. These sections say:

3.2 "The Governor in Council may...make regulations respecting

- (a) the protection, control and use of the surface of land in a land management zone; and
- (b) the issue of permits for the use of the surface of land in a land management zone, the terms and conditions of such permits and the fees therefor." and

19 (i.1) "The Governor in Council may make regulations respecting the protection, control and use of the surface of territorial lands;"

The land use regulations, which were passed in 1971, have been tested in the Courts on two relatively recent occasions.

In March 1974 a holder of a land use permit was prosecuted under the Territorial Lands Act for failure to comply with one of the operating conditions stipulated in the land use permit. The permit holder attempted to quash the prosecution on a technical point involving the issuing of an extension to the permit. The Honourable Mr. Justice W.G. Morrow, sitting as a Magistrate, dismissed the application of the permit holder, taking the view that the extension was valid, hence the condition imposed upon the Applicant as the permit holder was valid. The written reasons for his decision included the following;

"In the view I take of the Legislation, Section 3.2 (b) of the Territorial Lands Act gives legislative authority for making Regulations respecting the issue of permits. In stating that these regulations may include 'terms and conditions' I fail to see how the power to extend cannot be considered as being just as reasonable a type of term or condition as any of the other myriad of contingencies that those required to administer the legislation must anticipate in drafting the Regulations. In passing, I perhaps should observe that for the most part the land use operations with which the legislation under review here, is concerned, will be taking place

in very remote areas of northern Canada, well away from the normal channels of communication and I am certain this was well understood by the Parliament of Canada when the above language was chosen. The application is accordingly dismissed..."

In the other case the Crown appealed a sentence imposed upon a firm which had unlawfully conducted a land use operation without a land use permit, asking that the amount of the fine be raised from what was considered to be a nominal sum. In upholding the appeal and increasing the fine the Honourable Mr. Justice W.G. Morrow of the Supreme Court of the Northwest Territories stated, in part:

"...I would be remiss as a judge in this territory if I did not take notice of the need and purpose of the present legislation, 'to protect, and control, the use of the surface of the land'; a land which although tundra in nature and frozen over for many months each year is nonetheless a delicate land, easily damaged and perhaps when once damaged, impossible to repair. This is without any mention of the possible use that our original inhabitants, in this case Eskimos, may still be making of it and how their way of life may still be dependent on its being preserved in its natural state..."

In cases of this kind to fine a corporation such as the present one a mere \$100.00 is to in effect invite breaches, to invite the gamble. Where the economic rewards are big enough persons or corporations will only be encouraged to take what might be termed a calculated risk. It seems to me that the Courts should deal with this type of offence with resolution, should stress the deterrent, viz. the high cost, in the hope that the chance will not be taken because it is too costly.

Keeping in mind the good record of the present respondent but applying the above principles I allow the Crown's appeal and fine (the company) the sum of \$2,000.000..."

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Land designated as Group III would include

### Group III

Land designated as Group III would include national parks, national historic parks and sites, critical wildlife areas and ecological sites. Except for ecological sites there is specific federal legislation under which each form of land allocation can be administered. (38)

Ecological reserves <sup>(39)</sup> are legally protected natural areas where human influence is kept to a minimum, established for scientific research and educational use (Peterson, 1974).

Moir (1973: 400) in his examination of natural areas and policy respecting land use stated:

"Natural areas are large or small segments of a regional landscape or seascape where present influences or effects of man's activities are minimal. The value of these areas for scientific and educational study often exceeds the commercial or economic value of the natural resources they harbor and warrants their long-term preservation and protection...Natural areas can therefore be used to monitor the environment, thereby alerting man to deleterious changes. When used as sampling stations for environmental surveillance, natural areas aid the interpretation of possible biological consequences of pollutant buildup. They also provide comparative

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(38) The National Parks Act, the Historic Sites and Monuments Act and the Canada Wildlife Act.

(39) Ecological reserves or natural areas appear to be interchangeable terms; in Canada, it is only in the Yukon Territory and Northwest Territories that the term ecological sites is used.

data on yields and productivity from managed or altered ecosystems. Because of these and other perspectives that natural areas provide, their protection and permanence should be given a high priority in policies of land use."

Although there is no specific legislative authority for establishing and managing ecological sites in the north, there are various acts which could be used to designate and provide some degree of protection to areas of scientific value. These include:

- section 19(2) of the Territorial Lands Act which provides the Governor in Council with authority to set apart and appropriate territorial land for various public purposes which would include natural areas for scientific purposes;

- section 4(1) of the Canada Wildlife Act provides the Governor in Council with authority to assign the administration of any public land (including federal land in the two territories) to the Minister of the Department of the Environment where he is satisfied that such lands are required for wildlife research, conservation or interpretation;

- section 11(1) of the National Parks Act provides the Governor in Council with authority to set land aside in the territories for a national park;

- other legislation which would afford some protection to such sites includes territorial game and park ordinances.

It has been argued that establishing ecological sites under

statutory authority, such as the above, would impose definite limitations on the comprehensive and long-term management objectives of the ecological reserves program (Peterson, 1974; Geist, 1973; Franson, 1972).

Those arguments aside, it would be more consistent with the concept of northern land management as developed in this study, if ecological sites were provided for, and administered, under legislation specifically designed for the purpose. Therefore a 'Northern Ecological Sites Act' is proposed, the purpose of which would be:

- to provide for the establishment, administration, management and protection of specific natural areas in the Yukon Territory and Northwest Territories, for purposes of scientific study.

The proposed Act would include:

- (1) a description of the various kinds of ecological sites which could be established including areas:
  - (a) to be maintained in as near a natural state as possible;
  - (b) in which certain designated uses may be integrated, simultaneously or sequentially, so as not to interfere or detrimentally alter the natural values and uses within the site; and
  - (c) those which would serve to measure the effects of man's disturbances. (40)

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(40) This third approach to ecological reserves is discussed by Peterson (1973) and Jenkins and Bedford (1973).

(2) a statement of the selection criteria for the three categories of ecological sites identified in the Act.

(3) authority for the Governor in Council to set aside territorial land for ecological sites in either of the two territories according to one of the three categories, on the advice of the land use planning commission and the recommendation of the Minister and after:

(a) consultation with the Council of the Yukon Territory or the Northwest Territories, as the case may be; and

(b) publication in Part One of the Canada Gazette, of each order setting aside land for an ecological site, and a reasonable opportunity for interested persons to make representations to the Minister concerning the order;<sup>(41)</sup>

(4) authority for the Governor in Council to cancel, or delete any portion of, an ecological site provided the Minister has:

(a) requested and received the advice of the land use planning commission established under the

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(41) the sequence would be: (a) an order setting aside land as a reserve for an ecological site pending a native land claims settlement; and (b) an order setting aside land as an ecological site following native land claims settlement which would incorporate any necessary changes as a result of the settlement.



land use planning act;

- (b) published notice of the cancellation or deletion in Part One of the Canada Gazette and provided a reasonable opportunity for interested persons to make representations to him concerning the proposal.

(5) A statement of restrictions, viz. 'territorial lands within the ecological sites shall not be disposed of or settled upon, and no person shall use or occupy any part of an ecological site, except under the authority of this Act or the pursuant regulations'.

(6) Authority for the Governor in Council to make regulations for:

- (a) the administration and management of the ecological sites;
- (b) the protection of the land, flora and animals within the ecological site; and
- (c) the control, restriction or prohibition of any kind of use, development or occupation of the land and associated resources within an ecological site.

Under the British Columbia Ecological Reserves Act, 1971, the Minister may appoint a person or persons to advise him respecting any matter relating to the establishment and administration of ecological reserves (s. 9). The Québec Ecological Reserves Act, 1974, makes it mandatory that the Lieutenant-Governor in Council establish a board of not more than 15 members to advise the Minister. In this regard,

Section 10 of the Act says:

"Le Lieutenant-gouverneur en conseil constitue, pour aviser le ministre sur l'application de la présente loi, un conseil consultatif des réserves écologiques composé d'au plus quinze personnes, dont au moins six sont choisies parmi les fonctionnaires du gouvernement ou de ses organismes, nommés pour une période n'excédant pas cinq ans."

The land use planning commission in each territory, established under the proposed land use planning Act, would fulfill this advisory function, as part of its responsibilities for land management. Each commission would consider submissions and representations concerning the establishment of ecological sites. In addition the commissions would advise the Minister on any other matters pertaining to ecological sites.

#### Group II

Land designated as Group II is considered valuable in terms of one or more of the following: forest land; pasture and grazing land; wilderness recreation private and commercial; hunting and trapping; and territorial parks and campgrounds. Various territorial ordinances and the Territorial Lands Act provide for the administration and disposition of land or rights, where applicable, for each of the uses identified in Group II.

There is, though, a distinct weakness in the legislative base with respect to the management of the timber resource in terms of: timber disposition and utilization, harvesting procedures, reforestation, stand improvement and the practice of forestry generally. It will be necessary to introduce new legislation in this area before considering any large-scale forestry operations in the north.

The present statutory authority for the administration of timber in the territories lies in two sections of the Territorial Lands Act. Section 13 makes it unlawful for anyone to cut timber without a permit and section 14 authorizes the Governor in Council to make regulations respecting the terms and conditions to be attached to such a permit, the prescribing and recovery of dues, and the suspension or cancellation of permits.

In essence, what is required is some basic policy with respect to forest management upon which new legislation can be based. It was suggested earlier that one of the underlying principles of a northern lands policy might be that:

- improved land use practices do not automatically ensue from a policy which provides for direct government administration of resource harvesting.

It was also suggested that two possible goals for a northern lands policy might be:

- the conveyance of rights to the use of land and associated resources for industrial and commercial purposes under arrangements that encourage efficient use...
- the protection of the natural resource base and the maintenance or improvement of the land's productive capacity.

The foregoing statements provide a basis for considering some aspects of forest management policy for the territories.

The various forms of forest tenure in use throughout Canada have been described extensively (Haley, 1971; Munro, 1971; Pearse, 1974) and it is apparent that the salient feature of most tenure agreements is the provision of timber by the lessor to the lessee for conversion to marketable products. It is no doubt this fact that prompted Smith (1973) to say:

"Few forests are managed to provide the full range of goods and services which could be derived from them. Most are managed for one dominant use, established by the ownership rights, or lack of them, that govern the local situation."

Conventionally, Canadian foresters recognize the diverse value of the forest community, however it is usually the timber component which receives prime consideration. This is not difficult to understand considering the importance of the forest industry to the nation's economy. It is perhaps also significant that whereas timber values are easily quantified, the related values are not, hence the benefits which accrue from including them in management decisions are less concrete.

It seems appropriate, considering the nature of Group II land, to incorporate the concept of 'integrated-use' into any forest tenure agreements. Thus the agreement, while providing the lessee with rights to certain timber, would reflect the fact that the land comprises diverse values.

Timber in Group II areas would be made available for open competition. Bidders must show how harvesting methods and forest management practices would be carried out to complement other uses, such as recreation, sports hunting and fishing, subsistence hunting and

trapping.<sup>(42)</sup> Any subsequent forest tenure agreement would include terms and conditions reflecting the composite value of the leasehold area.

In essence the forest company assumes the role of forest manager by first developing, in the application stage, a proposal based on an integrated approach to forest-land use, and subsequently as the lessee, carrying out the plan under a forest tenure agreement. In recommending this approach it is recognized that it does not accord with the current move toward government assuming more, and the forest industry less, responsibility for practising forest management as examined earlier in this study.

Closely tied to this approach to forest management is the concept of management incentives.

The position taken by the forest Management Committee of the Canadian Institute of Forestry in 1969 was that incentives should be such as to provide encouragement (to the lessee or tenant) to increase per acre productivity, with a minimum outlay of public funds while, at the same time, safeguarding the equity of the Crown.

Among the various forms of incentive cited was the replacement of conventional stumpage charges with a fixed land-use assessment that is based on the natural productivity of the land in its wild, unmanaged state. If the lessee, through his own management efforts, increased the

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<sup>(42)</sup> For a discussion of how one company has approached the question of various land uses within a timber leasehold area see Crossley (1975: 46).

productive capacity of his leasehold then his allowable cut would increase with no additional stumpage charges.<sup>(43)</sup> If on the other hand the increased productivity was due to a shared program between the Crown and the tenant then the net returns or losses would be shared by the participants (Forestry Chronicle 1970).

A lump sum stumpage charge or fixed land use assessment<sup>(44)</sup> would appear to suit the type of tenure agreement called for earlier. If the timber under lease was in an area which designated timber production as the primary value, a lessee holding a renewable 20-year lease could be expected to initiate forest management practices in order to benefit from the stumpage free-increased differential in allowable cut.

On the other hand, if the proposed operation was to be in an area where wildlife habitat and recreation were of greater value, the Crown would assume forest management responsibilities and the revenues accruing to the Crown from stumpage based on volume cut would be used

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(43) Section 36(2) of the Forest Management Agreement between North Western Pulp and Power Limited and the Government of the Province of Alberta dated August 30, 1968, provides for just such an agreement. "When at any time hereafter by mutual agreement of both parties the basis for the payment of Crown charges has been changed from the measure of wood actually harvested to the calculated annual natural productive capacity of the forest management land (allowable cut), the Company shall not be required to pay dues for any wood harvested and utilized to a greater degree than it was required to by the original ground rules formulated under clause 12(4), nor for any extra wood produced by increased growth induced artificially by efforts of the Company exceeding its mandatory obligations."

(44) subject to periodic adjustment and review to compensate for inflation, changing demands and changing technology.

to develop and enhance the other values of the forest land.

Essentially what is lacking now is statutory authority to invest in improved management of, rather than administer, forest resources in the north. This becomes particularly important in the context of the above discussion concerning forest tenure agreements and management incentives. In order to implement a northern lands policy as envisaged in this study, it will be necessary to complete the legislative base by providing statutory authority for intensifying the management of forest land in the territories. This could be done by either passing a new act (the Northern Forest Act) or amending the present Territorial Lands Act.

The intent of such legislation would be to provide for the improved management and increased utilization of the forest land and associated resources of the Yukon Territory and Northwest Territories.

The proposed legislation would include:

- (1) authority for the Governor in Council to make various regulations including those governing:
  - (a) the management and use of forest land;
  - (b) all aspects of reforestation and afforestation on territorial land;
  - (c) the procedure by which and conditions upon which various forms of forest tenure and rights to timber may be acquired;
- (2) Authority for the Minister, with the approval of the Governor in Council, to dispose of timber in various ways

including by forest management agreement, as discussed under the subjects of tenure and management incentives above.

- (3) Authority for the Minister to make various regulations including those governing:
  - (a) the use of land designated as Class II (integrated-use areas) under the proposed Land Use Planning Act;
  - (b) the submission of proposals, and assessments of proposals, for the acquisition of timber under forest management agreements or other form of disposition; and the preparation of working and operating plans;
  - (c) logging methods and wood utilization standards.

#### Group I

Occupancy-use areas would cover a relatively small area and include land which is either used, occupied or suitable for:

- commercial and industrial sites in and adjacent to settled areas;
- year-round residences; seasonal recreational residences; and
- farm residences and agricultural land.

The responsibility for administering land for the above purposes is now shared by the federal department of Indian and Northern Affairs, and the territorial governments. The legislative authority for disposing of such land is the federal Territorial Lands Act (see the Territorial Land regulations, p. 133), the Yukon Lands Ordinance and the Commissioner's Land Ordinance, (NWT) (p. 136). Much of the land in



Group I would lie within existing or proposed Block Land Transfer areas and would, therefore, be administered by the territorial governments.

The possibility is remote that the demand for territorial land, for private purposes, will ever reach the levels experienced in southern Canada. Nevertheless, there is, even now, in the Whitehorse, Yellowknife, Hay River and Inuvik areas, a relatively heavy and growing demand for land for a variety of purposes.

Returning to the statement of principles and goals governing a northern lands policy, there are at least three references which are pertinent to Group I land. First, there is the principle that improved land use practices do not automatically ensue from a policy which restricts the sale of Crown land. Second, it has been suggested that a northern lands policy should provide for: the distribution of land occupancy and use rights to northern residents and others who wish to exercise those rights; and the efficient administration of northern lands, recognizing the goal of the Canadian Government to further the evolution of the territorial governments of the Yukon Territory and Northwest Territories.

What should be the government's policy for the alienation of Group I land which lies beyond the Block Land Transfer areas?

The following proposal is in response to the question.

(1) Where land suitable for such purposes has been identified, specific areas within Group I should be designated and made available for the following purposes:

- (a) residential subdivisions;
- (b) cottage subdivisions;

- (c) agriculture including market gardens, greenhouses,  
✓ mixed farming and grazing land;
- (d) commercial and industrial sites.

(2) Land applied for must be located in an area or zone designated for the intended use;

(3) Waterfront lots for either seasonal recreational or residential purposes would not be available for purchase but could be acquired under leasehold;<sup>(45)</sup>

(4) Grazing land and commercial and industrial sites would be available under lease, with the latter two available in some cases for purchase under a sell-back agreement as described in (5) below;

(5) In the case of:

- (a) non-waterfront cottage lots;
- (b) residential lots; and
- (c) market gardens, greenhouse operations and mixed farming; land would be available for purchase, following an initial lease period during which specific 'improvement commitments' would have to be met. To be eligible to purchase the land, the lessee would have to be a Canadian citizen or landed immigrant,

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(45) In January, 1975, the Minister of the Department of Indian Affairs and Northern Development announced a 'cottage subdivision' policy whereby 30-year leases will be granted on the basis of an initial three-year term, followed by a 27-year renewal provided certain development commitments are met.

resident in Canada. (46)

The sale of such land would be subject to a sell-back agreement whereby the purchaser agreed to use the land only for the purposes for which it was initially acquired. When an owner ceased to use the land for its intended purpose, he would have to be prepared to reconvey the parcel to the Crown at a price, based on a formula agreed upon at the time the original agreement was executed. The agreement would run with the land, being registered against the title, to protect the Crown's interest in perpetuity.

#### CONCLUSION

The history of northern land use may be considered in terms of the following four phases: prehistory, the early fur-trade, development of mining, and the current concern for the composite value of northern land.

(1) Prehistoric man lived in what is now northern Canada for thousands of years. During this time, several distinct cultures evolved and were replaced in turn. A common characteristic of all northern cultures was their ability to husband available resources for survival, despite the low productivity of the land and the severity of the climate.

The native of the precontact period was totally dependent upon

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(46) A 1975 Supreme Court of Canada ruling upheld a 1972 amendment to Prince Edward Island's Real Property Act which requires non-residents to obtain Lieutenant-Governor in Council approval for purchases of more than ten acres or where shore frontage exceeds 330 feet.

the land for his physical well-being. In addition the land held strong cultural and spiritual meaning for him. Neither the northern Indians nor the Inuit of this period conceived of land in terms of private property. Although personal property passed between individuals, there were no individual owners of land. As a prerequisite for survival, land belonged to the band or group.

(2) For many native people of the north the arrival of the fur trader resulted in the value of land assuming another dimension. Introduction of manufactured goods and European food staples, and a natural desire to acquire such commodities, resulted in a series of changes affecting the northern native.

One of these was his concept of land. The introduction of trapping as a means by which this new range of goods could be acquired sometimes resulted in the notion of land ownership. In some cases trappers were identified with particular areas which became known as their trapline and in others trappers recognized the land rights of an individual or a family and accepted the notion of inheriting a trail from one's elders.

As a result of the fur trade, land assumed an additional value and land policy expanded to incorporate the concept of individual ownership.

(3) Mining activity at the end of the 19th century ushered in the third phase of northern land use. In this case the new land policy was formalized in government statutes, regulations and administrative procedures. Essentially, the new policy was to make land available for

the exploration, development and production of subsurface resources, and much of the legislation developed then, and since, reflects this fact.

While the relative role played by the northern native has been considerably less in this phase than in the other two, the attendant exposure to western culture has had a marked effect on the northern native's way of life.

During this third phase, policy, attitudes and values respecting northern land were dichotomized. Those of the native hunter and trapper were expressed in unwritten form and those of the government were manifested in various legal and administrative institutions.

(4) We are now entering a fourth phase in northern land use. It is characterized by an increasing awareness of the composite value of northern land, including associated renewable as well as non-renewable resources, and a growing demand for rights to use land for a variety of purposes. Superimposed on this are the native peoples' demand that their land ownership and other rights be formally recognized and the desire of both territorial governments to assume responsibility from the federal government for the administration and management of the north's natural resources.

This study examines northern land in the context of:

- the evolution of uses, attitudes and values;
- the evolution of public policy as reflected in legislative and administrative institutions;
- various approaches to the management of public land;

- comprehensive land use planning;
- underlying principles and goals of a northern lands policy;
- a native land claims settlement;
- a future legislative base.

In examining the above this study sets forth seven premises and describes a set of six proposals as follows:

(A) Premises

(1) northern lands policy incorporates social and cultural values as well as economic and political ones;

(2) northern lands policy reflects the nature, capability and limitations of the land;

(3) northern lands policy recognizes the native peoples' legitimate claims to the land but does not limit the settling of such claims to the establishment of reserves, such as the Indian reserves, found in the provinces.

(4) northern lands are capable of meeting a variety of needs and include values which cannot be measured in terms of their monetary worth;

(5) future decisions respecting land use and allocation be made within the context of technically sound land use plans;

(6) improved land use practices do not automatically ensue from a policy which restricts the sale of Crown land nor which provides for direct government administration of resource harvesting; and

(7) because an area of 1.5 million square miles is involved, the administration and management of northern lands reflects regional differences and the physical diversity of the north.

(B) Proposals

(1) that the future administration and management of northern lands incorporate a course of action for guiding and determining decisions respecting land use and allocation, rather than simply a series of legislative and regulatory measures for the conveying of rights to the use of land and associated resources. This course of action which is described in the study as 'northern land use planning' would:

- (i) account for the natural values and properties of the land base;
- (ii) consider the potential uses of the land and its capability to meet regional needs and aspirations, as well as to attain regional and national goals;
- (iii) propose, and assess the consequences of various forms of land use and development; and
- (iv) monitor and document land use in order to take remedial action if necessary and compare the actual with the estimated effects in order to improve performance in the future.

(2) that a northern land use commission be established in each territory, under federal statute, with authority to act in an advisory capacity to the Canadian Government and the respective Territorial Government on a broad range of issues dealing with northern lands. Each commission would be responsible for the land use planning process described herein, and would have authority to call public hearings in connection with any matter related to its broad responsibilities for land management.

Each commission would be provided with a full-time staff and have authority to retain other professional and technical advisers.

(3) that for purposes of administration and management, northern land be classified according to four groups, on the basis of:

- (i) land capability in terms of renewable resources;
- (ii) land suitability in terms of major engineering works;
- (iii) terrain sensitivity to man-made disturbance;
- (iv) existing institutional arrangements; and
- (v) current land use and occupancy.

The composition of land uses within each of the four groups (policy for the disposition and alienation of land is discussed on pages 300-317) is as follows:

Group I: Occupancy-use Areas

Includes land which is either used, occupied or suitable for the following: permanent residences; seasonal recreational residences, farm residences and agricultural land; and commercial and industrial sites in and adjacent to settled areas.

Group II: Integrated-use Areas

Includes land valuable in terms of: forest land; wilderness recreation, private and commercial; hunting and trapping; and territorial parks and campgrounds.

Group III: Natural and Scientific Areas

Land in this category includes the various kinds of National parks under the Parks Canada program including: natural parks, natural landmarks; wild rivers; and marine parks. In addition,



Group III would include: historic and archaeological sites; critical wildlife areas; and ecological sites;

Group IV: Extensive-Management Areas

The prime values of Group IV land would be related to sub-surface resources but the criterion for distinguishing between Group IV and Group II land would be the relative capability of the land in terms of renewable resources not the relative value in terms of non-renewable resources.

(4) that the native land claims settlement provide the northern Indians and Inuit with land and associated resources comprising a broad range of values. If managed wisely this land would sustain a variety of economic activities as well as provide a basis for maintaining desired social and cultural values. The settlement to include land selected from Groups I and II, and a portion of the resource revenues accruing to the government from Group IV land.

(5) that the legislative base required for the administration and management of northern lands include three new Acts, described in the study, viz.:

Northern Land Use Planning Act

Northern Forest Act

Northern Ecological Sites Act,

in addition to the existing legislation which includes:

Territorial Lands Act

Territorial Land Regulations

# Territorial Land Use Regulations<sup>(47)</sup>

Yukon Lands Ordinance

Commissioner's Land Ordinance (NWT)

Area Development Ordinances (Y.T. and NWT)

Other related legislation would include:

Territorial Planning Ordinances (Y.T. and NWT)

Territorial Park Ordinances (Y.T. and NWT)

National Parks Act

Canada Wildlife Act

National Historic Sites Act.

(6) that citizen participation be provided for in the northern land use planning process through:

- (i) the land use planning commission to be established in each territory;
- (ii) the regional planning boards to be established under the territorial planning ordinances which would provide a public forum for participating in the development and refinement of an area's land use plan, under the direction of the land use planning commissions; and
- (iii) the public hearings conducted by the land use planning commissions.

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(47) other existing regulations pursuant to the Territorial Lands Act, such as timber, oil and gas, and mining would be removed and provided for under other legislation e.g., the proposed Northern Forest Act, the Petroleum and Natural Gas Act (see p. 127), and a new Mining Act.

The possible transfer of natural resources from federal to territorial jurisdiction is not considered in detail since this involves a political decision which lies beyond the context of this study. But it must be concluded that a northern lands policy as described herein would involve the territorial governments more in the management of northern lands.

Under the proposal virtually all northern residents will live, work and play on Group I lands. At this stage in the evolution of northern land administration it appears unnecessary to continue the duplication of administrative services now provided by the federal and territorial governments. Each territorial government already administers two of the three pieces of legislation which pertain to Group I land. (48) The whole administrative procedure could be streamlined further by making the administration of the federal Territorial Lands Act as it pertains to Group I land, a territorial government responsibility.

Considering the remainder of the territories and excluding Group III land, (49) there is no compelling argument for or against, a territorial, rather than a federal, agency administering the relevant

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(48) These are: in the Yukon Territory, the Yukon Lands Ordinance and the Area Development Ordinance; in the Northwest Territories, the Commissioner's Land Ordinance and the Area Development Ordinance. The federal legislation applicable in both territories is the Territorial Lands Act. In addition the respective Commissioner in Council may make ordinances with respect to agriculture, the Northwest Territories Act (s. 13v) and the Yukon Act (s. 16v.)

(49) which would be administered under the National Parks Act, the Canada Wildlife Act, the Northern Ecological Sites Act, and the National Historic Sites Act.

federal legislation. There is little precedent in Canada for provincial governments administering federal legislation pertaining to natural resources. This is principally because under the British North America Act most natural resources are a provincial responsibility.

Nevertheless the assumption of additional responsibilities by the territorial governments would be consistent with the Canadian Government's national objectives for the north, one of which is to "further the evolution of government in the northern territories" (appendix N).

Rather than innovative, the following appears to be a logical step in the natural evolution of public policy as it pertains to the 1.5 million square miles of Canada north of 60.

(i) policy for the administration and management of northern lands (excluding land now under the authority of the territorial governments), embodied in federal legislation hence the responsibility of the Parliament of Canada;

(ii) a land use planning commission in each territory, established under a land use planning act as described in this study;

(iii) a territorial government, department of lands and forests, comprising four branches, viz.: parks, wildlife, lands and forest, responsible for administering both territorial ordinances and federal legislation pertaining to the administration and management of northern lands.

It is evident that the composite value of northern land today reflects the historic and universal relationship existing between man *and* land. In developing a northern lands policy it is important to ensure

that it incorporates social and cultural as well as economic and political values. Future policy respecting northern land ought to be based on a sound appreciation of the land itself. Decisions respecting allocation, alienation, utilization and management must be made within the context of the nature, capability and limitations of the land.

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## APPENDICES

## APPENDIX A

*Ref. No. 3, Register B.*

Copy of a Report of a Committee of the Honorable the Privy  
P.C. No. 1503 A. Council, approved by His Excellency the Governor General in  
Council on the 5th July, 1869.

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2254. The Committee have had under consideration the Despatch No. 109, dated 12th  
June, 1869, from the Right Honorable the Secretary of State for the Colonies, sub-  
mitting a draft of the proposed Deed of Surrender of the Hudson's Bay Company's  
Territory.

Deed of Surrender. The Honourable the Minister of Justice, to whom the above mentioned Despatch  
and enclosure were referred, reports that he has carefully considered the draft of the  
proposed Deed of Surrender to Her Majesty of Rupert's Land and the Territories  
adjoining, by the Hudson's Bay Company, and that he is of opinion that the same is  
satisfactory in every respect.

The Committee concur in the opinion expressed by the Minister of Justice and  
advise that the draft transmitted be approved, and, that a copy of this Minute be  
forwarded by Your Excellency to Earl Granville for the information of Her Majesty's  
Government.

Certified,

(Signed) Wm. H. LEE,

*Clerk, Privy Council.*

To the Honorable  
The Secretary of State  
For the Provinces.

## SCHEDULE (C).

The Governor and Company of Adventurers of England, trading into Hudson's Bay,  
to HER MAJESTY QUEEN VICTORIA.

## DEED OF SURRENDER.

To all to whom these Presents shall come unto, or concern, The Governor and Company of Adventurers of England, trading into Hudson's Bay, send greeting—

Whereas the said Governor and Company were established and incorporated by their said name of "The Governor and Company of Adventurers of England trading into Hudson's Bay" by letters patent granted by His late Majesty King Charles the Second, in the 22nd year of His Reign, whereby His said Majesty granted unto the said Company and their successors the sole trade and commerce of all those Seas, Straits, Bays, Rivers, Lakes, Creeks and Sounds in whatsoever latitude they should be, that lay within the entrance of the Straits commonly called "Hudson's Straits," together with all the lands and territories upon the countries, coasts and confines of the Seas, Bays, Lakes, Rivers, Creeks and Sounds aforesaid, that were not already actually possessed by or granted to any of His Majesty's subjects or possessed by the subjects of any other Christian Prince or State, and that the said land should be from thence forth reckoned and reputed as one of His Majesty's plantations or Colonies in America called Rupert's Land, and whereby His said Majesty made and constituted the said Governor and Company and their Successors the absolute Lords and Proprietors of the same Territory, limits and Places aforesaid and of all other the premises, saving the faith, allegiance and Sovereign Dominion due to His said Majesty, his Heirs and Successors for the same, and granted to the said Governor and Company and their Successors, such rights of Government and other rights, privileges, liberties, franchises, powers and authorities in Rupert's Land as therein expressed.

And whereas, ever since the date of the said Letters Patent, the said Governor and Company have exercised and enjoyed the sole right thereby granted of such trade and commerce as therein mentioned, and have exercised and enjoyed other rights, privileges, liberties, franchises, powers and authorities thereby granted, and the said Governor and Company may have exercised or assumed rights of Government in other parts of British North America not forming part of Rupert's Land, or of Canada, or of British Columbia.

And whereas, by the British North America Act, 1867, it is (amongst other things) enacted that it shall be lawful for Her present Majesty Queen Victoria, by and with the advice and consent of Her Majesty's Most Honorable Privy Council, on Address from the Houses of Parliament of Canada, to admit Rupert's Land and the North Western Territory or either of them into the Union of the Dominion of Canada on such terms and conditions as are in the Address expressed, and as Her Majesty thinks fit to approve, subject to the provisions of the said Act.

And whereas, by the "Rupert's Land Act," 1868, it is enacted (amongst other things) that for the purposes of that Act the term "Rupert's Land" shall include the whole of the Lands and Territories held or claimed to be held by the said Governor and Company, and that it shall be competent for the said Governor and Company to surrender to Her Majesty, and for Her Majesty, by any instrument under Her Sign Manual and Signet to accept a surrender of all or any of the lands, territories, rights, privileges, liberties, franchises, powers and authorities whatsoever, granted or purported to be granted by the said Letters Patent to the said Governor and

Company within Rupert's Land, upon such terms and conditions as shall be agreed upon by and between Her Majesty and the said Governor and Company: Provided, however, that such surrender shall not be accepted by Her Majesty until the terms and conditions upon which Rupert's Land shall be admitted into the said Dominion of Canada shall have been approved of by Her Majesty, and embodied in an address to Her Majesty from the Houses of Parliament of Canada in pursuance of the 146th section of the British North America Act, 1867, and that upon the acceptance by Her Majesty of such surrender, all rights of Government and proprietary rights, and all other privileges, liberties, franchises, powers and authorities whatsoever, granted or purported to be granted by the said Letters Patent to the said Governor and Company within Rupert's Land, and which shall have been so surrendered, shall be absolutely extinguished: Provided that nothing in the said Act contained shall prevent the said Governor and Company from continuing to carry on in Rupert's Land or elsewhere trade and commerce.

And whereas Her said Majesty Queen Victoria and the said Governor and Company have agreed to terms and conditions upon which the said Governor and Company shall surrender to Her said Majesty, pursuant to the provisions in that behalf in the Rupert's Land Act, 1868, contained, all the rights of Government and other rights, privileges, liberties, franchises, powers and authorities, and all the lands and territories (except and subject as in the said terms and conditions expressed or mentioned) granted or purported to be granted by the said Letters Patent, and also all similar rights which have been exercised or assumed by the said Governor and Company in any parts of British North America not forming part of Rupert's Land, or of Canada, or of British Columbia, in order and to the intent that after such surrender has been effected and accepted under the provisions of the last mentioned Act the said Rupert's Land may be admitted into the Union of the Dominion of Canada, pursuant to the hereinbefore mentioned Acts or one of them. And whereas the said terms and conditions on which it has been agreed that the said Surrender is to be made by the said Governor and Company (who are in the following articles designated as the Company) to Her said Majesty are as follows, that is to say:—

1. The Canadian Government shall pay to the Company the sum of £300,000 sterling when Rupert's Land is transferred to the Dominion of Canada.
2. The Company to retain all the posts or stations now actually possessed and occupied by them or their officers or agents whether in Rupert's Land, or any other part of British North America, and may within twelve months after the acceptance of the said surrender select a block of land adjoining each of their posts or stations within any part of British North America, not comprised in Canada and British Columbia in conformity, except as regards the Red River Territory, with a list made out by the Company and communicated to the Canadian Ministers, being the list in the annexed Schedule. The actual survey is to be proceeded with, with all convenient speed.
3. The size of each block is not to exceed in the Red River Territory an amount to be agreed upon between the Company and the Governor of Canada in Council.
4. So far as the configuration of the country admits, the blocks shall front the river or road by which means of access are provided, and shall be approximately in the shape of parallelograms, and of which the frontage shall not be more than half the depth.
5. The Company may, at any time within fifty years after such acceptance of the said surrender, claim in any township or district within the fertile belt in which land

is set out for settlements, grants of land not exceeding one-twentieth of the land so set out; the blocks so granted to be determined by lot, and the Company to pay a rateable share of the survey expenses, not exceeding 8 cents Canadian an acre. The Company may defer the exercise of their right of claiming their proportion of each township or district for not more than ten years after it is set out, but their claim must be limited to an allotment from the lands remaining unsold at the time they declare their intention to make it.

6. For the purpose of the last Article the fertile belt is to be bounded as follows: On the south by the United States' boundary; on the west by the Rocky Mountains; on the north by the Northern Branch of the Saskatchewan River; on the east by Lake Winnipeg, the Lake of the Woods, and the waters connecting them.

7. If any township shall be formed abutting on the north bank of the Northern branch of the Saskatchewan River, the Company may take their one-twentieth of any such township, which, for the purpose of this Article, shall not extend more than five miles inland from the river, giving to the Canadian Dominion an equal quantity of the portion of land coming to them of townships established on the southern bank of the said river.

8. In laying out any public roads, canals, or other public works, through any block of land reserved to the Company, the Canadian Government may take without compensation such land as is necessary for the purpose, not exceeding one twenty-fifth of the total acreage of the block; but if the Canadian Government require any land which is actually under cultivation, which has been built upon, or which is necessary for giving the Company's servants access to any river or lake, or as a frontage to any river or lake, the said Government shall pay to the Company the fair value of the same, and shall make compensation for any injury done to the Company or their servants.

9. It is understood that the whole of the land to be appropriated within the meaning of the last preceding clause, shall be appropriated for public purposes.

10. All titles to land up to the eighth day of March, one thousand eight hundred and sixty-nine, conferred by the Company, are to be confirmed.

11. The Company is to be at liberty to carry on its trade without hindrance in its corporate capacity, and no exceptional tax is to be placed on the Company's land, trade, or servants, nor any import duty on goods introduced by the said Company previously to such acceptance of the said surrender.

12. Canada is to take over the materials of the electric telegraph at cost price; such price including transport, but not including interest for money, and subject to a deduction of ascertained deterioration.

13. The Company's claim to land under an agreement of Messrs. Vankoughnet and Hopkins is to be withdrawn.

14. Any claims of Indians to compensation for lands required for purposes of settlement shall be disposed of by the Canadian Government in communication with the Imperial Government; and the Company shall be relieved of all responsibility in respect of them.

And whereas the surrender hereinafter contained is intended to be made in pursuance of the agreement, and upon the terms and conditions hereinbefore stated.

Now know ye, and these presents witness, that, in pursuance of the powers and provisions of the Rupert's Land Act, 1868, and on the terms and conditions aforesaid, and also on condition of this surrender being accepted pursuant to the provisions of that Act, the said Governor and Company do hereby surrender to the Queen's Most Gracious Majesty, all the rights of Government, and other rights, privileges, liberties, franchises, powers, and authorities, granted or purported to be granted to the said Governor and Company by the said recited Letters Patent of His Late Majesty King Charles the Second; and also all similar rights which may have been exercised or assumed by the said Governor and Company in any parts of British North America, not forming part of Rupert's Land or of Canada, or of British Columbia, and all the lands and territories within Rupert's Land (except and subject as in the said terms and conditions mentioned) granted or purported to be granted to the said Governor and Company by the said Letters Patent. In witness whereof, the Governor and Company of Adventurers of England trading into Hudson's Bay, have hereto caused their Common Seal to be affixed, the nineteenth day of November, one thousand eight hundred and sixty-nine.

THE SCHEDULE ABOVE REFERRED TO,  
NORTHERN DEPARTMENT, RUPERT'S LAND.

DISTRICT.	POST.	ACRES OF LAND.
English River. . . . .	Isle à la Crosse. . . . .	50
	Rapid River. . . . .	5
	Portage La Loche. . . . .	20 { say 10 acres each end of portage.
	Green Lake. . . . .	100
	Cold Lake. . . . .	10
	Deer's Lake. . . . .	5
		— 190 acres in English river.
Saskatchewan. . . . .	Edmonton House. . . . .	3,000
	Rocky Mountain House. . . . .	500
	Fort Victoria. . . . .	3,000
	St. Paul. . . . .	3,000
	Fort Pitt. . . . .	3,000
	Battle River. . . . .	3,000
	Carleton House. . . . .	3,000
	Fort Albert. . . . .	3,000
	Whitefish Lake. . . . .	500
	Lac La Biche. . . . .	1,000
	Fort Assiniboine. . . . .	50
	Lesser Slave Lake. . . . .	500
	Lac Ste. Anne. . . . .	500
	Lac La Non. . . . .	500
	St. Albert. . . . .	1,000
Cumberland. . . . .	Pigeon Lake. . . . .	100
	Old White Mud Fort. . . . .	50
		— 25,700 acres in Saskat- chewan District.
	Cumberland House. . . . .	100
	Fort La Corne. . . . .	3,000
	Pelican Lake. . . . .	50
	Moose Woods. . . . .	1,000
	The Pas. . . . .	25
	Moose Lake. . . . .	50
	Grand Rapid Portage. . . . .	100 { 50 acres at each end of portage. — 4,325 acres in Cumber- land District.
Swan River. . . . .	Fort Pelly. . . . .	3,000
	Fort Ellice. . . . .	3,000
	Qu'Appelle Lakes. . . . .	2,500
	Touchwood Hills. . . . .	500
	Shoal River. . . . .	50
	Manitobah. . . . .	50
	Fairford. . . . .	100
Red River. . . . .		— 9,200 acres in Swan River District.
	Upper Fort Garry and Town of Winnipeg. . . . .	{ Such number of acres as may be agreed upon between the Company and the Governor of Canada in Council.
	Lower Fort Garry (in- cluding the farm the Company now have under cultivation). . . . .	
	White Horse Plain. . . . .	
Manitobah Lake. . . . .	Oak Point. . . . .	50
Portage La Prairie. . . . .		1,000
		— 1,050



Lac La Peine. . . . .	Fort Alexander. . . . .	500	
	Fort Francis. . . . .	500	
	Eagle's Nest. . . . .	20	
	Big Island. . . . .	20	
	Lac Du Bonnet. . . . .	20	
	Rat Portage. . . . .	50	
	Shoal Lake. . . . .	20	
	Lake of the Woods. . . . .	50	
	Whitefish Lake. . . . .	20	
	English River. . . . .	20	
	Hungry Hall. . . . .	20	
	Trout Lake. . . . .	20	
	Clear Water Lake. . . . .	20	
	Sandy Point. . . . .	20	
		—	1,300 acres in Lac La Peine District.
York. . . . .	York Factory. . . . .	100	
	Churchill. . . . .	10	
	Severn. . . . .	10	
	Trout Lake. . . . .	10	
	Oxford. . . . .	100	
	Jackson's Bay. . . . .	10	
	God's Lake. . . . .	10	
	Island Lake. . . . .	10	
		—	260
Norway House. . . . .	Norway House. . . . .	100	
	Beren's River. . . . .	25	
	Grand Rapid. . . . .	10	
	Nelson's River. . . . .	10	
		—	145
Total in Northern Department. . . . .			42,170 acres.

## SOUTHERN DEPARTMENT, RUPERT'S LAND.

DISTRICT.	POST.	ACRES OF LAND.	
Albany. . . . .	Albany Factory. . . . .	100	
	Martin's Falls. . . . .	10	
	Osnaburg. . . . .	25	
	Lac Seul. . . . .	500	
		—	635
East Main. . . . .	Little Whale River. . . . .	50	
	Great Whale River. . . . .	50	
	Fort George. . . . .	25	
		—	125
Moose. . . . .	Moose Factory. . . . .	100	
	Hannah Bay. . . . .	10	
	Abitibi. . . . .	10	
	New Brunswick. . . . .	25	
		—	145
Rupert's River. . . . .	Rupert's House. . . . .	50	
	Mistassing. . . . .	10	
	Temiskamay. . . . .	10	
	Woswouaby. . . . .	10	
	Mechiskun. . . . .	10	
	Pike Lake. . . . .	10	
	Nitchequon. . . . .	10	
	Kamapiscun. . . . .	10	
		—	120
Kinogamissee. . . . .	Matawaganique. . . . .	50	
	Kuckatoosh. . . . .	10	
		—	60
Total in Southern Department. . . . .			1,085 acres.

## MONTREAL DEPARTMENT, RUPERT'S LAND.

DISTRICT.	POST.	ACRES OF LAND.
Superior.. . . .	Long Lake.. . . .	10
Temiscamingue.. . . .	Kakabecagino.. . . .	10
		20
Labrador.. . . .	Fort Nascoptic.. . . .	75
	Outposts, ditto.. . . .	25
	Fort Chimo (Ungava).. . . .	100
	South River, Outposts.. . . .	30
	George's River.. . . .	50
	Whale River.. . . .	50
	North's River.. . . .	25
	False River.. . . .	25
		380

Total in Montreal Department..400 acres.

## NORTHERN DEPARTMENT, NORTH WEST TERRITORY.

DISTRICT.	POST.	ACRES OF LAND.
Athabasca .. . . .	Fort Chippewyan.. . . .	10
	Fort Vermilion.....	500
	Fort Dunevegan.. . . .	50
	Fort St. John's.. . . .	20
	Forks of Athabaska River	10
	Battle River.. . . .	5
	Fond Du Lac.. . . .	5
	Salt River.. . . .	5
		605 acres in Athabasca District.
McKenzie River.. . . .	Fort Simpson.. . . .	100
	Fort Liard.. . . .	300
	Fort Nelson.....	200
	The Rapids.. . . .	100
	Hay River.. . . .	20
	Fort Resolution.. . . .	20
	Fort Rae.. . . .	10
	Fond du Lac.. . . .	10
	Fort Norman.. . . .	10
	Fort Good Hope.. . . .	10
	Peel's River.. . . .	10
	Lapierre's House.. . . .	10
	Fort Halkett.. . . .	100
		900 acres in McKenzie River District.

Total in North West Territory.... 1,505 acres.

## RECAPITULATION.

	ACRES.
Northern Department, Rupert's Land.. . . .	42,170
Southern do do .. . . .	1,035
Montreal do do .. . . .	400
Northern Department, North West Territory.. . . .	1,505
	45,160

## APPENDIX E

Other Federal Legislation Having Land Use Connotations(1) The Northern Inland Waters Act (1970), 18-19 Eliz.II, c.66

The objective of this Act is (Section 9): "to provide for the conservation, development and utilization of the water resources of the Yukon Territory and the Northwest Territories in a manner that will provide the optimum benefit therefrom for all Canadians and for the residents of the Yukon Territory and the Northwest Territories in particular". The Act requires the Minister of Indian Affairs and Northern Development to appoint a Board in each territory together with the necessary staff to administer water licences and to designate water quality standards in water management areas defined under the Regulations.

If a licensee can show sufficient reason for needing certain lands for his undertaking and is unsuccessful in acquiring them the Minister under Section 24 may grant the licensee permission to expropriate.

24(1): "A licensee may apply to the appropriate board for permission from the Minister to enter upon, use, occupy, take and acquire any lands or any interest therein, and where the Minister, on the recommendation of the board, is satisfied that

(a) such lands or interest are reasonably required by such

licencee for use in relation to the appurtenant undertaking, and

(b) the licensee has made reasonable efforts to acquire such lands or interest and has been unable to do so and it is in the public interest that such permission be granted to him,

the Minister may, in writing, grant such permission; and thereupon Sections 156 to 184 of the Railway Act, insofar as they are reasonably applicable and not inconsistent with this Act, apply."

Under this Act the Governor in Council may reserve certain territorial lands from disposition (e.g., under the Territorial Lands Act) under Section 27. "The Governor in Council may, by order, reserve from disposition under any enactment relating to the disposition of territorial lands, either for a specified period or otherwise, all or any interests in any territorial lands under the control, management and administration of the Minister where such interests are in his opinion required

(a) for the protection of any water resource; or

(b) in connection with any undertaking the development or operation of which is, in his opinion, in the public interest and would require the use of those interests in lands and of waters adjacent to such lands.

(2) The Canada Wildlife Act. S.C.1973, c.21

Under this Act the Governor in Council, where he is satisfied that any public lands<sup>(1)</sup> are required for wildlife research, conservation or interpretation, may assign the administration, management and control of such lands to the Minister of the Environment (Section 4.1).

Where the administration, management and control of such public lands have been assigned the Minister may

(a) take charge of all wildlife research facilities operated on such lands;

(b) provide advice relating to any wildlife research, conservation, and interpretation being carried out on such lands;

(c) carry out measures for the conservation of wildlife on such lands not inconsistent with any law respecting wildlife in the province in which the lands are situated and subject to such regulations as the Governor in Council may make in that behalf; and

(d) establish facilities or construct, ~~maintain and operate~~

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(1) Public lands are defined under the Act as being lands belonging to Her Majesty in right of Canada (for example federal lands in the two territories) or of which the Government of Canada has, subject to the terms of any agreement between it and the government of the province in which the land is situated, power to dispose.

works for wildlife research, conservation and interpretation on such lands subject to such regulations as the Governor in Council may make in that behalf.

(3) The National Parks Act, R.S. c.N-13, amended by 1974, c.11.

The purpose of National Parks is stated in Section 4 of the Act as follows: "The Parks are hereby dedicated to the people of Canada for their benefit, education and enjoyment, subject to the provisions of this Act and the regulations, and such Parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations".

3.1(1) "...the Governor in Council may, by proclamation, amend the schedule by adding to any park described therein lands described in the proclamation where the Governor in Council is satisfied that

(a) clear title to the lands described in the proclamation is vested in Her Majesty in right of Canada..."

6(1) Public lands within the parks shall not be disposed of or located or settled upon, and no person shall use or occupy any part of such lands, except under the authority of this Act or the regulations.

(2) The Governor in Council may authorize the sale, lease or other disposition of public lands within a park when such lands are

required for

(a) the right-of-way or station grounds of any railway;

(b) the right-of-way of an oil or gas pipeline or any tanks, reservoirs, pumps, racks, loading facilities or other facilities connected with an oil or gas pipeline; or

(c) the right-of-way of telephone, telegraph or electrical transmission lines and any exchange, office, substation or other appurtenance connected therewith;

but such lands, subject to the use for which they are sold, leased or otherwise disposed of, shall still be part of the park within which they are situated and if any such lands cease to be used for the purpose for which they were so sold, leased or otherwise disposed of, they thereupon revert to the Crown.

(3) The Governor in Council may authorize the Minister to purchase, expropriate or otherwise acquire any lands or interests therein for the purposes of a park.

(4) The Expropriation Act applies to any expropriation proceedings taken under this section. R.S., c.N-13, s.6; 1974, c.11, s.2.1.

10. The Governor in Council may set apart any land the title to which is vested in Her Majesty, as a National Historic Park to

(a) commemorate an historic event of national importance, or

(b) preserve any historic landmark or any object of historic, prehistoric or scientific interest of national importance,

and may from time to time make any changes in the areas so set apart that he may consider expedient. R.S., c.189, s.10.

11. (1) Subject to subsection (2), the Governor in Council may, after consultation with the Council of the Yukon Territory or the Council of the Northwest Territories, as the case may be, by proclamation, set aside as a reserve for a National Park of Canada, pending a settlement in respect of any right, title or interest of the people of native origin therein, the lands described in Part I, II or III of Schedule V to this Act or any lands within the boundaries of the lands described in Part I, II or III of that Schedule, and upon the issue of a proclamation under this subsection, notwithstanding any other Act of the Parliament of Canada, and save for the exercise therein by the people of native origin of the Yukon Territory or Northwest Territories of traditional hunting, fishing and trapping activities, the National Parks Act applies to the reserve so set aside as it applies to a park as therein defined...

(3) Following a settlement in respect of any right, title or interest of the people of native origin in lands set aside as a reserve by proclamation issued under subsection (1), the Governor in Council may, by further proclamation, set aside such lands, or any portion thereof, as a National Park of Canada, and upon the issue of a proclamation under this subsection, notwithstanding any other Act of the



Parliament of Canada but subject to the terms of any such settlement, the National Parks Act applies to the National Park of Canada so set aside as it applies to a park as therein defined."

## NORTHWEST TERRITORIES

Mineral	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974(a)	Cumulative Totals(b)
Gold . . . . . \$	17,071,580	15,990,133	14,356,476	13,285,459	12,381,240	12,168,776	10,897,934	17,713,250	24,262,894	27,634,000	371,830,307
ounces	452,479	424,029	380,304	352,306	328,502	332,844	308,339	307,479	249,075	177,000	
Silver . . . . . \$	1,490,754	2,325,407	3,429,755	8,677,365	3,910,888	5,114,587	4,574,616	6,778,965	13,691,789	19,621,000	71,557,598
ounces	1,064,824	1,662,192	1,980,228	3,751,563	2,026,367	2,764,642	2,932,446	4,059,261	5,420,344	4,252,000	
Copper . . . . . \$	354,342	672,065	538,077	833,169	643,761	766,578	727,595	577,416	1,106,319	1,190,000	8,835,271
pounds	942,400	1,496,805	1,131,126	1,732,160	1,251,723	1,320,502	1,378,021	1,133,767	1,734,178	1,528,000	
Nickel . . . . . \$	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12,850,205
pounds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Lead . . . . . \$	25,677,695	31,472,562	35,665,535	33,636,984	32,299,014	37,842,405	22,629,795	27,838,277	32,261,787	37,977,000	318,124,323
pounds	165,662,547	210,659,720	254,753,820	250,275,180	212,913,740	239,206,099	167,628,110	180,439,960	199,887,160	183,464,000	
Zinc . . . . . \$	28,596,474	57,128,344	60,852,900	57,504,129	68,275,481	76,004,563	75,056,384	64,792,006	87,541,226	136,467,000	713,329,523
pounds	189,380,626	378,333,400	419,964,800	407,830,700	448,296,000	477,115,900	448,633,500	339,741,000	362,549,600	391,025,000	
Pitchblende(d) . . . . . \$	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79,477,897
pounds	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Cadmium . . . . . \$	516,635	2,769,372	2,551,920	774,060	675,136	737,632	301,476	205,436	61,152	158,000	8,750,819
pounds	185,840	1,073,400	911,400	271,600	191,800	207,200	155,400	81,200	16,800	40,000	
Bismuth . . . . . \$	.....	.....	.....	.....	.....	3,072	41,149	.....	.....	.....	44,221
pounds	.....	.....	.....	.....	.....	490	7,578	.....	.....	.....	
Tungsten . . . . . \$	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
pounds	.....	.....	.....	.....	.....	.....	3,288,400	3,174,120	3,228,600	3,544,000	
TOTAL . . . . . \$	73,707,480	110,357,883	117,394,663	114,711,166	118,185,520	132,637,613	114,228,949	117,905,350	158,925,167	223,047,000	1,584,800,174
<b>YUKON TERRITORY</b>											(c)
Gold . . . . . \$	1,698,975	1,639,103	675,725	911,338	1,118,715	653,034	511,534	234,983	2,032,502	4,130,000	274,680,855
ounces	45,031	43,466	17,900	24,167	29,682	17,862	14,473	4,079	20,865	26,000	
Silver . . . . . \$	6,462,393	5,868,217	6,701,756	4,806,384	5,182,166	7,845,312	8,966,417	8,331,575	15,342,856	28,420,000	207,143,090
ounces	4,615,995	4,194,580	3,869,374	2,077,987	2,685,060	4,240,709	5,747,703	4,988,967	6,073,973	6,158,000	
Lead . . . . . \$	2,766,953	2,386,684	2,141,959	970,629	4,256,183	20,830,196	29,340,379	34,392,366	38,013,324	44,010,000	227,139,267
pounds	17,851,309	15,975,125	15,299,709	7,221,940	28,056,581	131,670,010	217,336,142	222,921,742	235,522,452	212,609,000	
Copper . . . . . \$	.....	.....	3,409,779	5,097,157	7,645,623	9,148,995	2,709,696	890,286	14,791,665	17,605,000	64,399,984
pounds	.....	.....	7,167,919	10,597,000	14,866,077	15,760,000	5,132,000	1,748,093	23,186,245	22,600,000	
Coal . . . . . \$	85,626	46,390	15,791	.....	.....	.....	.....	.....	.....	.....	2,567,132
tons	8,801	5,670	1,912	.....	6,039	10,908	21,026	.....	.....	.....	
Zinc . . . . . \$	2,000,396	1,729,027	1,373,151	748,206	5,035,385	24,845,216	39,003,342	45,241,287	61,167,027	68,576,000	278,353,881
pounds	13,247,653	11,450,510	9,476,545	5,306,429	33,062,280	155,964,948	233,134,144	237,225,560	253,321,575	183,344,000	
Cadmium . . . . . \$	386,192	306,336	265,997	147,716	239,965	261,528	114,654	82,759	45,718	.....	6,344,235
pounds	138,918	118,735	94,999	51,830	68,172	73,463	59,100	32,711	12,560	.....	
Asbestos . . . . . \$	.....	.....	406,371	8,684,125	11,924,526	13,927,652	12,374,380	13,006,476	13,915,140	22,300,000	96,538,670
tons	.....	.....	2,260	63,592	87,437	105,638	91,969	101,888	100,734	90,000	
Nickel . . . . . \$	.....	.....	.....	.....	.....	.....	.....	3,996,762	5,209,621	.....	9,206,383
pounds	.....	.....	.....	.....	.....	.....	.....	2,814,621	3,404,981	.....	
Platinum . . . . . \$	.....	.....	.....	.....	.....	.....	.....	325,573	149,458	.....	475,031
ounces	.....	.....	.....	.....	.....	.....	.....	3,625	1,314	.....	
TOTAL . . . . . \$	13,400,535	11,975,757	14,990,529	21,365,555	35,402,563	77,511,933	93,020,402	106,502,067	150,667,311	185,041,000	1,166,848,528

(a) Preliminary Figures

(1) IAND records.

(b) Cumulative Totals 1932 to December 31, 1974  
(Figures for tungsten not available)(c) Cumulative Totals - 1886 to  
December 31, 1974(d) Figures for years 1932, 1943 to  
1953 not available

## APPENDIX G

Wood Utilization in the Yukon and Northwest Territories  
1961-1974

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<u>Year</u>	<u>Territory</u>	<u>Lumber (fbm)</u>	<u>Round Timber (lineal feet)</u>	<u>Fuelwood (cords)</u>
1961/62	NWT	1,049,000	584,000	1410
	YT	4,037,842	918,987	6249
1962/63	NWT	2,060,055	17,000	3741
	YT	8,096,274	2,103,375	6892
1963/64	NWT	2,271,533	50,134	3944
	YT	8,999,037	2,723,456	5902
1964/65	NWT	1,358,295	184,275	2501
	YT	6,557,695	2,308,751	8677
1965/66	NWT	2,522,947	251,268	8645
	YT	2,654,054	1,197,300	6798
1966/67	NWT	3,501,600	427,130	8295
	YT	5,213,882	1,626,296	8411
1967/68	NWT	2,365,877	436,575	8434
	YT	7,049,647	427,486	8545
1968/69	NWT	2,736,062	128,555	1023
	YT	7,680,707	1,150,690	10080
1969/70	NWT	5,089,776	295,670	1457
	YT	12,058,470	650,583	6084
1970/71	NWT	3,873,000	539,965	1763
	YT	5,459,335	710,480	5487
1971/72	NWT	1,405,000	820,000	2696
	YT	4,713,275	905,355	7449
1972/73	NWT	2,814,000	574,000	3810
	YT	7,394,000	470,000	7719
1973/74	NWT	2,328,000	532,000	1858
	YT	15,193,000	713,000	7964

## APPENDIX K

Population - Settlements in the Yukon Territory, 1966  
and 1971<sup>(1)</sup>

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<u>Settlement</u>	<u>1966</u>	<u>1971</u>
Whitehorse <sup>(2)</sup>	4,771	11,217
Faro	-	863
Dawson	742	762
Watson Lake	554	553
Mayo	479	381
Carmacks	311	348
Teslin	324	340
Ross River	173	317
Elsa	529	298
Upper Liard	148	219
Old Crow	218	206
Carcross	199	188
Haines Junction	195	183
Pelly Crossing	137	141
Beaver Creek	114	120
Watson Lake Airport	77	89
Destruction Bay	64	82
Keno Hill	144	79
Flat Creek	1	71
Burwash Landing	69	57
Stewart Crossing	28	43
Quill Creek	2	35
Swift River	40	33
Carcross Junction (M.904)	--	29
Johnson's Crossing (M.837)	--	24
Mile 5, Klondike Highway	--	21
Kloo Lake (M.1035)	--	20
Iron Creek	28	19
Tuchitua Lake	--	17
Squanga Lake (M.850)	--	17
Windid Lake	--	16
Millerville	18	16
White River (M.1169)	8	15
Lower Rancheria (M.687)	6	14
Jake's Corner (M.866)	6	14
Mile 2, Klondike Highway	--	13
Champagne (M.974)	--	13
Dominion Creek	5	12
Eagle Creek	--	12
McCabe Creek	--	12
Mile 3, Klondike Highway	--	12
Mile 1019	21	12
Donjek	13	11

<u>Settlement (Contd)</u>	<u>1966</u>	<u>1971</u>
Cowley	11	11
Other	4,870	1,042
	<hr/>	<hr/>
Total	14,382	18,388
	<hr/>	<hr/>

(1) Source: Census Division, Statistics Canada.

(2) Denotes change in boundaries since 1966.

Population - Settlements in the Northwest Territories,  
1966 and 1971<sup>(1)</sup>

<u>Settlement</u>	<u>1966</u>	<u>1971</u>
Yellowknife <sup>(2)</sup>	3,741	6,122
Inuvik	2,040	2,672
Hay River	2,002	2,420
Fort Smith	2,120	2,372
Frobisher Bay	1,631	2,014
Pine Point	459	1,225
Rae	779	1,056
Baker Lake	596	756
Fort Simpson	712	747
Cambridge Bay	511	716
Pangnirtung	376	690
Fort McPherson	654	679
Aklavik	611	677
Coppermine	536	637
Fort Resolution	677	623
Eskimo Point	464	598
Cape Dorset	357	597
Tuktoyaktuk	512	596
Fort Providence	378	587
Rankin Inlet	429	566
Igloolik	328	563
Pond Inlet	178	416
Coral Harbour	298	355
Fort Franklin	311	339
Broughton Island	201	334
Fort Good Hope	335	327
Normal Wells	199	301
Gjoa Haven	162	276
Clyde	99	274
Arctic Bay	123	269
Hall Beach	100	263
Fort Liard	177	263
Chesterfield Inlet	199	258
Fort Norman	216	248
Repulse Bay	146	242
Holman Island	179	241
Belcher Island	178	234
Snowdrift	178	221
Pelly Bay	171	215
Whale Cove	181	213
Spence Bay	247	209
Lake Harbour	97	189
Resolute Bay	254	184
Lac La Marte	125	161
Wrigley	136	152
Sachs Harbour	132	143
Tungsten	198	130

<u>Settlement</u>	<u>1966</u>	<u>1971</u>
Grise Fjord	98	109
Arctic Red River	86	108
Port Burwell	105	107
Port Radium	1	99
Paulaluk	40	95
Reindeer Station	76	--
Rae Lake	53	73
Nahanni Butte	71	66
Colville Lake	67	65
Daly Bay	59	--
Enterprise	25	56
Trout Lake	30	48
Jean Marie River	51	47
Kakisa Lake	39	42
Keepooshaw	38	33
Marian Lake Village	43	29
Camsell	--	25
Edzo	--	25
Dory Point	--	17
Marian Lake Camp	--	16
Camp Kyukjuak	--	15
Pattinson Harbour	13	--
Cape Perry	50	12
Eureka	13	10
Paradise Gardens	--	10
Snare Lake	56	9
Aston Bay	--	8
Resolution Island	18	8
Mould Bay	56	6
Hislop Lake	25	4
Rocher River	38	4
Twin Gorges	--	5
Buffalo River Junction	--	3
Nicholson Point	22	3
Salt River	7	2
Isachsen	12	2
Bell Rock	--	1
Other	2,815	530
	<hr/>	<hr/>
Total	28,738	34,807
	<hr/>	<hr/>

(1) Source: Census Division - Statistics Canada.

(2) Boundary change since 1966.

## Forms of Local Government in the Northwest Territories

## Appendix L

<u>INCORPORATED</u>	<u>COUNCIL</u>	<u>BUDGET</u>	<u>REVENUE</u>	<u>EMPLOYEES</u>	<u>CAPITAL</u>	<u>AREAS OF RESPONSIBILITIES</u>
<b>CITY:</b> Population exceeds 6000 and taxable assessment of \$2500 per capita.	Mayor and eight Aldermen.	Sets own budget.	Villages, Towns and Cities get grants from the N.W.T. Gov't. -Per Capita Grant. -Road Maintenance Grant. -Water Delivery Subsidy. -Grant in lieu of taxes (taxes paid on buildings owned by Government.) -Administrative Grants for first five years following incorporation. -Capital Grants of 50% of approval on road and sidewalk construction. -Repayable loans over lifetime of asset required for capital projects such as fire hall, water/sewer extensions, etc.  Also, Property taxes, Community Service Charge, fines, fees, licences and permits.	Has its own employees according to local needs.	It can finance capital projects by selling debentures. Recieves matching grants of 50% for roads and sidewalk constructions.	Towns and Cities have no real extra areas of responsibility over those of a Village. The difference between them and a Village lies mainly in ability to act by themselves. Villages and Hamlets must consult and get approval from the Territorial Government for many of their actions. Towns and Cities do not need Territorial Government approval for most of their actions. In order to determine exact differences, it would be necessary to refer to the Municipal Ordinance under a particular area of responsibility. The Ordinance is designed to give increasing ability to act, as a community increases its status.
<b>TOWNS:</b> Population exceeds 1000 and has a taxable land assessment of \$2500 per capita.	Mayor and eight Councillors.	Sets own budget.		Same as City.	Same as City.	
<b>VILLAGES:</b> Population of 500 and raising or about to raise revenue by land taxes.	Chairman and seven councillors.	Sets own budget in consultation with Yellowknife.		Same as City.	Same as City.	Can act under the Municipal Ordinance by resolution or by-law on all things a Hamlet can plus; debentures borrowing local improvements, buying and selling property, by-law enforcement officers and property taxes.
<b>HAMLET:</b> Petition of 25 residents and Commissioner's approval.	8 Councillors, one of whom is elected as Chairman by the others.	Sets own budget with guidelines from the Territorial Government.	Operating Grant, Community Service Charge, permits, licences, fines and fees.	Has its own employees in accordance with budget guidelines.	In form of projects carried out by Region or Yellowknife.	Can act under the Municipal Ordinance by resolution or by-law; appointment of auditor, budgets, business licences, community service charge, councillor remuneration, council procedures, domestic animals, advance poll, fire prevention, employees, garbage and municipal services, fines, grants, highways, liveries, protection of persons and property, public health, Secretary Treasurer, zoning, water supply, building regulations, census cancelling debts, civic holidays, naming and numbering streets, polling divisions, trailers, combustible or dangerous materials, and snowmobile and other relevant things.
<b>SETTLEMENT:</b> Not incorporated. Council formed on local desire.	6-8 Councillors one of whom is elected Chairman by the others.	Budget is set by Region with guidelines from settlement.	Per Capita Grant of; \$20 per person with maximum of \$12,000	None unless as a project out of the per capita grant.	In form of projects carried out by the Region or Yellowknife.	A Settlement Council is an advisory board only. While it is always consulted, it has no legal powers and may be over-ruled. On local matters the settlement council states its opinion in the form of a resolution which is then taken into consideration when the Territorial Government acts for the settlement. The council has control over its per capita grant and can conduct community projects with it.



## APPENDIX M

## Appendix M

Municipalities in the Yukon Territory<sup>(1)</sup>

<u>Type of Municipality</u>	<u>Estimated Population</u>	<u>Assessment</u>
1. Village or municipal district	over 300	over \$1.0 million
2. Town	500 to 2500	over \$2.0 million
3. City	2500 and over	over \$10.0 million

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(1) Section 8(1) Municipal Ordinance of the Yukon Territorial Government.

## APPENDIX N

Canadian Government's Northern Objectives and PrioritiesFor the 70's as Stated in March, 1972A. Objectives

- (1) To provide a higher standard of living, quality of life and equality of opportunity for northern residents by methods which are compatible with their own preferences and aspirations;
- (2) To maintain and enhance the northern environment with due consideration to economic and social development;
- (3) To encourage viable economic development within regions of the Northern Territories so as to realize their potential contribution to the national economy and the material well-being of Canadians;
- (4) To realize the potential contribution of the Northern Territories to the social and cultural development of Canada;
- (5) To further the evolution of government in the Northern Territories;
- (6) To maintain Canadian sovereignty and security in the North; and
- (7) To develop fully the leisure and recreational opportunities in Northern Territories.

B. Order of Priorities

- (1) To give rapid effect to the agreed guidelines for social improvement;

- (2) To maintain and enhance the natural environment, through such means as intensifying ecological research, establishing national parks, ensuring wildlife conservation;
- (3) To encourage and stimulate the development of renewable resources, light industries and tourism, particularly those which create job and economic opportunities for native northerners;
- (4) To encourage and assist strategic projects (key to increased economic activity in the region or Territory with solid economic and social benefits) in the development of non-renewable resources and in which joint participation by government and private interests is generally desirable;
- (5) To provide necessary support for other non-renewable resource projects of recognized benefit to northern residents and Canadians generally.

## APPENDIX O

The Historical and Legal Position of the Canadian Native with  
Respect to Aboriginal Rights\*

"Aboriginal rights are those property rights which native peoples retain as a result of their original use and occupancy of lands. These property rights have always been recognized by English and Canadian law. The theory of aboriginal rights originated at least as early as the 17th century as part of international law as viewed by Great Britain, Spain, the Netherlands and perhaps some of the other colonizing nations. The basic notion was that, although a discovering nation took sovereignty to the lands in question, the native peoples retained property rights. At law these property rights appear to be complete except for two incidents peculiar to aboriginal land rights. First, aboriginal title can only be surrendered to the Crown; that is, the native peoples cannot make a private sale as the Crown is the only entity which can extinguish the title, either by purchase or conquest (expropriation). Secondly, the concept of aboriginal title is one of communal rather than individual ownership.

Great Britain fully recognized aboriginal rights during the process of colonization of North America. The Royal Proclamation of 1763, issued following the British conquest of the French in North America, is one of the first official documents to clearly articulate this concept. It is an important addition to the law of aboriginal rights in Canada because it is a basic constitutional document in Canada's history, because it is a clear statement of Canadian law on the subject and because, subsequent to 1763,

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\*From Cumming (1973:88-91).

the procedures set forth in the Proclamation for the extinguishment of native claims were followed in obtaining more lands to meet the pressures of colonization. The Royal Proclamation, when issued, applied to all lands of British North America including those of the Hudson's Bay Company, and it is arguable, was a statement of policy and law in respect to lands which were then undiscovered, but later would come under British sovereignty.

The basic intent of the Royal Proclamation was to create a large area of land "reserved" to the Indians as their hunting grounds and to proscribe white settlement there. As pressures for land for white settlement became acute, the Proclamation provided the lands in "Indian Country" could be sold, but only to the Crown. That this procedure was closely followed is evidenced by the many treaties entered into between the Crown and the Indians in an extensive treaty-making system lasting until 1923 and covering almost all of Ontario and much of the West. The fact, too, that Canada's native peoples were to become the constitutional responsibility of the Federal Government by virtue of s.91(24) of the British North America Act is a further manifestation of the policy expressed in the Royal Proclamation toward aboriginal rights.

It must be emphasized, however, that the recognition of aboriginal rights in Canada preceded the Royal Proclamation and that it is not the exclusive source of these rights in Canada. One example of this assertion is the fact that the Hudson's Bay Company concluded a treaty with the Indians around Rupert's River as early as 1668. Throughout Canada's history there is clear recognition of aboriginal rights and indications that these rights could not be interfered with in the absence of consultation between the native peoples and the Federal Government, with compensation being paid

for the extinguishment of these rights. The following are examples of legislation, common law and executive acts which confirm this assertion:

- a) 1869-70 - The purchase of the Hudson's Bay Company's territories and the acquisition of the North-western Territory. The Federal Government accepted responsibility for any claims of the Indians to compensation for land in Rupert's Land and the North-western Territory.<sup>1</sup>
- b) 1870 - The Manitoba Act granted land to settle the Metis' aboriginal claims.<sup>2</sup>
- c) 1871-1930 - The numbered treaties and their adhesions speak of the Indians conveying land to the Crown. As the Order-in-Council for Treaty No. 10 demonstrates, the treaty-making was done with a concept of aboriginal title clearly in mind:

On a report dated 12th July, 1906 from the Superintendent General of Indian Affairs, stating that the aboriginal title has not been extinguished in the greater portion of that part of the Province of Saskatchewan which lies north of the 54th parallel of latitude and in a small adjoining area in Alberta...that it is in the public interest that the whole of the territory included within the boundaries of the Province of Saskatchewan and Alberta should be relieved of the claims of the aborigines; and that \$12,000 has been included in the estimates for expenses in the making of a treaty with Indians and in settling the claims of the half-breeds and for paying the usual gratuities to the Indians.<sup>3</sup>

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<sup>1</sup> The deed of surrender is reprinted in R.S.C. 1970, Appendices, pp.257-77. (See also Appendix A.)

<sup>2</sup> S.C.1870, c.3, s.31.

<sup>3</sup> Treaty No. 10 and Reports of Commissioners, Ottawa: Queen's Printer, 1966, p.3.

- d) 1872 - The first Dominion Act dealing with the sale of Crown land.

Section 42 stated:

None of the provisions of this Act respecting the settlement of Agricultural lands, or the lease of Timber lands, or the purchase and sale of Mineral lands, shall be held to apply to territory the Indian title to which shall not at the time have been extinguished.<sup>4</sup>

This provision remained in the various Dominion Lands Acts until 1908.

- e) 1875 - The Federal Government disallowed "An Act to Amend and Consolidate the Laws Affecting Crown Lands in British Columbia" stating "There is not a shadow of doubt, that from the earliest times, England has always felt it imperative to meet the Indians in council, and to obtain surrenders of tracts of Canada, as from time to time such were required for the purposes of settlements."<sup>5</sup> As authority, the Deputy Minister of Justice cites the 40th article of The Articles of Capitulation of Montreal and the Royal Proclamation of 1763.<sup>6</sup>
- f) 1876 - Speech of Governor-General Dufferin in Victoria strongly upholding the concept of Indian title and criticizing the British Columbia Government.<sup>7</sup>

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<sup>4</sup> S.C. 1872, c.23.

<sup>5</sup> W.E. Hodgins, Dominion and Provincial Legislation, 1867-1895, Ottawa: Government Printing Bureau, 1896.

<sup>6</sup> Ibid.

<sup>7</sup> The speech may be found in G. Stewart, Canada Under the Administration of the Earl of Dufferin, Toronto: Rose-Belford Publishing Co., 1879, pp.491-93.

- g) 1879 - The Dominion Lands Act authorized the granting of land in the Northwest Territories to satisfy "any claims existing in connection with the extinguishment of the Indian title, preferred by half-breeds..."<sup>8</sup>
- h) 1888 - In the case of St. Catherine's Milling and Lumber Co. v. The Queen<sup>9</sup> the Federal Government argued that it obtained a full title to land from the Indians by Treaty no. 3.
- i) The Federal-Provincial Agreements which followed the decision in the St. Catherine's case sometimes employed the following "whereas" clause (taken from the 1924 Ontario Agreement): "Whereas from time to time treaties have been made with the Indians for the surrender for various considerations of their personal and usufructuary rights to territories now included in the Province of Ontario..."
- j) 1889 - The Federal Government disallowed the Northwest Territories Game Ordinance because it violated Indian treaty hunting rights.<sup>10</sup>
- k) 1912 - In the boundaries extension legislation for both Ontario and Quebec, the Federal Government made a special provision requiring treaties with the Indians.<sup>11</sup>

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<sup>8</sup> S.C. 1879, c.31, s.125(e).

<sup>9</sup> (1889), 14 App. Cas. 46, p.54.

<sup>10</sup> Reprinted in S.C. 1891, p.lxi.

<sup>11</sup> S.C. 1912, c.40, s.20(a) (Ontario); S.C. 1912, c.45, s.2(c) (Quebec).



1) 1930 - British North America Act. This act transferred the ownership of natural resources to the prairie provinces. In each of the provinces the Indians are protected in their right "of hunting, trapping, and fishing game and fish for food at all seasons of the year on all unoccupied Crown lands and on any other lands to which the said Indians may have a right to access."<sup>12</sup>

m) 1946 - The evidence of M.R.A. Hoey, Director of the Indian Affairs Branch, May 30, 1946, before the Joint Committee of the Senate and House of Commons:

From the time of the first British settlement in New England, the title of the Indians to lands occupied by them was conceded and compensation was made to them for the surrender of their hunting grounds... this rule, which was confirmed by the Royal Proclamation of October 7, 1763, is still adhered to.<sup>13</sup>

n) 1946 - The evidence of Mr. T.R.L. MacInnes, Secretary, Indian Affairs Branch, June 4, 1946:

Now it remained for the British to recognize an Indian interest in the soil to be extinguished only by bilateral agreement for a consideration. That practice arose very early in the contracts between the British settlers and the aborigines in North America, and it developed into the treaty system which has been the basis of Indian policy both in British North America and continuing on after the revolutionary war in the United States.<sup>14</sup>

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<sup>12</sup> R.S.C. 1970, Appendices, pp.371, 380-81, and 388-89.

<sup>13</sup> Minute No. 1, p.31.

<sup>14</sup> Joint Committee of the Senate and House of Commons, Minute No. 2, p.54.

- o) 1966 - The Canadian Indian, a pamphlet published by the Department of Indian Affairs, states: "Early in the settlement of North America, the British recognized Indian title or interests in the soil to be parted with or extinguished by agreement with the Indians and then only to the Crown."<sup>15</sup>
- p) 1971 - The Dorion Commission Report expressly recognizes aboriginal rights, urges an expansive view of the content of aboriginal title and acknowledges the need to compensate native peoples for the extinguishment of their native rights.<sup>16</sup>
- 1973 - Judgement of Morrow, J. (supra 99).

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<sup>15</sup> Department of Indian Affairs and Northern Development, The Canadian Indian, Ottawa: Queen's Printer, 1966, p.3.

<sup>16</sup> Rapport de la Commission d'Etude sur l'Integrite du Territoire du Quebec: le Domaine Indien, Quebec: 1971, Vol. IV, 1, pp.389-97.

## APPENDIX 'P

Education North of 60

As the church established its missions in the north, beginning in the Mackenzie Valley in the 1850's, it also undertook to provide classroom instruction.<sup>(1)</sup> That the church continued in this role over an extended period of time is illustrated by the fact that as recently as 1947, 549 of the 730 registered pupils in the Northwest Territories attended church operated schools.<sup>(2)</sup> Similarly, in the Yukon Territory, the responsibility for the education of all Indian children lay with the Roman Catholic and Anglican churches and the Baptist Missionary Society until 1948.<sup>(3)</sup>

In 1955, the Department of Northern Affairs and National Resources launched a major school program to build schools and pupil residences throughout the Northwest Territories. Between 1955 and 1965 the number of federal schools increased from 10 to 51 and the number of students from 2018 to 7196 (see Table 1). The pupil

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(1) p.63.

(2) Canadian Department of Mines and Resources, Annual Report, 1947.

(3) The Yukon Today, IAND publication no. R29-7268, Ottawa, 1968.

residences, which in most cases were operated for the department<sup>(4)</sup> by the church numbered 17 in 1965, accommodating over 1500 pupils.

TABLE P-1

Pupil Enrolment, Northwest Territories, Selected Years

<u>Year</u>	<u>Inuit</u>	<u>Indian</u>	<u>Other</u>	<u>Total</u>
1955	380	618	1020	2018
1965	2987	1285	2924	7196
1973	4600	1768	5624	11992

Source: Department of Education, Government of the Northwest Territories, Annual Report, 1973.

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- (4) By 1973 there were six school residences owned by the Government of the Northwest Territories (education is a territorial government responsibility in both territories today) and operated under agreement with the church:
- Grollier Hall, Inuvik, 200 bed, Roman Catholic;
  - Stringer Hall, Inuvik, 250 bed, Anglican;
  - Fleming Hall, Fort McPherson, 100 bed, Anglican;
  - Akaitcho Hall, Yellowknife, 200 bed, inter-denominational;
  - Breynat Hall, Fort Smith, 100 bed, inter-denominational;
  - Ukkivik Residence, Frobisher Bay, 400 bed, inter-denominational.
- There are also 12-bed student hostels located in Cambridge Bay, Fort Good Hope and Fort Liard, which are staffed by native couples, supervised by the local school principal, for younger students whose parents go out for short periods to hunt, fish and trap.

TABLE P-2Pupil enrolment, Yukon Territory, selected years

<u>Year</u>	<u>Number of pupils</u>
1934	177
1947	432
1949	500
1957	1754
1966	3144
1973	4670

By 1971, nearly 83 per cent of the territories' local population between the ages of five and 19 years was enrolled in school (see Table 3). Between the years 1967 and 1973 the number of students from the Northwest Territories enrolled in Canadian universities increased from 67 to 161.

TABLE P-3

Student enrolment, Yukon Territory and Northwest Territories  
as a percentage of the total population between five and 19 years

	<u>Northwest Territories</u>		<u>Yukon Territory</u>	
	<u>1966</u>	<u>1971</u>	<u>1966</u>	<u>1971</u>
Total popn. (5-19 yrs.)	9426	12458	4302	5695
Total school enrolment	7196	10334	3144	4717
Proportion students/total popn. (per cent)	76.3	82.9	73.1	82.8

The inequality of earnings between ethnic groups in the north<sup>(5)</sup> can no doubt be attributed to several factors, however there appears to be a significant relationship between formal schooling and earning power. An analysis of 4582 males, 14 years of age and over in the Mackenzie District of the Northwest Territories by Kuó (1972:10) showed that Indians benefited at all levels of formal education in terms of earning power. In the case of Inuit and non-natives there is no relationship between education in elementary school and earnings but there is a high correlation between earnings and education only after they entered secondary school. For the Metis, education in elementary and secondary school had no significant influence on their earnings (see Table 4).

University, college and technical institute training all had a substantial effect on incomes within each ethnic group as did 'apprenticeship and journeyman' training with all of the native groups and 'nursing and other vocational training' with the Indian, Inuit and non-native groups.

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(5) In 1969/70 the per capita income of non-natives in the N.W.T. was approximately \$3,500 compared with \$900 for natives.

TABLE P-4General Characteristics of Male Workers by EthnicOrigin, District of Mackenzie, Northwest Territories - 1970

	<u>Indian</u>	<u>Inuit</u>	<u>Metis</u>	<u>Non-Native</u>
(1) sample size	1281	344	302	2655
(2) annual earnings per worker (\$)	1301	2662	3253	8387
(3) workers with no education (%)	4.8	36	18	3
(4) average years of day school	3.6	4.8	6.6	10.2
(5) university, college and technical institute (%)	.6	.9	2.6	23.9
(6) nursing, teacher's college, other vocational school (%)	3.1	3.8	8.9	19.7
(7) apprenticeship and journeyman (%)	2.9	4.1	11.3	22.2

Source: Kuo (1972)

One of the objectives of the comprehensive education program launched in 1955 for the Northwest Territories was the development of out-of-school training and general education programs for young people beyond school age and adults who had had no previous exposure to formal education or training. As a result the Vocational Education and Adult Education Programs were established. In 1971/72 there were 1415 people

enrolled in vocational training programs in the Northwest Territories (see Table 5).

TABLE P-5

Summary of Enrolment in Northwest Territorial Vocational  
Education Program by Ethnic Origin, 1971/72

	<u>Inuit</u>	<u>Indian</u>	<u>Other</u>	<u>Total</u>
Full time in school	432	211	108	751
Correspondence courses	3	2	3	8
Adult evening classes	46	65	316	427
Training-on-the-job	1	5	6	12
Training outside of N.W.T.	<u>112</u>	<u>32</u>	<u>73</u>	<u>217</u>
Total	594	315	506	1415

Source: Annual Report, N.W.T. Government, 1971/72.

There were approximately 500 adults and young people over the age of 17 enrolled in a similar program in the Yukon Territory during 1971/72.<sup>(6)</sup>

An important part of the vocational program in each territory is the apprenticeship program. In 1972 there were 160 persons registered as apprentices in the Northwest Territories, of which 32

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<sup>(6)</sup> Annual Report of the Commissioner, Yukon Territory, 1971/72.



per cent were native. (7)

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(7) Annual Report, N.W.T. Government, 1971/72.











