

"WILD WEDGE": The Loss of Wilderness in the Southern Lakes Region,
Yukon Territory

by

Ernest Bruce Halhad Shelvey
B.A., University of Victoria, 1990

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF ARTS

in the Department of History

We accept this thesis as conforming to the required standard

Dr. Kenneth S. Coates, Co-Supervisor (Department of History)

Dr. Ian MacPherson, Co-Supervisor (Department of History)

Dr. Brian W. Dippie, Departmental Member (Department of History)

Dr. Victoria Wyatt, Outside Member (Department of History in Art)

Dr. Nancy Turner, External Examiner (Environmental Studies Program)

© Ernest Bruce Halhad Shelvey, 1992

University of Victoria

All rights reserved. This thesis may not be reproduced in whole or in part,
by mimeograph or other means, without the permission of the author.


Supervisors: Dr. Ken Coates and Dr. Ian MacPherson


ABSTRACT

The "Wild Wedge" is one of the few places left in the Southern Lakes region, Yukon Territory to remain as a wilderness in the minds of the resident population. Bordered by roads, it has experienced much attention in the last one hundred years from fur traders, big game hunters, miners, loggers and other forces of development. Although its appearance is one of a wilderness area, a closer look reveals the scars of visible and invisible forces of change which have transformed the area for more than a century. In this study, an attempt has been made to go behind the facade of our common conceptions about wilderness areas and expose the realities of the northern "wilderness".

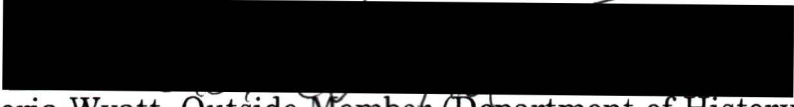
The first chapter outlines the forces of change at work on the landscape of the Southern Lakes region. The second chapter examines the visible impact of development based industries. The third chapter completes the study by analyzing the invisible impact of resource extraction and activities which accompany development. In conclusion, the thesis explores the concept of "wilderness" in relationship to the Southern Lakes region and illustrates how the transformation of the environment over the last one hundred years of development has stripped the Southern Lakes region of its "wilderness". The "Wild Wedge" is significant because it represents a misconception about the environment, which not only Northerners, but Canadians in general, hold of northern and peripheral regions.

Examiners:


Dr. Kenneth S. Coates, Co-Supervisor (Department of History)


Dr. Ian MacPherson, Co-Supervisor (Department of History)


Dr. Brian W. Dippie, Departmental Member (Department of History)


Dr. Victoria Wyatt, Outside Member (Department of History in Art)



Dr. Nancy Turner, External Examiner (Environmental Studies Program)

TABLE OF CONTENTS

ABSTRACT	ii
LIST OF MAPS	iv
INTRODUCTION.....	1
CHAPTER ONE Forces of Change.....	17
CHAPTER TWO The Visible Transformation	54
CHAPTER THREE The Invisible Transformation.....	78
CONCLUSION.....	108
BIBLIOGRAPHY	116

LIST OF MAPS

Map 1
Resource Map - Pre-1896..... 13

Map 2
Forces of Change - 1898-1991 52

Map 3
Marks on the Land - 1898-1991..... 75

Map 4
Pre-1898 Wildlife Utilization..... 84

Map 5
Invisible Transformation - 1898-1991..... 105

Map 6
The Loss of Wilderness - 1898-1991 112

INTRODUCTION

Each generation seems to believe that it has invented the core values in public debates. The contemporary struggle over the environment is an excellent example of an age-old controversy that has re-emerged in modern clothing. Control over land use has long been a source of conflict. The European expansion into the newly discovered lands of North America brought into focus two opposing land use ideologies. Simply put, the technologically "superior" newcomers viewed the land as something to be exploited and reduced their interests to intense economic pursuits, like agriculture, mining or forestry, with little or no concern for broader environmental matters. First Nations, on the other hand, viewed themselves as part of the landscape. Their society was dominated by environmental awareness because they chose to integrate themselves with their surrounding. Today, the complexity of the issue can be seen in Canadian society. Advocates of technology promote an active role in managing the earth, while advocates of natural ecology and sustainable economic pursuits demand a return to a more holistic view of the environment.¹

Contemporary environmental debates have consumed the human mind like never before in the world's history. In 1978, representatives from 100 nations from around the globe came together in Switzerland to talk about the rapid depletion of the earth's resources. The discussion concentrated on the need for a re-orientation of thought and behavior that the leaders saw as crucial to human survival. Many of the countries

¹ Peter Knudston and David Suzuki. Wisdom of the Elders. Toronto: Stoddart Publishing Co. Limited, 1992; Robert Page, Northern Development: The Canadian Dilemma. Vancouver: McClellan & Stewart, 1986.

willingly subscribed to the World Conservation Strategy¹; others, however, conscious of the plan's economic implications, refused to admit that there was global crisis. A decade later, the World Commission on Environment and Development (the Brundtland Commission) again highlighted the problems of industrial development and warned countries without environmental laws that resource depletion, even in relatively sparsely populated, technologically advanced countries like Canada, was at a critical point.²

Environmental issues most often surface in the form of land use conflicts. In Canada, recent struggles have centered around peripheral areas such as James Bay, located in northern Quebec. It is in northern regions like the Northwest Territories and the Yukon that the modern debate on development and conservation can be clearly seen. Forces of change such as mining, forestry, recreational activities and transportation corridors have transformed the landscape, in ways both subtle and dramatic.

The "wilderness" has become the key focus point in the northern Canadian debate over development. Tourist brochures promoting the Yukon boast about an environment which has experienced few outside pressures. To many people, regions like the Southern Lakes, located on the Yukon/British Columbia border, represent a place where time has stood still, and an area where "progress" has not yet intruded. The wild, for such individuals, is needed to reinforce their faith in technology because

¹ International Union for the Conservation of Nature and Natural Resources. World Conservation Strategy: Living Resource Conservation for Sustainable Development. Gland, Switzerland: IUCN, 1980.

² World Commission on Environment and Development. Our Common Future. New York: Oxford University Press, 1987.

untouched environments give hope for the future, and prove that modern civilization was justified. In reality, however, few places match such understandings and dreams. Humans have regularly manipulated the environment of the Southern Lakes region, from the time the first people entered the area in 8000 BP (Before Present), to the mass influx of people during the Klondike Gold Rush in 1898, through the decades of industrial development, to the present. To many, the Southern Lakes region is a classic "wilderness"; to others, First Nations people, it is a homeland. It is not pristine, however, raising questions about the meaning of the concept of wilderness.

The confusion over the idea of wilderness is not new. Roderick Nash in Wilderness and the American Mind states that, "wilderness, in short, is so heavily freighted with meaning of a personal, symbolic, and changing kind as to resist easy definition."¹ What one person may subjectively consider as a wilderness area, another might regard as a development zone. General impressions about wilderness have changed over time, further confusing the matter. Writers at the turn of the century had a much different idea of the wild than do journalists, propagandist and academics today. Even standard dictionary definitions differ, wilderness comes from the Old English root and means the place of wild beasts, in German, wild game, in Spanish, the lack of cultivation and in French, deserted place. Samuel Johnson's Dictionary of the English Language, published in 1755, defined wilderness as "a desert; a tract of solitude and savageness."² Modern dictionaries define it as "an unsettled and

¹ Roderick Nash, Wilderness and the American Mind. New Haven: Yale University Press, 1967, p. 1.

² As quoted in Nash, Wilderness and the American Mind, p. 3.

uncultivated region left in its natural condition." This open ended definition takes on new meanings as one considers outer space, the ocean and other non-human environments. Figuratively the meaning is associated with solitude, even to the point of being lost or perplexed because of the lack of guidance.

Most people perceive the North as wilderness by virtue of its remoteness. This assumption, however, is not satisfactory because an analysis of the environment reveals that development seems to have effected every peripheral region. The affects of "Arctic Haze" have been given a lot of attention when Alaskan First Nations became sick from the contamination delivered by the winds from Siberia. On the other hand, even those who maintain that they are protecting wilderness areas call into question common conceptions about the northern wild. Conservation officers in Kluane National Park, which rests on the Yukon/Alaska/British Columbia border, manage game and determine the habitats which suit them. Caribou, mountain goats and moose, to name a few, are managed almost as much as some cattle herds in Alberta.

There is a danger in definitions of wilderness which hold no standard meaning, especially when considering northern and peripheral areas like the Southern Lakes region of the Yukon. Development and conservation efforts can mask the reality of land use. This both confuses and distorts perceptions that residents and outsiders have of the area and sets a precedent for the future development of the area. If wilderness remains an ambiguous concept, the forces of change will continue their unchaste course of environmental manipulation.

By defining wilderness both as a place of limited human influence and an area where the marks of development are not evident, this study will show how forces of change have produced visible and invisible transformations of the Southern Lakes region. The physical and conceptual elements of the wilderness concept, so defined, give stability to what otherwise might well be a moral fable. Dichotomies between development and an untouched environment cease to be of paramount importance; instead, change over time becomes the focus. Changes to the Southern Lakes landscape over a one hundred year period of development illustrate how an area, thought to be wilderness, can be transformed so that its wilderness character disappears.

This thesis emerges out of a strong tradition of historiography on the environment. American studies are especially rich in their consideration of environment agency in the formation of the United States. Frederick Jackson Turner's frontier thesis represents the standard viewpoint of many early authors that the environment was a determinant in the character of western expansion.¹ Since the formation of environmental history programs, however, more complete and complex analyses of the environment have been attempted.² Historians now seem to be more

¹Frederick Jackson Turner, The Frontier in American History. New York: 1920, pp. 1, 4.

² The standard work on the environment which challenged the traditional view of the wilderness is Roderick Nash, Wilderness and the American Mind. Other, more recent works include; Donald Worster, Dust Bowl: The Southern Plains in the 1930s. New York: Oxford University Press, 1972; Donald Worster, Natures Economy: The Roots of Ecology. San Francisco: Sierra Club Books, 1977; Lee Clark Mitchell, Witnesses To A Vanishing America: The Nineteenth-Century Response. Princeton: Princeton University Press, 1981; William Cronon, Changes in the Land: Indians, Colonists, and the Ecology of New England. New York: Hill and Wang, 1983; Donald Worster, Rivers of Empire: Water, Aridity, and the Growth of the American West. New York: Pantheon

interested in exploring the impact that humans have had on the environment, than how the environment has influenced humans. Donald Worster represents this new social history with his latest book Under Western Skies, which challenges Turners interpretation, replacing it with a convincing analysis of human environmental manipulation in the creation of the West.¹

Canadian environmental historiography is not nearly as extensive as that of its southern neighbors. The focus for ecologically minded subjects has been development and politics. The creation of environmental laws and conservation guidelines has attracted the greatest attention, especially from earlier writers.² Modern scholars are starting to place more importance on the environmental impact of development, and as a result studies about environmental issues are becoming more readily available.³ Mega projects

Books, 1985; Alfred W. Crosby, Ecological Imperialism: The Biological Expansion of Europe, 900-1900. New York: Pantheon Books, 1985; Samuel P. Hays, Beauty, Health and Permanence: Environmental Politics in the United States, 1955-1985. New York: Cambridge University Press, 1987; Stewart L. Udall, The Quiet Crisis and the Next Generation. Salt Lake City: Peregrine Smith Books, 1988; Stewart L. Udall, Patricia Nelson Limerick, Charles F. Wilkinson, John M. Volkman and William Kittredge, Beyond the Mythic West. Salt Lake City: Peregrine Smith Books, 1991

¹ Donald Worster, Under Western Skies: Nature and History in the American West. New York: Oxford University Press, 1992.

² Canada, The Canadian Commission on Conservation, The Forests of Canada. Ottawa: Kings Printer, 1918. For a broader discussion on legislation and conservation policy, Rowland Lorimer, Michael M'Gonigle, Jean-Pierre Révéret and Sally Ross, eds., "To See Ourselves/To Save Ourselves: Ecology and Culture in Canada." Canadian Issues - Association for Canadian Studies. (Volume XIII, 1991). Included in the volume are miscellaneous articles on the roots of Canadian ecology, the park system, environmental (conservation) legislation and sustainable development.

³ Two examples are, Thomas Berger, Northern Frontier Northern Homeland: The Report of the Mackenzie Valley Pipeline Inquiry, Revised Edition. Vancouver: Douglas and McIntyre, 1988 and Bruce Hodgins and Jamie Benidickson, The Temagami Experience: Recreation, Resources and

such as the Mackenzie Valley Pipeline and the James Bay Hydro-Electric Project have made the north the focal point of Canadian environmental studies.¹

"Wild Wedge" offers a case study on the issues surrounding land use in North America. It describes a land in transition and highlights the human choices made during the various stages of development. This project proceeds on a deliberately limited basis. For example, only the dominant newcomer society in each period is examined in detail. As a result, the themes about aboriginal land-use are not fully analyzed in the era of resource development. Furthermore, archival sources were of restricted value because the people who recorded their impressions of the area paid precious little attention to the physical landscape. Resources which are exploited as commodities in the period of development before 1950 are not fairly represented in records. For example, timber was used extensively in the Gold Rush era but few references are made to the extent of exploitation. The destruction of game habitats was not a concern to most newcomers, and therefore, it is not well described in the written record. Ethnographic and archaeological studies provide some background to First Nations' use of the land, but the sheer size of the area in question limits their utility and accuracy. The varied geography, changes in the landscape and to wildlife have made the reconstruction of First Nations' society very difficult. But, despite the selectivity of approach, this study should shed some light on the implications of human utilization of land and resources in the North.

Aboriginal Rights in the Northern Ontario Wilderness. Toronto: University of Toronto Press, 1989.

¹ Page, Northern Development: The Canadian Dilemma.

It should be mentioned that this land use study benefited tremendously from personal experience. The perspectives gained were invaluable to this thesis, and would not have been realized by relying solely on archival material. Traveling through the mountains and down the lakes brought life to the pages of history and a sense of purpose that this story needed to be told. The words and feelings of many Tagish people are implied throughout the work but no formal effort was made to produce a record of oral history. I deliberately limited myself to the work of trained anthropologists and ethnologists not only because of my lack of training in oral history, but also out of respect for the Tagish elders. Although many elders took the time to informally relay their concerns on the environment, elders were not asked to relay specific ethnographic data because time did not allow for the thorough investigation that such a project would require. Such omissions should not be misconstrued as an oversight but rather an admission that the thesis lacks a consistent Native voice.

The Southern Lakes region is situated above the British Columbian border in the central portion of the southern Yukon. The northwest region boasts a mountainous terrain from which the Wheaton and Watson rivers flow. These tributaries feed a lake system some 400 kilometers in length, including Bennett Lake, Nares Lake, Tagish Lake, Atlin Lake and Marsh Lake. The lakes generally drain in a northeasterly direction from the Coastal Mountain range in the west to the broad Lewes and Teslin plateaus in the east.

The Southern Lakes provides a unique environment for plants and animals because of its extremes both in topography and climate. Glacial history largely determined its wildlife population. The extremely diverse

topography, created some 12,500 BP by huge ice fields which advanced up from the southeast, provides a wide variety of plant and animal habitats. Deep glacial lakes and swift glacial streams characterize the mountainous western area. Shallow, marshy bodies of water, and meandering rivers are more common on the sweeping plateaus in the eastern region.¹ The majority of wildlife migrated north from the unglaciated southern North America, a minority of mammals migrated south from the Beringia land corridor, and a small number of species originated in the Rocky Mountains. A variety of animals inhabited the area including big game such as mule deer, mountain goats, Dall sheep, caribou, moose and black and grizzly bears, predators such as wolves, coyotes, cougar and lynx, and smaller fur bearers like fisher, muskrat, red fox, marten and otter.

Birds are also found in considerable abundance. Over two hundred avian species inhabit a vast array of habitats. Ptarmigan and grouse, along with their predators, a variety of hawks, eagles and owls, occupy the extensive alpine and sub-alpine areas. Smaller species such as sparrows and scavenging birds including crows and ravens reside in the low plateau areas of boreal forest. The lakes are the site of extensive staging areas for swans, geese and ducks during their northward migration.

Sixteen different species of fish including a wide variety of trout (char) and whitefish inhabit the lakes of the Southern Lakes region. In general, the lakes in the western portion of the region, including Lindeman and Bennett lakes are less productive than those in the eastern plateau

¹ D. Davies, C. E. Kennedy and K. McKenna, Resource Inventory-Southern Lakes. Whitehorse: Government of Yukon, Department of Renewable Resources, 1983, pp. 16-17.

region. Overall fish productivity in the Southern Lakes Region is 1/6 to 1/10 that of similar lakes to the south in the interior of British Columbia.¹

The vegetation of the Southern Lakes region is as diverse as the region's varied physiography. The shallow deposits of silt-like sandy soil in lower elevations in the eastern and northern portion of the region support stands of lodge pole pine, white and black spruce, cottonwood and a variety of willows, shrubs, grasses and other herbaceous plants. In contrast, the rugged terrain of the Coast Mountains hosts a different plant constituency. Most of the alpine regions remained glaciated, with little if any flora present. The sub-alpine regions are characterized by steep V-shaped valleys and alpine meadows which are colonized by a medley of lichens, willows and shrubs, and a smattering of white spruce and sub-alpine fir.²

Temperatures are cool and generally sub-humid, with extreme temperate fluctuations ranging from -55°C to +35°C. Precipitation is very low; the total average yearly snow and rainfall is only 250 to 350 mm making it the most arid area in all of the Northwest Coastal region. The largest amounts of precipitation occur in the late fall and early winter with a increasing deficit of moisture in late winter, early spring and early fall.³

The human history of the area began as early as 8000 BP when groups of people migrated through the area.⁴ It can be assumed that they

¹ Davies, Kennedy and McKenna, Resource Inventory-Southern Lakes, pp. 22-24.

² Canada, Canadian Forestry Service, Pacific Forestry Centre, E. T. Oswald and B. N. Brown, Forest Communities in Lake Laberge Ecoregion, Yukon Territory. Victoria: Supply and Services Canada, 1986, pp. 14-16.

³ Canada, Pacific Forest Research Centre, E. T. Oswald and J. P. Senyk, Ecoregions of Yukon Territory. Victoria: Fisheries and Environment Canada, 1977, pp. 33-37.

⁴ The historical reconstruction of human habitation in the Southern Lakes region is drawn from the following ethnographical, archaeological and

were descendants of people who lived in eastern Beringia (interior unglaciated Alaska-Yukon) and migrated southwest following after the glacial retreat. Little is known about these people or the group which followed their occupation of the area around 2500-3000 BP.¹ This latter group is believed to be the distant ancestors of the present Carcross-Tagish people. However, other findings suggest that there was more than one cultural group in the area at this time.² The groups were seasonally mobile, moving throughout the Southern Lakes Region, exploiting big game such as caribou, sheep, bison and moose and supplementing this diet with smaller game, fowl and fish.³ It is not known when or why some of these coexisting groups left the area, but the archaeological record shows that by

anthropological studies. Catharine McClellan, My Old People Say: An Ethnographic Survey of Southern Yukon Territory. Ottawa: National Museums of Canada, Publications in Ethnology, #6, 1975, 2 volumes. William B. Workman, Prehistory of the Aishihik-Kluane Area, Southwest Yukon Territory. Ottawa: National Museum of Canada, Mercury Series, Archaeological Survey of Canada, Paper no. 74, 1978. Sheila C. Greer, Site Locations and Archaeologically Significant Areas in the Southern Lakes District, Yukon Territory. Final Report. Ottawa: National Museums of Canada, Archaeological Survey of Canada, 1983. Sheila C. Greer and R. J. LeBlanc, "A 1983 Update on Yukon Culture History." Halifax: Unpublished paper presented at the Canadian Archaeological Association Annual Meeting, April 1983. Sheila Greer, "Prehistoric Land-Use Patterns: Recent Research in the Southern Lakes Region, Yukon." Victoria: Unpublished paper presented at the Canadian Archaeological Association Annual Meeting, April 1984. Sheila C. Greer, "Traditional Land-Use Patterns of the Carcross-Tagish Band." Interim Report, Unpublished paper prepared for the Carcross Tlingit Society, The Carcross-Tagish Indian Band, November 1984. Sheila C. Greer, Wheaton-Watson Resource Study: Culture History and Heritage Resources Watson and Wheaton Valleys. Whitehorse: Department of Renewable Resources, Yukon Government, October 1987.

¹ Workman in Prehistory of the Aishihik-Kluane Area theorizes based on his findings that the earlier culture (Little Arm peoples) was replaced by a new culture which migrated into the area, pp. 402-403.

² Greer and LaBlanc, "A 1983 Update on Yukon Culture History," pp. 10-13.

³ Workman, Prehistory of the Aishihik-Kluane Area, pp. 379-382 and Greer,

2700 BP only the Athapaskan-speaking culture remained, including the Tutchone and Tagish.¹

The Tagish interacted with different varieties of animals, animate and inanimate objects in their new environment of the Southern Lakes. Ingenuity and adaptability were paramount in an area where food supplies were very unpredictable. The harsh climate, animal cyclical patterns and supernatural acts all played a big role in the seasonal cycles developed by the Tagish.² Sophisticated harvesting methods, such as sheep blinds, indicate that yearly cycles were maintained and subsistence patterns remained relatively constant.³ Small family groupings moved from camp to camp exploiting caribou herds, sheep herds, fish runs, migrating fowl or seasonal vegetation among other resources.⁴ Stone technology was adapted to suit different natural resources which were integrated into the Tagish economy.

The expanses of their territory and the availability of the resources ensured that a substantial number of people could be supported on the land.⁵ However, exploiting these resources on a consistent basis was problematic with the stone age technology they employed. Resource

¹ Workman shows a 4500 year continuity of occupation throughout his three period classifications, Aishihik phase, Teye Lake phase and the Bennett Lake phase, for the area to the west of the Southern Lakes. The same pattern may apply to the Southern Lakes Area although studies have not confirmed this assertion. Workman, Prehistory of the Aishihik-Kluane Area, p. 414.

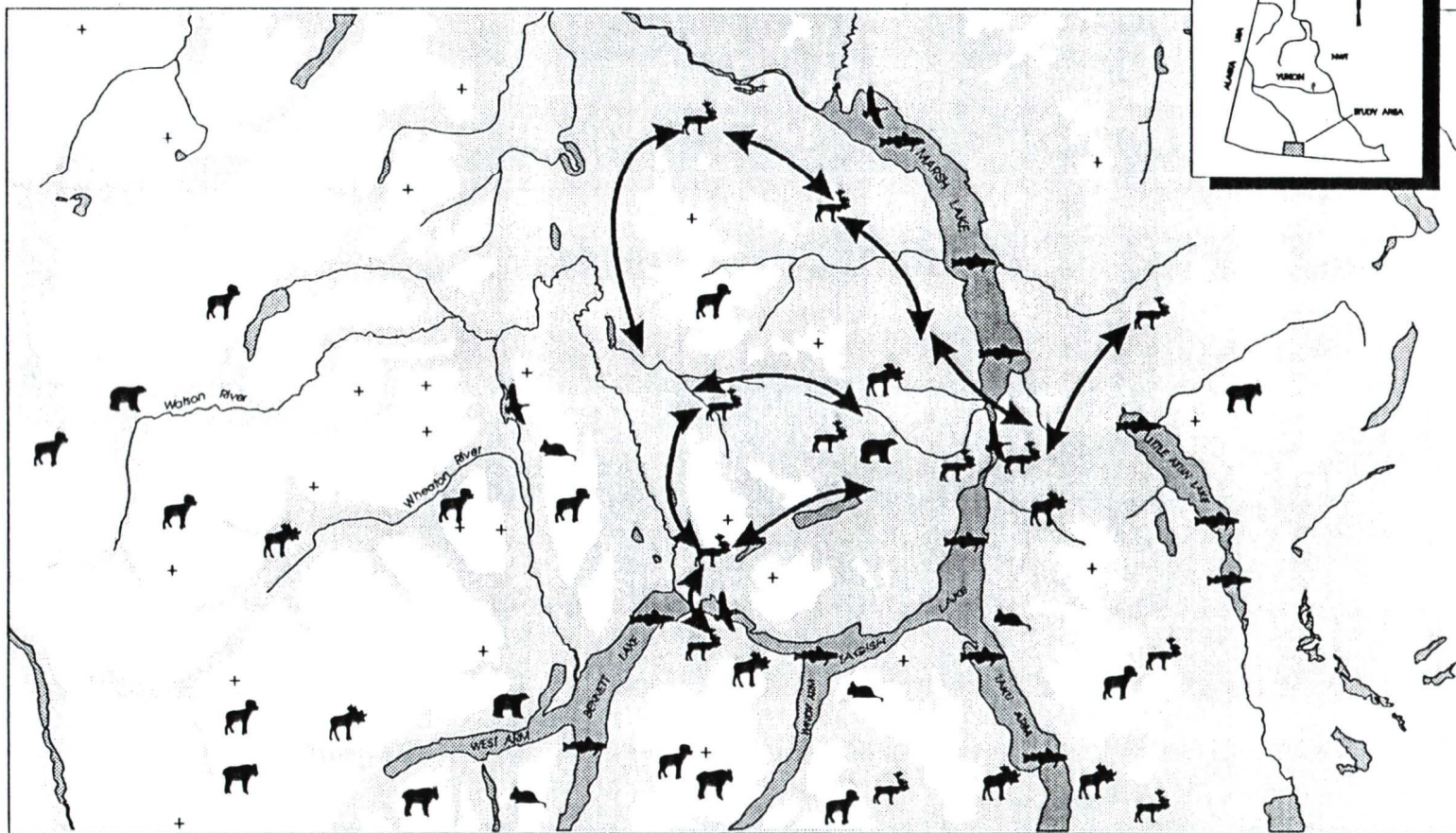
² Julie Cruikshank, "Through the Eyes of Strangers: A Preliminary Survey of Land Use History In The Yukon During the Late Nineteenth Century." Report to the Yukon Territorial Government and the Yukon Archives, February, 1974, p. II-3.

³ Greer, "Field Report of the 1983 Project," pp. 6-8.

⁴ Greer, Site Locations and Archaeologically Significant Areas, pp. 15-18.

⁵ D. Davies, C. E. Kennedy and K. McKenna, Resource Inventory - Southern Lakes. Whitehorse: Land Planning Branch, Department of Renewable Resources, Government of Yukon, 1983).

MAP 1
RESOURCE MAP - PRE-1896



- Lowland / Valley
- Lakes
- Sheep
- Goats
- Bears
- Ground Hogs

- Caribou
- Moose
- Migratory Bird Habitat
- Fish

10 km



Based on: Greer, "Traditional Land-Use Patterns".
McClellan, *My Old People Say*.

S. Garner Cartographer

extraction was a time-consuming process as was the preparation of tools. The small, extended family units, ranging from ten to twenty people, were highly mobile and were not able to preserve the large amounts of food necessary to support larger groups. It is likely that the small family bands were as limited in number as in their size.

In the minds of many observers of the north, northern and peripheral regions, like the Southern Lakes, remain frozen in time as a pristine pre-contact environment. One hundred and fifty years of development, however, has brought significant changes to the pre-contact landscape. As L.-E. Hamelin explains;

there seem to be many visions of the North ... The southern vision (the North is a hinterland to be exploited for the benefit of southern Canada) ... The romanticized vision (wilderness that must never be touched) ... The pessimistic vision (which sees only the problems) and the development vision (with natural gas opportunities).¹

Northern regions are affected by the same ideological, technological and developmental pressures as the urban places in which most Canadians live.

In recent years, the impact of development in the north has been hidden by the federal and territorial governments. The re-creation of wilderness area has not been attempted with bulldozers and cranes, but rather, with a new set of definitions. In January of 1991, the Yukon Government, in a draft proposal for the Yukon Environment Act, recognized wilderness "as a resource in its own right."² Ironically, the

¹ L. -E. Hamelin. Canadian Nordicity: It's Your North Too. Montreal: Harvest House, 1979, p. 4.

² Yukon Government. Yukon Conservation Strategy. Yukon Environment Act: Draft for Discussion Purposes Only. Whitehorse: Yukon Government, 1991, p. 63.

government thought that lands under management are still "wilderness" areas. If one needs further proof of the ambiguous use of the term in the Yukon, the government's definition of wilderness will suffice: "'Wilderness' means any area ... in a largely natural condition, in which ecosystem processes are largely unaltered and in which human activity has been limited to undertakings that do not significantly alter the natural environment."¹

Morgan Sherwood, the dean of Alaska history, analyzed the dangers inherent in such descriptions: "if historians continue to treat Wilderness only as an idea, the meaning of which has changed over time, they will have little to contribute to the preservation of natural environments."² Northern historians such as Morris Zaslow, Ken Coates, Bill Morrison, Gordon Bennett and David Morrison, to name a few, have attempted to untangle the endless stereotypes of southerners about the North. They have outlined well the important events and political processes, and explained their significance to the Yukon. However, the myth that the Yukon exists as a "wilderness" still persists in the minds of many people.

Focusing in on the Southern Lakes region is important because, as a historical meeting place, it has experienced the full range of development in the Yukon. In many ways it is a microcosm of Yukon history. Transformation of the landscape took place during the fur trade, the Klondike Gold Rush, the mining boom of the 1910s and 1920s, the lean years of the 1930s, the revitalization period after the construction of the Alaska

¹ Ibid., p. 91.

² Morgan Sherwood. "The Wilderness and Alaska" in Mary Childers Manguzzo and Stephen W. Haycox. eds. Interpreting Alaska's History: An Anthology. Anchorage: Alaska Pacific University Press, 1989, p. 435.

Highway during W.W.II, and during the recent decades of tourism. Chapter 1 examines the "forces of change" in this vital region. The industrialization of the region will be explored providing the background from which the identity of the Southern Lakes region can be defined. The second chapter outlines the history of the visible transformation of the land and how the marks of transportation corridors, settlements and resource development came with the immigration of newcomers to the area. The chapter looks at the simple but often overlooked fact that human interaction with the environment leaves marks on the land which can linger for generations and affect subsequent land-use. The final chapter highlights the invisible transformation of the land. The effects of direct wildlife utilization -- trapping, hunting and fishing -- will be explored as well as some of the developments which directly affected wildlife habitats. The chapter is devoted to showing the extent of wildlife utilization in the Southern Lakes region and the process by which it has been left severely depleted.

CHAPTER ONE: Forces of Change

The forces which shape countries, politics and people have long been the subject of historical debate. Events which stand out in history such as a World War or an epidemic often receive extensive attention from historians because easily identifiable and abrupt changes make for exciting and provocative history. But do they reveal the process of change or are they merely catalysts in the process? The Southern Lakes region of the Yukon Territory is one area that has experienced wholesale economic, social and political change. The transitions have come, not only by way of exceptional events, but also by the slow progress of development. This chapter examines the forces of change in the Southern Lakes. It highlights the events like the Klondike Gold Rush and the building of the Alaska Highway but also provides a broader ideological analysis of land-use. Developments such as the fur trade, fur farms, mining and forestry, which have not received as much attention, have been equally instrumental as forces of change.

Historians have devoted much attention to the development of the North after W.W.II. Prime Minister John Diefenbaker was electrifying pre-election audiences across Canada in the 1958 campaign with "I see a new Canada. A Canada of the North!"¹ His "Northern Vision" with its bountiful supplies of raw materials, enabled Canadians to re-experience

¹ Ken Coates and William Morrison. Land of the Midnight Sun: A History of the Yukon. Edmonton: Hurtig Publishers, 1988, p. 281.

the frontier. One writer captured the essence of our nation's expectation of the Yukon in the middle decades of this century when he wrote:

Land of mountains and timber it is, storied land of nineteenth century wealth in gold; land of unfathomless twentieth-century riches in copper, zinc, iron, tungsten and petroleum; land of prodigiously falling waters ready to drive giant turbines; land for industry; land for labor.¹

Furs, gold, silver, copper, lead, oil, gas, timber and water power; these brought development to the Southern Lakes Region of the Yukon. Over the last one hundred and fifty years trappers harvested fur, miners extracted minerals, loggers exploited the forests, and industrialists harnessed the power of rivers and lakes. Development has dramatically affected the Southern Lakes region. The wealth extracted from the land has been impressive; the marks of abandoned development and environmental disturbances remain as the regional legacy.

Before industrial development, however, the land and resources were viewed from a First Nations' perspective which differed from that of the development-minded newcomers. For centuries, the Tagish adapted their land-use patterns to suit the severe environmental conditions of the Southern Lakes Region. Development was limited because their material world was integrated with their subsistence patterns. For example, varieties of stone were manufactured into projectile points for arrow and spear heads and processing devices for butchering meat and tanning hides, flint was used for sparking fires and boulders for hunting blinds and traps. The methods of extraction for subsistence harvesting were harmonious

¹Lawrence Drake. "New Frontier: The Pacific Northwest." Colliers (November 20, 1943), p. 58.

with the ecosystem, and were limited to the technology employed by First Nations harvesters.¹

The Tagish developed a relatively stable subsistence base which supported a slowly growing population. This stability fostered new forms of economic and cultural diversity within their society. Tools became increasingly innovative; bone implements replaced stone tools reducing the time required for their labour intensive construction.² Intertribal trading networks brought foreign materials into the area, further expanding their range of tools. Copper from the White or Copper River and obsidian, possibly from Mount Edziza, in northwestern British Columbia, are examples of non-indigenous materials imported into the Southern Lakes.³ The injection of imported goods into Tagish culture facilitated the exploitation of resources. The trading networks became a force of change in Tagish culture as subsistence activities increasingly became a source of affluence.⁴

Evidence for this paradigm shift can be found in the societal and economic structures of the Tagish. Initially, the governmental system that developed out of the Tagish world view one which was based on consensus. A loose moiety system gave the highly mobile Tagish cohesion, controlled

¹ Workman, Prehistory of the Aishihik-Kluane Area, pp. 123.

² For a map and discussion on the intertribal trade on the Northwest coast see R. Cole Harris, ed. Historical Atlas of Canada, Volume I, From Beginning to 1800. Toronto: University of Toronto Press, 1987, plate 14.

³ Greer, "Field Report of the 1983 Project," pp. 12-13, 22.

⁴ Greer, Wheaton-Watson Resource Study, pp. 13-14. The term affluence is used in the same manner as outlined in Marshall Sahlin's The Original Affluent Society in which he challenges the interpretation that Aboriginal subsistence was a life of desolation. He explains that before the advent of the cash economy, affluence should be measured by the amount of effort was put into subsistence activities per day.

intermarriage and arbitrarily divided resources.¹ But the geographical diversity of their resources and their long established harvesting cycles, which separated nuclear families for much of the year, made it difficult to maintain close relationships even with members of their extended family or moiety. The decentralized system primarily regulated the control of resources without restricting the movement of any particular group.² When land-use became specialized during the 700 year period of intertribal trade prior to the turn of the century, however, the division of Tagish territory by the Wolf and Crow moieties was defined further by the resource ownership of individual sibs within these two main groups.³ Territorial and resource distinctions produced unmarked barriers on the land, much like national borders which defined large geographical areas for the purposes of tribal identification and intertribal trade.

The exchange of copper, obsidian or shells for dressed caribou, sheep and moose hides, ground squirrel, fine inland furs and lichen dyes, in the formative trade years, was much more than a trade of material goods; more importantly, it led to an exchange of ideas.⁴ The Tagish acquired techniques of resource harvesting, such as the use of fish traps and animal corrals, and learned new ways of processing and preserving food from their trading partners: the Southern Tutchone, Inland Tlingit and Coastal

¹ Mrs. Angela Sidney, Mrs. Kitty Smith, and Mrs. Rachel Dawson, My Stories Are My Wealth, p. 3.

² McClellan, My Old People Say, vol. 2, p. 439-479.

³ McClellan, "Culture Change and Native Trade in the Southern Yukon Territory," pp. 78-101.

⁴ McClellan, "Culture Change and Native Trade in Southern Yukon Territory," p. 113.

Tlingit.¹ This is especially true of their exchange with the Coastal Tlingit, a powerful First Nations group on the Northwest Coast, which had developed harvesting methods around the recurring salmon resource. The new technology, which appeared 2300 BP., enabled the Tagish to provide the same subsistence requirements in a shorter period of time and with the utilization of fewer resources.²

Trade augmented the use of the land for affluence and the processes of cultural change. Areas which were rich in resources came under the exclusive ownership of families who harvested the resources for exchange and export.³ Lower ranking Coastal Tlingit groups who were desirous of trading partnerships with inland groups such as the Tagish, secured trading relationships by marrying into these families. The extent to which these partnerships took place, and the period in which they flourished is rather ambiguous. Catherine McClellan, an anthropologist and expert on Coastal trade, concludes that the process of intermarriage "took place in the nineteenth century."⁴ At this time, the Athapaskan speaking Tagish adopted several Tlingit institutions, such as the potlatch and clan system, and absorbed a limited number of Tlingit people.

The Tagish lifestyle changed dramatically over the period of trade. Two clans of coastal origin, the TukRedi and the Dakluwedi, formed

¹ Catharine McClellan, "Intercultural Relations and Cultural Change in the Cordillera," June Helm, ed., Handbook of North American Indians: Subarctic, Volume 6. Washington: Smithsonian Institution, 1981, pp. 387-388.

² Usher and Staples, Subsistence in the Yukon, p. 115.

³ Catherine McClellan and Glenda Denniston, "Environment and Culture in the Cordillera," June Helm, ed., Handbook of North American Indians: Subarctic, Volume 6. Washington: Smithsonian Institution, 1981, pp. 375-376.

⁴ McClellan, "Culture Change and Native Trade in Southern Yukon Territory." Unpublished Ph.D. Thesis, University of California, Berkeley, 1950, p. 218.

alliances with Tagish who controlled resources in the Southern Lakes Region. The TukRedi, who were of the Crow moiety and took the beaver as their crest, claimed all the territory from Carcross to the south end of Bennett Lake. The Dakluwedi were members of the wolf moiety and had the killer whale as their crest. They claimed all the land around Tagish.¹ Coastal influences pervaded Tagish society to such an extent that their Athapaskan language was replaced by the trading language of Tlingit.²

Resource control came to represent power and place in Tagish society as a result of the strong Tlingit influence which weakened a Tagish decentralized system of consent.³ A tight, centralized system was adopted from the Tlingit; control over resource use depended on the influence of a few powerful people within each clan or family structure. Whereas a variety of subsistence resources used to be necessary for survival, in the new hierarchical system, diversity of diet and clothing became the distinguishing mark of affluence. Transactions could cross family boundaries but most often would be between families within the Crow or Wolf moiety.⁴ Sheep or goat meat from the Watson river area might be

¹ McClellan, "Culture Change and Native Trade," pp. 76-100.

² In 1887, Dawson considered the Tagish to be Tlingit-speaking Indians with an Athapaskan type culture. George M. Dawson. Report On An Exploration in the Yukon District, N.W.T. and Adjacent Northern Portion of British Columbia, 1887. Whitehorse: The Yukon Historical and Museum Association, 1987, p. 178B. Reprinted from Geological and Natural History Survey of Canada, Annual Report (New Series) Volume III, Part I, 1887-88. Montreal: William Foster & Co., 1889, pp. 192B, 204B.

³ Catharine McClellan, "The Inland Tlingit," American Antiquity. January 1953, vol. 8, no. 3, pt 2, pp. 47-52.

⁴ Adrian Tanner, "The Structure of Fur Trade Relations." University of British Columbia, Unpublished Masters Thesis, Department of Anthropology, 1965, pp. 16-18.

traded for some salmon from the McClintock River, or, for the more affluent, with exotic items from the coast such as oolichan oil and liquor.¹

Despite the defined social boundaries formed by the Tlingit, there was still a certain amount of fluidity among different First Nations. The Tagish intermarried with the Chilkoot, a Tlingit group on the coast; the Southern Tutchone, an Athapaskan group to the west of the Tagish, with the Chilkat, Tlingit to the north of the Chilkoot. Complications abounded when inland nations began intermarrying. Clan names changed as people moved from one place to the next, as new houses split off and took new names, and as houses joined with other clans.² Relationships were further complicated by the existence of rank and the order of these clans.³ A disagreement developed in the early 1800s within the Wolf moiety when a Tahltan married a Tagish resulting in the redistribution of three different clans of the Wolf; some went to Tagish, some down the coast, and some stayed at Tahltan.⁴ Wars often resulted from a quarrel over wives on whom the social structure of the Tutchone, Tagish and Tlingit was based.

¹ British Columbia Government. Narcisse Belleau Gauvreau. Abstracts from Reports on the Peace River and Cassier Districts made by British Columbia Land Surveyors to the Department of Lands -- 1891-1928. Victoria: Minister of Lands, 1929, p. 111-114.

² V. E. Garfield, "Possibilities of Genetic Relationship in Northern Pacific Moiety Structure," Society for American Archaeology. 1953, Memoir No. 9, pp. 58-61.

³ For example, the Upper Tanana nation did have a wolf clan in its second moiety which is supposed to have originated from an Athapaskan nation to the south. This was certainly not the Southern Tutchone their arch rivals, and therefore, it may be logical that it was a result of intermarriage with the Tagish. See Marie-Francoise Guédon, People of Tetlin Why Are You Singing? Ottawa: National Museum of Man, Mercury Series, Ethnology Division Paper No. 9, 1974, p. 76. McClellan tells of a similar relationship with the aboriginal people around the area of Teslin, see McClellan, "Culture Change and Native Trade," pp. 91-93.

⁴ Ibid.

By the end of the eighteenth century, European trade goods imported from the coast had become common items of trade. Large trading expeditions of one hundred or more Tlingit would visit the Tagish on a semi-annual basis, usually in the spring or early summer, and trade beaver, lynx, muskrat and marten pelts for European trade goods. These items would, in turn, be traded to other nations further inland. The system of alliances based on marriages which had developed between the Tagish and the Coastal Tlingit was perpetuated with other inland tribes. Huge profits were realized by the Tagish, who inflated the cost of the trade goods two to three hundred percent. By the time inland nations such as the Han and Kaska exchanged their furs for trade items, the cost of these goods had increased some four to five times what they were traded for on the coast.¹ It is unlikely that all the Tagish were involved in this type of trading relationship and many were probably forced to use some of their own people as middlemen in the exchange of furs for trade goods.²

For the first half of the nineteenth century, a Tlingit monopoly controlled the exchange of European goods for furs. The Tlingit's intimate knowledge of the Yukon River drainage and inland, intertribal trading routes enabled them to maintain their dominance by either underbidding their competition or controlling the trade with their military dominance. The Tagish, amongst other interior nations, desired an interior post from which they could trade directly for European goods. In 1843, a group fitting the description of the Tagish, with a good knowledge of the Tlingit monopoly traveled to the new HBC post, Fort Frances.³ They found, however, that the

¹ McClellan, "Culture Change and Native Trade," p. 145.

² McClellan, *My Old People Say*, pp. 512-514.

³ McClellan, "Culture Change and Native Trade," p. 216.

coastal trade had a better rate of exchange than could be offered through the interior posts, whose goods were laded with transportation costs.¹ The HBC realized the extent of the Tlingit monopoly in 1852 when Fort Selkirk, located on the Pelly River and some 450 kilometers away from the coast, was destroyed by Kohklux, the famous chief of the Chilkats because "they [HBC] dared to interfere with his traffic with the Tahk-heesh and other Interior Indians."²

The Tlingit-Tagish connection became so important that many Tagish gave up their culture to accommodate the social and economic realities of the trade. The cross-cultural exchange of differing native cultures and of European culture created a major cultural transition. Tlingit-style carving adorned traditional Tagish items such as gopher snares; completely new forms of material culture appeared in the form of ornamentally carved ceremonial bowls for grease drinking contests, as did new ceremonial customs such as the potlatch.³ The development of Tagish material culture reflected the lifestyle changes of the Tagish from a highly mobile subsistence based group unable to carry an elaborate tangible material culture, to one which was affluent enough to embellish and maintain material goods.

Although the inland posts failed to break the Tlingit monopoly, inevitably their control over the jealously guarded mountain passes to the

¹ Harold Innis, The Fur Trade In Canada: An Introduction to Canadian Economic History. Revised Edition. Toronto: University of Toronto Press, 1956, pp. 324-325.

² George Davidson, "Explanation of Indian Map of the Rivers, Lakes, Trails and Mountains From the Chilkat to the Yukon Drawn By the Chilkat Chief, Kohklux, in 1869." Mazama. Portland, Oregon: April 1901, p. 76.

³ McClellan, My Old People Say, vol. 1, pp. 275-277.

Pacific was to fall. The Hudson's Bay Company (HBC), Russian-American Trading Company (RATC) and independent "free traders" were prevented from entering into the Southern Lakes area from the coast until the latter parts of the nineteenth century.¹ The first written sources of a non-Tlingit visiting the Tagish from the coast was geographer Aurel Krause in 1881.² It was not until 1883 that the Tagish were able to make their own trading expeditions to the Wilson and Healy trading post at Dyea on the coast.³ But by this time their trading block had largely been circumvented by non-native trading activities in the northern Yukon. In particular, the RATC and the HBC had made extensive inroads on the middle Yukon.⁴ Without the ability to attract inland nations away from the RATC or the HBC, nor military power to control inland nations, the Tlingit influence over the inland nations, such as the Tagish, had subsided.

By 1887, gold miners entered the region. Gold exploration in the upper Yukon preceded mineral exploration in the south when, in 1872, L. McQuesten, A. Harper and A. Mayo arrived. By 1878, there were a reported 200 miners in the area. The same year, George Holt crossed the Chilkoot with a couple of inland native guides, seemingly without the permission of the Tlingit. He traveled through the Southern Lakes to the Tes-lin-too (Hootalinqua River) and worked a tributary for gold. Unsuccessful in his endeavours, he returned to the coast and was later murdered by the Cook

¹ Dawson, Report On An Exploration in the Yukon District, N.W.T. and Adjacent Northern Portion of British Columbia, 1887, pp. 193B-194B.

² Aurel and Arthur Krause, Zur Tschuktschen-Halbinsel und zu den Tlinkt-Indeanern 1881/82. Berlin: Deitrich Reimer Verlag, 1984.

³ McClellan, "Culture Change and Native Trade," p. 142.

⁴ For an in-depth discussion of the fur trade in the upper Yukon region see Ken Coates, "Furs Along the Yukon: Hudson's Bay Company -- Native Trade in the Yukon River Basin, 1830-1893." B.C. Studies 55 (Autumn 1982), pp. 50-78.

Inlet Indians in 1885. The particulars of this inaugural journey are very much in doubt as Holt was known for embellishments. However, George Dawson, one of the first to extensively explore the Southern Lakes in 1887, authenticated the trip from the stories of other miners and Indians.¹

Mining activity was steadily increasing in the north as news of gold discoveries created an influx of miners to the area. By 1896, an established mining community existed in the Yukon basin. Approximately 450 miners at Forty Mile petitioned for a road to the coast. The long and arduous journey into the northern mining area prohibited further expansion; an easy and accessible route was needed.² The answer came in 1894, when Lieutenant Frederick Swatka of the United States Army popularized what was to become known as the river route to the Yukon River. In his popular book, A Summer In Alaska, he outlined the route which commenced in what was to become Skagway, Alaska, over the Chilkoot Pass, down Lake Lindeman, through the chain of Southern Lakes including Bennett Lake, Nares Lake, Tagish Lake and Marsh Lake and finally ending up at the head of the Lewis or Yukon River.³ Swatka filled in the topographical place names, often replacing First Nations titles with the names of famous Americans.⁴ Swatka's total disregard for the

¹ George M. Dawson, Report on an Exploration in the Yukon District, N.W.T. and Adjacent Northern Portion of British Columbia 1887, p. 179B.

² National Archives of Canada [NAC], RG 85, vol. 1167, file 351-1-2, part 1. See Petition, Miners at Forty Mile to Hon. T. Mayne Daly, Minister of the Interior, December 11, 1896.

³ Frederick Swatka, A Summer in Alaska. St. Louis, J. W. Henry, 1894. This book was later reprinted under the name Along Alaska's Great River. Reprinted Edition. Anchorage, Alaska: Alaska Northwest Publishing Company, 1983, pp. 27-40.

⁴ A few years later, Dawson condemned this practice. "He [Swatka] completely ignored the place names of many places already well known to miners throughout the country." Many of these names were adaptations of the

established order of the Yukon foreshadowed the events which were to accompany the exploitation of the transportation corridor he popularized.

In 1896, two Tagish men - Skookum Jim and Dawson Charlie - and George Carmack, a miner and explorer from the south, discovered gold in the Klondike. This event sparked a gold rush, and before the turn of the century, thousands of fortune seekers made their way over the mountain passes and through the Southern Lakes chain. The Klondike Gold Rush transformed the geographical, political and social boundaries of the region.

To governments, mining companies and prospectors, the North was a hinterland, a vast storehouse of unfathomable and inexhaustible resources. For the greater majority of miners, the Yukon was not their home, nor did they think it ever would be. Their "get in, get rich and get out" mentality so closely linked with a hinterland economy disassociated them from the land and resources, and promoted an ignorance of the North's fragile and dependent ecosystems.

For the Southern Lakes, the Gold Rush was a transitory event. Between 1897 and 1899, over 30 000 people traveled over its lake system only interested in the area in as much as it provided them with the resources and an access way to the Klondike. People on their way to the Klondike laid siege to the hillsides surrounding Lake Lindeman and Bennett Lake. As one pioneer put it, "the place echoed with the whine of saws, the crashing of trees, the blows of axes and the tap of caulking irons as men . . . and they

Tagish or Tlingit name. After the publication of Schwatka's book and maps all persons entering the Yukon followed his names and former titles fell into disuse. See Dawson, Report ... Yukon District, p. 143.

were legion - set about building scows, dories and rowboats, each according to his own fancy."¹

Logging became a thriving industry from 1898 to 1900. Prospectors who had run out of money and supplies turned to logging, supplying boat and raft building activities on a factory scale and an individual basis over a span of two years. Saw mills in the Southern Lakes became the main exporters of wood products to the outlying districts of the Yukon. As early as 1896, raw pine and spruce logs were being exported from the region to Forty Mile, a mining community down river from Dawson City.² Other sawmill exports included a business in cut timber and sawdust to such places as Tagish Post and Whitehorse.³ The logs were harvested from outlying areas, milled at either Armstrong Mills at Abbott's Cove or Millhaven Bay on Bennett Lake and shipped via steamer to their destination.⁴ An added burden was also placed on the industry as fire frequently devastated whole forests. D. D. Cairnes in his Southern Survey in 1906 noted that Bennett Lake around the area of MacDonald Creek was "devoid of all live timber" as a result of forest fires.⁵ Similar reports of the

¹ Ethel Anderson Becker, Klondike '98: Hegg's Album of the 1898 Alaska Gold Rush. Portland: Metropolitan Press, 1949, p. 49.

² NAC, RG 18, D3, vol. 2. RCMP- Yukon Records, Daily Journal, Tagish, 1896. June 13, 1896.

³ NAC, RG 18, D3, Vol. 5. RCMP-Yukon Records, Daily Journal, Bennett, 1899. Report on March 30 and 31, 1899.

⁴ NAC, RG 18, D3, vol. 1. RCMP-Yukon Records, Daily Journal, Lake Bennett, 1898. Report on July 19, 1898 for the export of 1500 ft. of lumber to Whitehorse.

⁵ NAC, RG 45, vol. 186, file 201. See Notebook of Southern Survey Done by D. D. Cairnes, 1906.

destruction of forests because of fire and logging followed from other areas, the worst being the Yukon side of Taku Arm on Tagish Lake.¹

Developmental pressures around the turn of the century propelled the forest industry to full time, large scale operations. The construction of the White Pass and Yukon Route railway from Skagway to Whitehorse resulted in the opening of new saw mills. The Bennett Lake area saw plenty of forestry activity not only for the manufacture of railway ties, but also for the construction of a number of steamboats which traveled the lakes after 1900.² The Tagish Lake region also experienced extensive forestry. Many native people obtained employment in wood camps which supplied cordwood fuel for steamboats which traversed the Southern Lakes system on their way to Whitehorse and, from there, up the Yukon River to Dawson City, the depot of the Klondike.³

After 1902, the demand for timber from the Southern Lakes region decreased because of the railway link to the coast. Because of the inferior quality of the stands in the area, they were passed over for the superior imported logs of Alaska and British Columbia. Exhausted supplies of suitable logs in the Lindeman and Bennett lake areas led to the opening of smaller mills on Tagish Lake, near Ten Mile Point. These sawmills supplied the immediate area with cut lumber for small construction projects. The diminishing importance of steamboat travel between Bennett City and Whitehorse also contributed to the drop off in forestry. Coal

¹ NAC, RG 85, vol. 1525, file 3695. Letter, Robert C. Miller, Timber Inspector, Tagish, to Secretary of the Department of the Interior. September 20, 1901.

² Gordon Bennett, Yukon Transportation: A History. Canadian Historic Sites: Occasional Papers in Archaeology and History, no. 19. Ottawa: National Historic Parks and Sites Branch, Parks Canada, 1978, p. 46.

³ "St. Savior's, Carcross," Northern Lights 2: 3 (August 1914).

imported via the WP & YR railway provided a more economical and longer lasting source of fuel for steam production.

Meanwhile, mining in the Southern Lakes region showed signs of promise. The Wheaton and Watson river areas attracted a few prospectors, as did the tributaries of Bennett and Tagish Lakes. The hydraulic mining technology -- high pressure diverted water to displace rock into sluice boxes -- disrupted streams and rivers and displaced large amounts of land.¹ The lack of suitable claims which could be worked for a profit by individual miners slowed mining activity in the southern Yukon. Excitement ran high towards the end of the Klondike Gold Rush as reports came from the Atlin region that a major strike had been found. The news touched off a significant rush, and became the most extensive working in the area. But the ore deposits, characteristic of other claims in the region, were soon exhausted.

Prospecting groups played a far greater role in the transformation of the Southern Lakes Region than can be accounted for by the small amount of gold they extracted. They were often the first non-native explorers to enter regions and take inventory of the resources. Minerals such as coal, silver and copper were not economical to extract from northern areas in the early part of the century because reserves in the south, which did not incur the large transportation costs, were readily available. Their discovery, however, was important for the mining industry in the following decades when capital intensive production developed.

¹ Yukon Archives [YA], Series 3, Gov. 1947. Letter and Map, Parsons B. Egbert and Mr. R. Miller, Macdonald Creek, N.W.T. to Major Z. L. Wood, Tagish Post, N.W.T., June 8, 1899.

Some prospectors remained on the Southern Lakes landscape. Movements into other areas, particularly in the southern regions, which were initially passed up for the Klondike, became increasingly popular. Others reverted to a more diversified lifestyle to make a living by combining trapping activities in the winter with prospecting in the summer.¹

By 1905, most prospectors had either moved to the Alaska gold fields near Fairbanks or had given up, making way for capital intensive, large scale mining.² The WP & YR railway, which had served many of the individual miners in previous years, now provided the industrial link to the ocean necessary for large scale mining. The individual miner with a pick and pan all but faded from the landscape only to be replaced by machines and large industrial processes.³

The new force of change in the Yukon became the large corporations as consolidated mining companies bought up most of the Klondike.⁴ By 1910, only two major companies, the Canadian Klondike Mining Company headed up by Joe Boyle, and his arch rival the Yukon Gold Company run by A. N. C. Treadgold, were operating placer and dredging mining

¹ YA, Series 10, vol. 145, file 1. Donald E. Taylor, Watson Lake District Yukon Legislative Council on behalf of the Prospectors of the Southern Yukon, Brief to Standing Committee on Indian Affairs and Northern Development - Bill C-187 - Yukon Minerals Act, July 22, 1971.

² The temporary nature of the gold rush and the Federal governments realization of it set the tone for their Yukon policy which did not include enhancing or diversifying regional development. For an in depth discussion see David Morrison, The Politics of the Yukon Territory, 1898-1906. Toronto: University of Toronto Press, 1968.

³ Ken S. Coates and William R. Morrison, Land of the Midnight Sun: A History of the Yukon. Edmonton: Hurtig Publishers, 1988, pp. 152-160.

⁴ It is clear from Clifford Sifton's (Minister of the Interior) policy regarding large corporations that the government's idea of the Yukon was to use it as a source of capital and a short-term outlet for Canadian business. For a detailed discussion see David Hall, Clifford Sifton: The Young Napoleon. Vancouver: University of British Columbia Press, 1981, pp. 159-192.

operations. Expansion of mining interests outside of the Klondike led to extensive operations in the Southern Lakes region. Prior to W.W.I, the price of metals such as copper, lead and silver increased on the world market, making it feasible to transport the raw materials to smelters outside of the Yukon. A plethora of mining operations sprung up across the Southern Lakes region.

On August 10, 1905, Conrad Consolidated Mines established a location for a concentrating plant, which was built four years later on the west shore of Windy Arm on Tagish Lake.¹ By 1909, Conrad City was established as the intermediate processing center for many of the mines in the Conrad Division, servicing mining groups such as the Caribou, Humper, Skyline, Montana, Venus, Tiger, Vega and Thistle. These mines, located on Montana Mountain south of Carcross and west of Conrad, consisted of from three to seven mining claims, of which only two or three were worked for a variety of metals, the most common being silver. These larger groups were also accompanied by seventy two individual claims of various sizes. All were in operation from 1907-1908.²

The Wheaton and Watson river valleys experienced considerable growth after the turn of the century with the WP & YR affording prospectors easy access through Robinson's Crossing, located directly east of Annie Lake. By 1907, there were ten mining groups in operation including Gold Hill, Nevada, Silver King, Happy, Tally-Ho, Buffalo Hump, White Knight, Porter, Whirlwind and Hawk-Eye. Each group represented

¹ NAC, RG 85, vol. 1517, file 1200. Letter and Map, A. B. Palmer to Mr. Cory, Minister of the Interior, November 6, 1905.

² NAC, RG 85, vol. 1770, file 32926. Mining Report, Percy Reid, Mining Recorder to F. X. Gosselin, Gold Commissioner, February 1, 1909.

an average of five claims. Individual prospectors also show on the mining record - extensive exploration resulted in over sixty claims staked in the area - but in far smaller numbers than those in the Montana Mountain area.¹ The following year the number of mining companies increased to seventeen,² but poor results and the high price of transportation to the railway reduced this number to five the following year.³

A reduction in the number of people with quartz claims, however, did not lead to a smaller number of miners in the area. Prospectors merely moved onto higher priced metals and a more cost-efficient extraction method: placer gold mining. Considerable prospecting took place from lower Tagish Lake up to Marsh Lake, especially in the summer months of 1912.⁴ The closing of several of the larger quartz mines, like the Big Thing and Caribou Group claims of mining magnate Colonel Conrad, led to an even greater rush to placer strikes such as the one on Judith Creek which flows into Marsh Lake. However, the discovery of only small quantities of gold eventually led to the demise of concerted mining activity in the Southern Lakes Region.⁵ In 1913, there were only three mining groups in operation, employing about ten men, and no placer mines.

Mining operations were vital to the Yukon economy. Shutdowns reduced the Yukon population as much as ten to twenty percent. Such was

¹ NAC, RG 85, vol. 1770, file 32926. Mining Report, Percy Reid, Mining Recorder to F. X. Gosselin, Gold Commissioner, February 1, 1909.

² NAC, RG 85, vol. 1770, file 32926. Mining Report, Percy Reid, Mining Recorder to F. X. Gosselin, Gold Commissioner, February 15, 1910.

³ NAC, RG 85, vol. 1770, file 32926. Mining Report, Percy Reid, Mining Recorder to F. X. Gosselin, Gold Commissioner, February 18, 1911.

⁴ NAC, RG 85, vol. 1770, file 32926. Mining Report, Percy Reid, Mining Recorder to F. X. Gosselin, Gold Commissioner, February 6, 1912.

⁵ NAC, RG 85, vol. 1770, file 32926. Mining Report, Percy Reid, Mining Recorder to F. X. Gosselin, Gold Commissioner, December 16, 1913.

the case with the Engineer Mine of Captain James Alexander. Originally discovered on the southern shore of Lake Tagish in 1903, the gold mine promised to become a huge success. Over the period of ten years, Capt. Alexander worked the mine with as many as twenty-five men. In 1918, the Mining Corporation of Canada offered to purchase the property with plans for large scale development. But the tragic death of Alexander in 1918 shelved this prospect; the economic boost that the mine was to give to the region never materialized.¹

The sporadic nature of the bust and boom cycle, which had become characteristic of the Yukon economy, continued in the years following 1917. Large corporations, uninhibited by a nationally controlled government, exploited the land and its resources when world markets warranted and shut down when profits fell. In 1917, the Alaska Corporation was operating the Big Thing Group of mines but closed down the same year.² The Venus mine, operated by the Seattle based company Lackinshaw and Tagish Mines, became the mainstay of the mining activity in the Southern Lakes Region of the Yukon, and remained the only operational mine after 1918.³ After a series of start-ups and shut-downs, and change of management and controlling interests, the mine, situated on the Windy Arm of Tagish Lake, showed considerable promise.⁴ The mine and mill were restored to

¹ Ken Coates and Bill Morrison. The Sinking of the Princess Sophia: Taking the North Down With Her. Toronto: Oxford University Press, 1990, pp. 39 and 168.

² NAC, RG 85, vol. 1862, file 142555. Letter, F. Hennan, Mining Recorder to Controller M.L. & Y Branch, Department of the Interior, May 3, 1918.

³ NAC, RG 85, vol. 1862, file 142558. Letter, R. C. Miller, Assistant Gold Commissioner to Controller of ML & Y Branch, Department of the Interior, March 1917.

⁴ NAC, RG 85, vol. 1862, file 142558. Note: Department of the Interior, January 10, 1918.

working order by the Canadian Harper Mines Corporation, and, with a new boiler installed, the property seemed to be started on a long tenure of ore production and reduction.¹ But rising costs of transportation to the coast, necessary to get the ore to the smelters in Granby and Trail quickly made the production unfeasible.²

Mining in the region slowed to a crawl by 1925 and although ore was being extracted in areas like the Wheaton river valley, it was more often stockpiled in anticipation of future price increases.³ Mining developments had ceased to be a feasible economic venture in the southern Yukon. Characteristic of the sluggish mining development in the area was a report of a gold strike in the Atlin Lake District in 1924. The discovery, which in years past would have caused a major rush, received little more attention than a police report and a newspaper write-up in the Vancouver Province.⁴

This illustrates another very important, but often overlooked, characteristic of development in the Southern Lakes region: stable industries which sustained a fixed population were not present. The lack of political guidance by the territorial government did little to add stability to the boom and bust economic cycles. The exception and the backbone of the Yukon economy were the permanent residents who diversified the commercial operations from the fur trade into tourism and big game

¹ "Venus Mine Has Made A Good Showing: Outlook Is Now Bright," Dawson Daily News. October 22, 1917.

² NAC, RG 85, vol. 1862, file 142558. Letter, J. C. Berton, Mining Recorder to the Controller, M.L. & Y. Branch, Department of the Interior, July 26, 1920.

³ NAC, RG 85, vol. 1862, file 142556. Letter, H. H. Rowatt, Superintendent to The Mining Recorder, March 10, 1922.

⁴ NAC, RG 85, vol. 609, file 2657. Royal Canadian Mounted Police Report, Whitehorse Sub-District, Carcross Detachment, E Blatta to the Commanding Officer, Dawson, YT. October 22, 1924.

hunting. For the most part, these people were the natives who had the ability to live off the land when the economy lagged.¹

Efforts were made by newcomers to stabilize the fragile economy. Visions of the Southern Lakes plateau lands in neat quarter sections, abounding with bushels of wheat or livestock, were common. The history of sub-Arctic agriculture, however, was not promising. Elaborate schemes for supplying cattle, pigs, sheep and other livestock to the Klondike more often than not had led to disaster. Fresh produce and meat were at a premium and those who managed to carry out their ventures successfully "mined" the miners. In these early years, the need for livestock feed made haying a lucrative and competitive business because the amount of grassland was very limited, but non-native grasses did not fare well in the short growing season. In the late 1920s, the lagging economy brought about a number of agricultural endeavours such as reindeer herding and wheat and vegetable production, but none were successful.

The northern Yukon's large-scale extraction operations of silver-lead (especially in the Keno Hill mines) provided the sole industrial development for the whole of the Yukon during the 1920s. Advocates of further development in the area petitioned the United States, British Columbia and Yukon governments for a road link to the tide water at Skagway in the mid-1920s.² Requests for increased access to the border region failed to materialize on account of the inability of the governments to work out a

¹ Frances Abele, "Canadian Contradictions: Forty Years of Northern Political Development," in Kenneth S. Coates and William R. Morrison, eds., Interpreting Canada's North: Selected Readings. Toronto: Copp Clark Pitman Ltd., 1989, pp. 312-313.

² NAC, RG 85, int. 188, vol. 1168, file 351-1-2. part 1A. Letter, Mr. Gilbert Skelly, Carcross to G. P. Mackenzie, Gold Commissioner, Yukon Territory, June 8, 1924.

suitable agreement. The WP & YR railway and steamboat company remained the only link to mining developments in the Yukon. The lack of workable mines north of Whitehorse all but guaranteed the longevity this corporate transportation system.¹

The Southern Lakes economy was sustained by the WP & YR transportation system. The Yukon River was the only major transportation corridor which could handle the mineral tonnage. To facilitate river travel, the Lewis Dam, twenty miles upstream from Whitehorse on the Yukon River, was built by the White Pass and Yukon Navigation Company Limited from 1924-1925. It came into operation in 1926, raising the level of the water on the lake system, thereby allowing larger steamer loads and permitting earlier break-up of ice with consequent opening of navigation.² The dam increased the average yearly navigational season by two months. But for the Southern Lakes, it meant that the lakes to Lake Bennett were raised up to five feet above their normal levels.

During the 1930s and 1940s, different forces of change emerged in the Southern Lakes because of the lack of development. With the exception of minimal mining efforts, mineral extraction in the Southern Lakes region was virtually non-existent. The thirties were especially tough because silver-lead productions fell as a result of low world demand. Transportation and communication remained problematic in a region which was so large. The WP & YR railway continued to operate,

¹ NAC, RG 85, vol. 608, file 2592. Memorandum, T. Shanks, Department of the Interior, Topographical Survey of Canada to Dr. Deville, Royal Bank Chambers, November 16, 1923.

² NAC, RG 85, vol. 1212, file 354-3-1. Letter, C. S. Rogers, President and General Manager, White Pass and Yukon Route to Alphonse Fournier, Minister of Public Works. April 30, 1947. Appendix A.

marginally at best, but wagon roads and airplanes challenged the steamships as a means of moving materials and people.¹

Forestry experienced something of a renaissance because the extended transportation corridors provided loggers with a broader range of harvesting areas. A reduction in registration fees for timber births in the Southern Lakes made logging available to anyone who wished to harvest in the 1930s.² The unregulated cutting of wood and the absence of reforestation, whether by natural or silvicultural means, drastically cut back suitable stands of forest in the Southern Lakes region.³

Tourism, which had been a stable industry in the Yukon following the gold rush, collapsed during the Depression. The heralded Tutshi cruise down the Taku Arm on Lake Tagish was taken out of commission in the late 1930s as a result of low passenger loads, although the Carcross to Tagish cruise remained operational until the 1950s. Ben-My-Cree Lodge on the Taku Arm, which defied the northern climate with its horticulture that "border[ed] on fantastic", the mining town of Atlin and some of the most striking Northern scenery complemented the cruise.⁴ Unfortunately, even though the trip was thoroughly enjoyable and well received, the tourists did not come in sufficient numbers to make the venture profitable.⁵

¹ Bennett, Yukon Transportation, pp. 119-124.

² NAC, RG 85, vol. R1365-0, file 9. Report on Yukon Forestry, D. Davidson, Chief, Territorial Division, Department of Indian and Northern Affairs to the Director. October 26, 1966.

³ NAC, RG 85, vol. R1350-1, file 1. G. M. Wilson, Superintendent of Forestry, Yukon Government, "Report on Forest Management - Yukon Territory."

⁴ NAC, RG 18. J. W. Abbott, Officer-in -Charge. Report of a Developmental Survey into the Tagish-Carcross districts of the Yukon. November 16, 1946.

⁵ Coates and Morrison, Land of the Midnight Sun, p. 198.

By the end of the Depression significant improvements needed to be accomplished on the Yukon's transportation system if development, especially in the mining industry, was to advance. The need for an independent route to the Pacific was never so evident as during W.W.II. The prices of metals rose sharply, which encouraged mining development, but the WP & YR railway, the only source of transportation that the mining companies had at their disposal to export the ore, was occupied. It was clear that the WP & YR railway and steamboat systems were antiquated and ineffective for large scale mining operations. Although a major force in the transformation of the Yukon Territory in the past, it had ceased to provide the same leadership by 1940.¹

In the early 1940s, however, the Yukon's transportation woes were suddenly and significantly eliminated by the construction of the Alaska Highway. The United States Army urgently pushed the war time project. Thousands of army personnel occupied Whitehorse and other centers, quadrupling the population of the Yukon. The WP & YR railway was leased by the US. Army and run around the clock in an effort to keep up with the demand for construction supplies. Fifteen hundred miles of highway, from Dawson Creek, British Columbia to Fairbanks, Alaska were built between 1942 and 1944. The decisions of war made by the US. Army changed the Yukon forever.²

The Alaska Highway, even though it passed on the periphery of the Southern Lakes region, transformed the area. Supplies to build the route

¹ Bennett, Yukon Transportation, pp. 136-140.

² Ken Coates and Judith Powell, "Whitehorse and the Building of the Alaska Highway, 1942-1946." Paper presented to the Symposium on Boom and Bust Cycles in Communities of the Canadian and American West, University of Victoria, Victoria, B.C., August 27-29, 1987.

were shipped through Skagway to Carcross where they were either carried on by train to Whitehorse for use in construction or transferred to the lower part of the Alaska Highway construction via the hastily rebuilt Carcross-Tagish road. Carcross became the focus of the increased traffic, the White Pass being the only corridor that was able to handle large shipments to the southern part of the Yukon Territory. The Southern Lakes region acted as a depot for further development in other parts of the Yukon during W.W.II.

The completion of the Alaska Highway and the upgrading of transportation systems thrust the Yukon Territory into the modern industrial era.¹ At war's end southern companies showed renewed interest in the non-renewable resources of the Southern Lakes Region of the Yukon Territory.² Re-staked claims along the tributaries of Little Atlin Lake and increased quartz mining activities, especially by Transcontinental Resources Limited, which focused in on the Venus mines area near Windy Arm of Tagish Lake, provided encouraging signs for renewed development. Another group of claims was staked in the Wheaton River area on Follé Mountain.³

The Yukon was ready to forge ahead from the hinterland economy characteristic of pre-war development. Escalating prices for minerals and the new ability to profitably transport these minerals to the southern markets provided the impetus for development. The new vision of the North was one of sustainable industries that would not only supply the south with

¹ YA, YRG, Series 1, vol. 71, file 35-3. J. E. Gibben, Acting Controller, "Mining Activity in the Yukon Territory, January 1 to September 30, 1946."

² YA, YRG, Series 1, vol. 71, file 38. Memorandum, George Esper, Bureau of Northwest Territories and Yukon Affairs to Mr. Payton, January 6, 1947.

³ YA, YRG, Series 5, T. S. 5 1/2, 1284, vol. 1. W. M. Emery, Mining Recorder, Whitehorse District to J. E. Gibben, Acting Controller, February 19, 1947.

raw materials but also support a thriving Yukon population. Gas, oil, hydroelectric and mining projects designed to transform the landscape, illustrate the intentions of a society whose goal was to scientifically manage the environment to economic advantage.

The resurgence of agricultural interests in the areas north of sixty best illustrates the southern attitude. An experimental farm set up after the war in Haines Junction by the Canadian government's engineers met with some horticultural success and set much of the tone for agricultural development in the Southern Lakes.¹ Promoters of agriculture had advocated such pursuits since the late 1930s. W. D. Albright, Superintendent of the Dominion Experimental Station in Beaverlodge, Alberta and farming promoter, best represented southern sentiments in 1938, when he stated: "Year by year we are rolling back the wilderness towards the Pole, winning for Canadian civilization league after league of productive country -- and the end is not yet."² But those who tried agricultural pursuits in the Southern Lakes experienced the limitations of farming in the sub-Arctic. The Peake Report, conducted in 1975, proved the assumptions that the government had maintained throughout the years, "that the Yukon does not have the climate nor the soil conditions to support a viable commercial [agricultural] industry."³

¹ YA, YRG, Series 10, vol. 122, file 3. Letter, L. V. Brandon, Regional Manager, Water, Lands and Forests, Department of Indian Affairs and Northern Development to J. Naysmith, Chief, Water, Lands and Forests, Indian Affairs and Northern Development. July 2, 1971.

² As quoted in C. S. MacKinnon. "The Rise and Decline of Agriculture and Horticulture in the Mackenzie District and the Yukon." Musk-Ox 30 (1982), p. 52.

³ YA, YRG, Series 10, vol. 122, file 1. Letter, Peter J. Gillespie, Administrator for the Yukon Territory to J. Buchanan, Minister, Department of Indian Affairs and Northern Development. October 9, 1975. See also YA, YRG, Series 10, vol. 122, file 1. Letter, H. K. Scott, Chief, Crops Section, Census Division, Dominion

The following decade was one in which the Yukon Territory formed many semi-autonomous industrial bodies while the Federal government established an extensive bureaucratic infrastructure of its own.¹ The Yukon Department of Game and Publicity, the Federal Department of Resources and Development (formerly the Department of Mines and Resources), the Federal Department of Northern Affairs and National Resources, the Northern Health Service and the Yukon Department of Welfare all injected life into the economy of Whitehorse which became the capital of the Yukon on April 1, 1953.² The introduction of major amounts of Federal money stabilized the seasonal Yukon economy and established a relatively permanent but concentrated population.

By the 1960s, the extensive bureaucracy had developed to the point where they could administer the Alaska Highway, which had become the lifeline to the North since its opening to unrestricted traffic in 1948. The Yukon was discovered by tourists seeking a Klondike rush and by politicians who sought to stimulate a sagging Canadian economy. Diefenbaker's "Northern Vision" was, in the words of Alvin Hamilton, Minister of Northern Affairs and National Resources, to "visualize making every corner of the Yukon accessible."³ Transportation corridors to every mineral, oil and natural gas bearing region were planned.

Many of the projects that developed out of the "Northern Vision" were high profile developments such as the well publicized Mackenzie Valley

Bureau of Statistics to James Smith, Commissioner of the Yukon Territory. January 25, 1971.

¹ YA, Series ROF 600, vol. 8, folder 4. F. B. Fingland, Assistant Commissioner (Executive), " paper presented at the 19th Alaskan Science Conference, Whitehorse, August 1968.

² Smyth, The Yukon Chronology, pp. 22-27.

³ Ibid., p. 280.

Pipeline of the 1970s.¹ However, a lesser known but equally important pipeline was constructed by the US. Army in 1944.² Like the Alaska Highway, the pipeline was built as a matter of national security. The main CANOL pipeline ran from Norman Wells in the Northwest Territories, through Ross River, by Squanga Lake, up to the Whitehorse refinery and then in a westerly direction eventually terminating in the Alaskan town of Fairbanks. A spur line built in 1944 on the right of way of the WP & YR railway to transport petroleum products from Skagway to Whitehorse ensured the flow of oil and gas.³

The fuel ways were an immediate maintenance liability. Annual upkeep was haphazard and spills were frequent, although records were not kept until they came under the control of the Canadian government in 1958.⁴ After the war, the spur line was leased by the WP & YR Company. They transported approximately 32 million gallons of diesel and stove oil

¹ Thomas R. Berger, Northern Frontier Northern Homeland: The Report of the MacKenzie Valley Pipeline Inquiry, Revised Edition. Vancouver: Douglas & McIntyre, 1988. See also YA, Pam. 1978-182, Julie Cruikshank, "Myths and Futures in the Yukon Territory: The Inquiry as a Social Dragnet." Paper Presented to the Association for Canadian Studies, University of Manitoba, May 16, 1978 for a critique on the role of inquiries and their misrepresentation of northern interests to the south.

² Canada, House of Commons Debates, Friday, May 5, 1944. CANOL Project: Development of Oil Resources of Northwest and Yukon Territories.

³ For the initial plan of the CANOL pipeline see S. R. Gage, A Walk of the CANOL Road: Exploring the First Major Northern Pipeline. Oakville, Ontario: Mosaic Press, 1990, pp. 153-154.

⁴ From the evidence of a study conducted by the Environmental Protection Service it is a certainty that major oil spills occurred with some frequency prior to the time when records of such "significant events" were kept. NAC, RG 10, Vol. 148, file 1. D. Munro and K. Weagle, "An Environmental Study of the White Pass & Yukon Route Pipeline from the B.C. -Alaska Border to Whitehorse, Yukon." Whitehorse: Unpublished report by the Environmental Protection Service, 1976. For an account of the pipeline transfer see, Letter, E. L. Hardin, Jr., Colonel, Corps of Engineer, United States Army to the Commissioner of the Yukon Territory. January 20, 1970.

per year from 1966 to 1976. Over the period of ten years there were 39 breaks recorded resulting in major spills totaling over 150 000 gallons of fuel.¹ Methods of disposing of the spilled oil were confined to burning, and were considered ineffective.² Only about fifty to seventy percent of the oil could be burned off; the remaining oil seeped into the ground or went into the ice in the winter or directly into the lakes, streams and rivers.³ In one instance, a main line break spilled approximately 5000 barrels of jet fuel into a lake near the head of McClintock River. A government report states that the oil accumulated "in such concentration that residents in the vicinity were hauling it away for use as fuel oil."⁴ In the late 1970s, after a minor upgrade, the pressure of the spur line was raised from 1200 psi to 1400 psi, heightening the risk of a major spill.⁵ Even though the government knew of the great amount of oil spills in the Southern Lakes region, they "did not consider the present situation to be hazardous,"⁶ probably because of the drastic shortage of fuel in the interior.

Up to the end of the W.W.II the growth in the Yukon mining had been confined to the precious metals: gold and silver. After the war,

¹ NAC, RG 10, Vol. 148, file 1. Appendix I, Spill History of the Pipeline From 1966-1976. Letter, C. W. Kingston, Vice President Administration, The White Pass and Yukon Corporation Limited to Colin E. Wykes, District Manager, Environmental Protection Service, August 13, 1976, pp. 31-36.

² Ibid.

³ Ibid., pp. 13-27 a pictorial presentation of the environmental damage caused by the spills.

⁴ NAC, RG 85, int. 188, vol. 1498, file 441-1-1, part 3. See Letter, F. H. Collins, Commissioner, Department of Northern and National Resources to The Director, Northern Administration and Lands Branch, June 4, 1956.

⁵ NAC, RG 10, Vol. 148, file 1. See Munro and Weagle, "An Environmental Study of the White Pass & Yukon Route Pipeline from the B.C. -Alaska Border to Whitehorse, Yukon," p. 1.

⁶ NAC, RG 85, int. 188, vol. 1498, file 441-1-1, part 3. See Letter, F. H. Collins, Commissioner, Department of Northern and National Resources to The Director, Northern Administration and Lands Branch, June 4, 1956.

however, there was a reassessment of the Yukon's mineral potential and the possible value of base metal production.¹ By 1950, major mining companies conducted exploration and development programs in the Yukon. The federal government helped out with loan guarantees and programs like Roads to Resources which enabled companies to access the minerals. One such development produced an improved motor vehicle road which connected Whitehorse to Carcross. The motor way later became known as the Klondike Highway when it was expanded in 1986 to the tidewater at Skagway.

Road building activity in the Southern Lakes Region created a new demand for alluvium rock, which was needed to build and repair roads. Gravel pits cut out of mountain sides or located near sensitive river and stream habitats became a familiar sight on the landscape. The activity increased the number of landslides and augmented the amount of silt and rock making its way into the entrances of lake tributaries.²

Efforts to create a sustainable economy based on mining continued to be futile. Two of the biggest mines in Yukon history, the Whitehorse copper mine and the Clinton Creek asbestos mine, were success stories of the 1950s that failed to sustain their production.³ High production costs encouraged companies to extract the ore at accelerated rates with less concern for the long term prospects. In the face of these failures, the lead and zinc mine

¹ NAC, RG 85, int. 188, vol. 1498, file 441-1-1, part 1. Memorandum, George Esper, Bureau of Northwest Territories and Yukon Affairs to Mr. Payton. "Re: Interests in the Yukon Arising From the Construction of the Alaska Highway." January 6, 1947.

² Yukon Government. Yukon Land Resources & Inventory Atlas. Volume 1. Whitehorse: Yukon Government, 1979. Map D, Whitehorse area (105D).

³ Charles J. Brown, "Yukon Mining Survey - 1965." North. May/June 1966, Vol. 13, pp. 32-34.

located in Ross River became the backbone of the Yukon economy.¹ The Cyprus-Anvil mine greatly increased the importance of the WP & YR railway route to the seaport at Skagway, but after the closing of the mine in 1984, the rail abandoned its operations. Curraugh Resources revived the mine in 1986, based on government support both for operation and highway transportation; the railway was not reopened.

Meanwhile, mining companies in the Southern Lakes Region speculated on claims that had initially been worked near the turn of the century. The Yukon Antimony Corporation showed an interest in the Wheaton Antimony deposits, as did the Arctic Mining Co. in the Big Thing gold and silver property on Montana Mountain. Both companies constructed mills and reduced the ore that had been held in reserve for some sixty years.² The extraction of gold and silver from these mines in the late 1960s and early 1970s was, according to the companies promotional literature, expected to be impressive; they projected returns of three to four million dollars a year.³ But a combination of low grade ore and rising operational costs quickly closed the mines.

The realization by many government officials and developers that mining was not going to sustain the economy of the Yukon brought the possibility of exporting power generated from hydro-electric dams to the fore. Many development-minded people envisioned the taming of waterways like the mighty Yukon River. Certainly, the need and market

¹ NAC, RG 85, vol. N7740-346-03. John Bruk, President, Cyprus Anvil Mining Corporation to Hon. J. J. Buchanan, Minister of Indian and Northern Affairs. December 9, 1975.

² "Arctic Gold and Silver Opens Northern Mine," Examiner. August 17, 1968, vol. 3, no. 7, p. 1.

³ YA, Pam. 1967-125C. Arctic Gold and Silver Mines Limited, The Story of a New Producing Gold and Silver Mine in the Yukon, Promotion Pamphlet.

were readily available. A power generating plant near Whitehorse was constructed by Yukon Hydro in 1952 and expanded to meet the power demands of mines and pipeline turbines in 1980.¹ A smaller hydroelectric plant on the Aishihik River was also constructed in the late 1950s to meet the market for cheap and affordable hydro-electric power.²

The manipulation of water levels for hydroelectricity affected the lakes and rivers that created the reservoir. Significant increase in water levels led to the loss of hay lands and fish spawning areas in the Southern Lakes region. Grievances filed by Carcross Chief Stanley James in 1977 illustrate a lack of communication on the part of government officials. His concern for the natural resources of the area were brushed off because the heightened water levels did not affect their reserve which was located 100 feet from the lake front.³ The conclusion of the government that "it is unlikely that the Reserve is under water," showed no concern for the resources Chief James wished to protect.⁴

The consequences of power projects that were realized paled in comparison to the ones which were left on the drafting table. Such was the case with the Tagish-Lynn or Taiya Project proposal by Aluminum Company of America (ALCOA) in 1947 to dam the Yukon River at Miles Canyon. The Southern Lakes area was to be a large storage reservoir

¹ NAC, RG 85, vol. N-2865-3/5, file 17. Letter, J. Smith, Chairman, Northern Canada Power Commission to John Munro, Minister of Indian and Northern Affairs Canada. September 4, 1980.

² "Yukon Hydro Fighting Elements to Produce More Power." The Whitehorse Star. July 16, 1954.

³ NAC, RG 85, vol. 801/30-1. Letter, June Gardiner, Senior Land and Estates Officer, Indian and Northern Affairs to G. A. Poupore, Director, Lands and Membership. May 13, 1977.

⁴ Ibid.

which would then be reversed back through the Coast Range to drive giant turbines near tidewater on the Taiya River, in Alaska near Skagway. The project, similar in size to the James Bay Hydroelectric development in Quebec, came close to becoming a reality, in spite of the fact that most of the Southern Lakes region would have been flooded.¹ Taiya was designed to raise the water level of Marsh Lake some 50 feet and the levels of Tagish, Bennett, Lindeman, Atlin and Little Atlin Lakes and connecting streams accordingly. In spite of the obvious changes to the landscape, the project analysts suggested that "game and fur mammals and birds other than waterfowl would suffer little actual loss."² The project was abandoned in 1957 because of ALCOA's inability to bring the Canadian and American government to the negotiating table and, on the other hand, Canadian companies protecting their investments in the Kitimat hydroelectric power plant proposal.³

The desire to produce power which could be exported to the south with one large dam continued to threaten the landscape of the Southern Lakes region. The British Columbia government initiated a study to predict the effects of a dam which would create water storage reservoirs in the Atlin and Tagish lakes. The Yukon River-Atlin Lake-Taku River power project would have raised Marsh, Bennett and Tagish lakes a total of 62 feet. The creation of a large reservoir from these water bodies would have

¹ NAC, RG 85, int. 69, vol. 1302, file 332-1-3, part 2. J. Dewey Soper, "The Proposed International Yukon River Power Project In Relation to Wildlife: A Preliminary Investigation," Unpublished Report.

² Ibid.

³ Claus-M. Naske, "The Taiya Project." B.C. Studies 91-92 (Autumn-Winter, 1992), pp. 46-47.

had pronounced effects on physical processes in the area.¹ In 1979, a new proposal called the Mid-Yukon Project was forwarded by the Northern Canada Power Commission which would have flooded the region to the north of Whitehorse in the vicinity of Carmacks.² Both projects met with much public opposition but ultimately failed because resource developments, such as the Alaska Highway Natural Gas Pipeline and numerous large mining operations in northern British Columbia's Cassiar region did not materialize leaving the hydroelectric projects without a consumer.³

Other economic schemes designed to diversify the economy were investigated. The minor smallwood forest industry of the Southern Yukon was reawakened in the late 1960s because of changes in the world market, particularly the Japanese demand for lumber and pulp.⁴ Southern companies, some with forestry experience in the north, cast covetous eyes at the timber potential of Yukon. In 1969, Atlin Industries Ltd. proposed the development of a lumber manufacturing facility to be located at Carcross.⁵ The sawmill and chipmill negotiated by the company through

¹ I. L. Withler, A Limnological Survey of Atlin and Southern Tagish Lakes: With Special Reference to Their Proposed Use as Hydro-electric Storage Reservoirs. Management Publication No. 5 of the British Columbia Game Commission, 1956, pp. 12-14.

² NAC, RG 85, vol. N2865-3/5, file 31. Proposal, "The Mid-Yukon Project," unpublished position paper for future studies.

³ Editorial, "Hydro Up A Creek?" The Whitehorse Star. June 6, 1980. The initial proposal was based on the projected power needed to drive the pipeline turbines.

⁴ NAC, RG 85, vol. R 1350-1, file 1. Letter, A. D. Hunt, Director, Department of Indian Affairs and Northern Development, Northern Economic Development Branch to J. B. Bergevin, Asst. Deputy Minister, Development. April 10, 1969.

⁵ NAC, RG 85, vol. R1350-1, file 1. Letter, D. Ross Fitzpatrick, Executive Vice-President, Atlin Industries Ltd. to J. K. Naysmith, Chief, Water, Forests and Land Division, Department of Indian Affairs and Northern Development. March 12, 1969.

the federal government raised the ire of a more assertive territorial government.¹ Concern for sustainable economic exploits and protection of recreational and tourist areas were paramount to the Yukon government.² The Yukon media attacked the federal governments promotion of the project with a satirical comment: "Almost all of the trees in the area would be cleared away and the lakes would be nicely polluted for hundreds of years."³

By 1970, tourism had become the new force of change in the Southern Lakes region. An "environmentally conscious" Territorial government effectively lobbied against the federal government and eliminated the development plans of Atlin Industries Limited because "logging would destroy the authentic wilderness frontier atmosphere that tourists desire."⁴ The commercial potential of tourism was recognized and steps were taken to ensure that areas frequented by tourists were protected. Improved road surfaces, the range of the automobile and improved tires encouraged many more outsiders to visit the area in cars and motor homes. Yukoners also invaded the Southern Lakes region. After 1965, cottage construction around Marsh and Tagish lakes expanded exponentially.

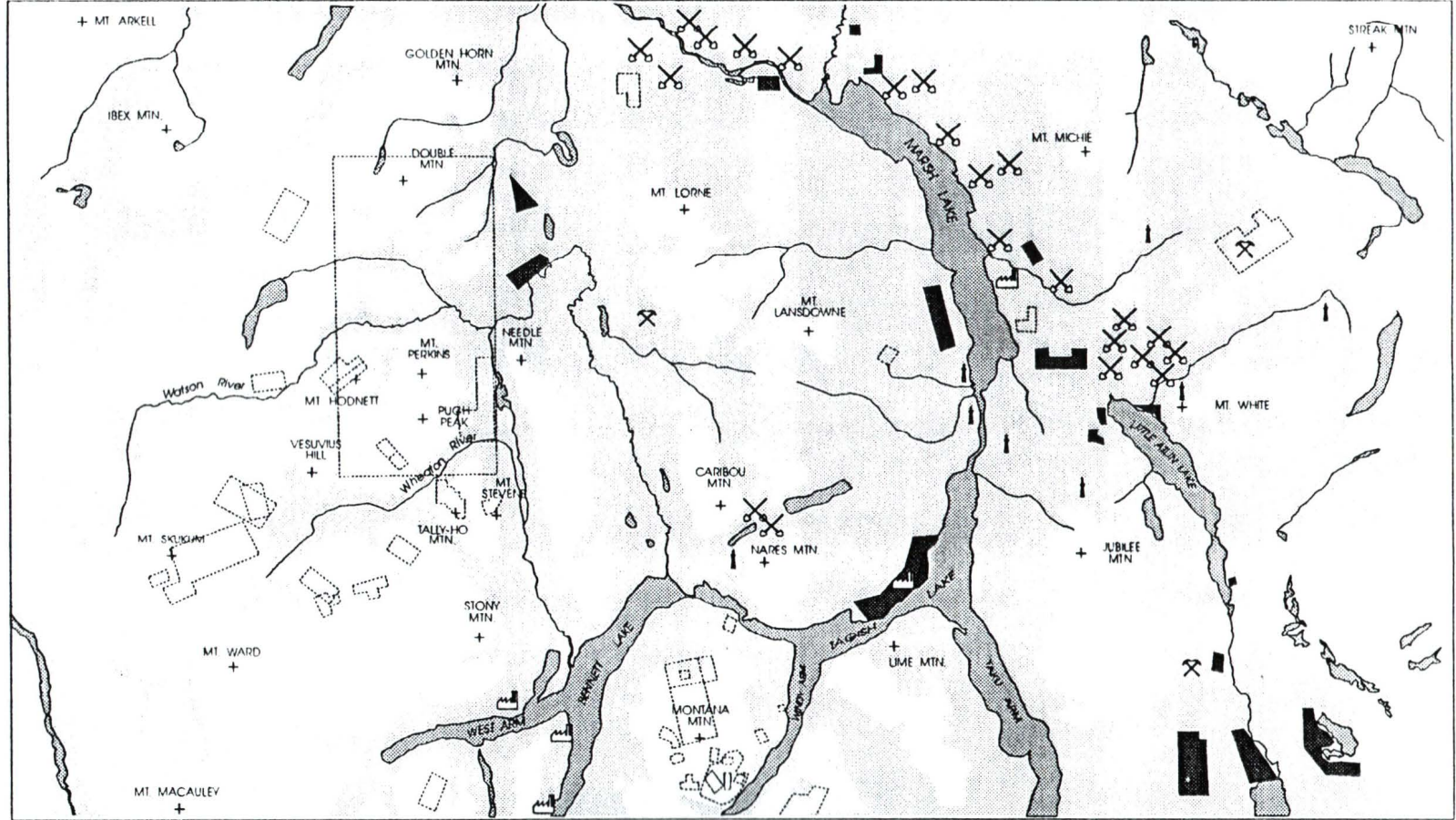
¹ NAC, RG 85, vol. R1390-1, file 2. Yukon Territory, Territorial Government Minutes, Discussion about Sessional Paper #10, Federal Forest Management and Timber Disposal Policy - Yukon Territory. April 7, 1970.









² John Lammers, President, Yukon Conservation Society, "Question on Conservation." The Whitehorse Star. May 21, 1970, p. 25.

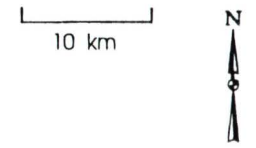
³ NAC, RG 85, vol. R1390-1, file 2. Willard L. Philips, the Editor of the Whitehorse Star to John Chretien, Minister of Indian and Northern Development. July 10, 1970.

⁴ M. R. Fajrajsl, "Multiple use of Forest Lands of the Tagish-Marsh Lakes Area." Unpublished report prepared for the Territorial Council of the Yukon, November, 1972.

MAP 2 FORCES OF CHANGE - 1898-1991



- | | | | |
|---|---------------------------------|---|--------------|
|  | Lowland / Valley |  | Mining Claim |
|  | Lakes |  | Gravel Pit |
|  | Mine | | |
|  | Haying / Agriculture | | |
|  | Monitoring Station (Obs. Tower) | | |
|  | Sawmill | | |



Based on: Yukon Government, *Yukon Land Resources & Inventory Atlas, Volume 1*.
 Jamie Bastedo, "A Resource Survey Method for Environmentally Significant Areas".

S. Garner Cartographer

This type of government pseudo-environmentalism, however, was an additional type of resource exploitation. Roadside stopovers became necessary for tourists who made their way along the highways in campers; campsites now occupy almost every lake and stream. Recreational housing also developed. Hundreds of people now migrate into the area from Whitehorse creating seasonal townships around the lakes.

The forces of change have transformed the Southern Lakes region in the last one hundred years of development. Foot paths and game trails have been converted into railways and highways, rivers and lakes into inter-locking waterway systems. Mining activities have become increasingly exploitive; the movement from the individual prospector to capital-intensive mining can be traced by the environmental scars that are forged on the landscape. Few areas in the region are untouched by human influences.

CHAPTER TWO: The Visible Transformation

In one hundred years, the Southern Lakes region, Yukon Territory has been transformed. Lost forever is the uninterrupted landscape. Gone are the free flowing streams and rivers, the unscarred mountains and the wooded hills. They are marked instead, by the signs of human technological advance: bridges, dams, mines, settlements and transportation routes. The history of wildlife utilization and development can be plainly seen on the landscape. A beached raft which washed ashore during the Gold Rush still remains, testifying to the plight of prospectors, but also to the ecological destruction that accompanied them. The gaping mouth of a mine, last worked in the 1920s, remains a permanent fixture, as does the machinery strewn about the site. The north is an unforgiving place. Successive developments have not wiped away the remnants of the past; the slow decaying process holds the caricatures in place for future generations. Changes to the Southern Lakes landscape came quickly; the environmental scars linger.

It is difficult to determine the significance of aboriginal marks on the land. To the untrained eye, the trails, camps and harvesting tools blend into the landscape as if aboriginal people themselves were a part of the scenery. To a certain extent, this is true. Throughout the Tagish subsistence cycle there was a degree of environmental harmony which is inherent in their world view. For example, although they returned to particular locales on a cyclical basis, no permanent settlements were established. Most of the Tagish camps were occupied by single families

which moved from one resource area to the next without establishing a recurring pattern. The Tagish transient lifestyle left few permanent scars on the land because indigenous need and their lack of post-stone age technology ensured that the over use of resources did not occur.¹

A closer examination, however, reveals that the Tagish manipulated their environment when they had the technology to do so. The ability to fashion the land to their advantage left some subtle yet distinguishing marks. Trade goods augmented the technological advances of the Tagish and provided them with the technological ability to change their land use patterns. Initially, trading had been limited to Russian goods and coastal trading, however, at the turn of the nineteenth century the coastal trade had diminished and the demand for inland furs developed. The trade which developed from the coast produced a cultural revolution amongst the Tagish.²

Water routes and overland trails enabled large Tlingit trading expeditions to extract rich inland furs from the interior nations.³ Schwatka notes that an old trader told him that "as many as eighty of the former tribe [Tahk-heesh] have been known to cross ... by the Chilkat and Chilkoot trails twice a year; or, in brief, eight tons of trading material found its way over ...

¹ Greer, Site Locations and Archaeologically Significant Areas in the Southern Lakes District, Yukon territory. Final Report, pp. 18-19 and Greer, Wheaton-Watson Resource Study: Culture History and Heritage Resources Watson and Wheaton Valleys, pp. appendix, part 1 and 2.

² Alan D. McMillan, Native Peoples and Cultures of Canada: An Anthropological Overview. Vancouver: Douglas and McIntyre, 1988, pp. 205-206.

³ George Guédon. "Explanation of Indian Map of the Rivers, Lakes, Trails and Mountains From the Chilkat to the Yukon Drawn By the Chilkat Chief, Kohklux, in 1869." Mazama (April 1901): pp. 75-82.

and, [from there it was] spread all over the north-west."¹ Tagish elders speak of the faces which were carved into trees to mark the trading trails in the Primrose Valley and Skagway area, and the Tagish trail which "led to everywhere."² Inland trading networks were accessed through the Big Snafu Lake trail leading to the east.³ Trading patterns and established trading routes placed marks on the land.⁴

The acculturation of the Tagish to the Coastal Tlingit society as a result of their intimate trading relationship produced many new distinguishing cultural features. Semi-permanent settlements developed which were occupied for much of the spring and summer and revisited for a brief time during the winter for feasting and potlatches.⁵ Tlingit style permanent dwellings, representing the TukRedi and the Dakluwedi clans, were built at the Tagish Narrows, the place where the Tlingit came to trade.⁶ Imported harvesting technologies such as fish weirs and large game traps located on the east side of Tagish Lake and the north side of Tagish Lake also became evident on the landscape.⁷ Traditionally a land

¹ Lieutenant Schwatka, "The Great River of Alaska: Exploring the Upper Yukon." The Century Illustrated Monthly Magazine. May 1885 to October 1885, Vol. XXX, p. 743.

² Greer, Traditional Land Use, Art Johns, p. 11; Angela Sidney, p. 22; John Wally, p. 25.

³ *Ibid.*, Johny Johns, pp. 14-19.

⁴ *Ibid.*, pp. 8-32.

⁵ Catharine McClellan, "Tagish." June Helm, ed., Handbook of North American Indians: Subarctic, Volume 6. Washington: Smithsonian Institution, 1981, pp. 483-484.

⁶ F. Schwatka was the first to mention the presence of Tlingit style housing at this locale, F. Schwatka, Report of a Military Reconnaissance in Alaska Made in 1883. Washington: 1885, p. 81. Dawson also mentions them with reference to their usage in the winter, see Dawson, Report on the Yukon District 1887, p. 204B.

⁷ Greer, Traditional Land Use, Mary James, p. 8; Art Johns, p. 11; Johny Johns, p. 14-18, 21; Daisy Smith, p. 24; and Dora Wedge, pp. 26-29.

based people, some Tagish used the lakes as a mode of travel after dug-out canoes were imported from the coast, but only after trade necessitated it in the early nineteenth century.¹ Dug-out canoes from the cottonwood trees found around Haunka Creek by Little Atlin Lake were also constructed. These improvements to transportation made consistent travel possible over the treacherous, windy lakes.² Land travel was also improved with the introduction of domesticated dogs in the latter half of the nineteenth century. Dogs, which were used for Tagish/Tlingit trading expeditions, became very valuable pack animals, especially for the transporting trade goods over the mountain passes.³

The fur trade brought dramatic changes to the land-use patterns of the Tagish, but extensive land-use changes were curbed by two factors which drastically altered Tagish society and ensured their subservient role in the lucrative fur trade: wars and virgin soil epidemics.⁴ The former centered around Tagish women, who were often mistreated by Tlingit traders. Scrimmages were also common between groups of inland nations.⁵ Population losses due to the small pox epidemic in the mid-nineteenth century and the scarlet fever epidemic in 1890 all but decimated the Tagish.⁶ Once a "large and flourishing" nation in the mid-nineteenth

¹ In Greer, "Traditional Land-Use Pattern," p. 14, Johny Johns relates a story of his father who imported a 24' foot dugout canoe from the coast. He did this because the small, fragile moose hide boats were unstable and unsafe on the lakes.

² Ibid.

³ McClellan, My Old People Say, part 1, pp. 161-167.

⁴ Lieutenant Schwatka, "The Great River of Alaska: Exploring the Upper Yukon." The Century Illustrated Monthly Magazine. May 1885 to October 1885, Vol. XXX, p. 743.

⁵ McClellan, My Old People Say, part 2, p. 519.

⁶ For a discussion of the spread of epidemics on the coast see, Hubert Howe Bancroft, History of Alaska, 1730-1885. San Francisco: A. L. Bancroft, 1886, pp.

century,¹ the Tagish were cut down to a "poor" and "miserable" tribe of about fifty persons when Lieutenant Schwatka traveled through the area in 1883.² These diseases, along with other sicknesses such as influenza, pneumonia, venereal disease, tuberculosis and measles³ were spread through the coastal trading routes.⁴

The trading routes established by the Tlingit through the mountain passes became the avenues for non-native people to plan their exploitation of the hitherto unknown regions of the Southern Yukon. But they were not immediately available. The first official crossing of the Chilkoot Pass by non-natives was made on July 4, 1880 when Edmund Bean led an inland mining expedition to the Southern Lakes. The miners reached as far as Teslin, but were unsuccessful in their search for gold.⁵ Although the outcome was insignificant, the event was of great consequence. The agreement reached with the coastal Tlingit, which opened the transportation corridor over the mountain passes, was unquestionably one of the most significant events in the transformation of the Southern Lakes.

560-563. William Dall, Alaska and Its Resources. Boston: Lee and Shepard, 1870, p. 100.

¹ Z. T. Wood, "Annual Report of Superintendent Z. T. Wood, 1898," Annual Report of the North-West Mounted Police 1899. Publisher unknown: 1899, pp. 31-55.

² Schwatka, Military Reconnaissance in Alaska, pp. 15-16, 80-82.

³ Julie Cruikshank, Their Own Yukon: A Photographic History By Yukon Indian People. Whitehorse: Yukon Press Limited, 1975, p. 95.

⁴ Julie Cruikshank notes that the Hutsnuwu (Angoon) Tlingit clan, of which members of a major Tagish clan were associated, lost two-thirds of their number as a result of the measles epidemic in 1848 and the smallpox epidemic in 1863. See "'Images of Society in Klondike Gold Rush Narratives: Skookum Jim and the Discovery of Gold.'" Ethnohistory. Winter 1992. Volume 39, number 1, p. 24.

⁵ Allen A Wright, Prelude to Bonanza: The Discovery and Exploration of the Yukon. Whitehorse: Arctic Star Printing Inc., 1980, pp. 136-137. Captain Beardslee, an American Naval Officer, negotiated the way for Bean to lead the first expedition over the pass.

Explorers and a few mining expeditions made their way over the pass in subsequent years, but opted to travel directly north upon reaching Lake Lindeman, limiting the effects they had on the Southern Lakes. Similarly, the first scientific study of the Chilkoot and Chilkat passes concentrated on the area to the north and west of the Southern Lakes region. Dr. Arthur Krause and his brother Aurel meticulously mapped Lake Lindeman and the sources of the Tahk-heena River in May and June of 1882, and for the first time publicized the accessibility of the interior of the Yukon. Their studies showed, however, that although the passes offered the easiest passage into the interior, the overland trail to the Tahk-heena (Takhini) River was not an ideal route to the head of the Lewis (Yukon) River.¹ Swatka's route through the Southern Lakes region, although not a direct course, became the path of choice because of the relative ease of water travel.

In the wake of explorers who studied the military, geographical and geological promise of the Southern Lakes, came thousands of people willing to challenge the environment. Lindeman and Bennett Lakes were transformed into massive depots complete with saw mills and ship yards.² For two years, from 1897 to 1899, Bennett City housed over 20,000 people whose sole purpose it was to reach the Klondike.³ Bennett City was

¹ Aurel and Arthur Krause, Zur Tschuktshchen-Halbinsel and zu den Tlinkit-Indianern 1881/82: Reisetagebücher and Briefe. Berlin: Deitrich Reimer Verlag, 1984,

² Richard J. Friesen. The Chilkoot Pass and the Great Gold Rush of 1898. Ottawa: National Historic Parks and Sites Branch, Parks Canada, Environment Canada, 1981, pp. 62-64.

³ In 1898 NWMP reports indicate that there were approximately 1000 men in Bennett City. NAC, RG 18, D3, vol. 1. NWMP, Yukon Records, Daily Journal Lake Bennett, Friday, May 6, 1898. Furthermore there was 450 boats and/or barges on the East side of Bennett alone. Considering that there was usually 4-5 men

transformed into a large tent city and boat building center in 1898, and teamed with the activity of those on their way to the Klondike.¹

The demand for quicker and more efficient modes of travel led to larger and more disruptive transportation systems. Steamers became commonplace on the Southern Lakes system, transporting miners and their supplies down the Yukon River to the Klondike. Two or three steamers would arrive and depart every second day out of Bennett City, bringing the successes and the all too common failures out of the Klondike, and taking fresh recruits into the field. However, by the fall of 1898, the flow of traffic from the Chilkoot Pass had dwindled to one or two people a day.² The transformation of the land was evident by the barren hillsides which had been stripped of their wood for steam production. Established trails such as the Red Line Express from Skagway to Bennett City via the White Pass, and the Chilkoot Pass trail, reinforced the marks of human occupation.

By the turn of the century, the individual miner was being ousted by conglomerate corporations which wished to industrialize the mining process in the Klondike. The new mining style demanded that more efficient and practical transportation routes be developed. Large scale resource development was dependent on a transportation link to the ocean.³ The White Pass & Yukon Route railway was organized in the spring of 1898

per boat the numbers were significant. NAC, RG 18, D3, vol. 1. NWMP, Yukon Records, Daily Journal Lake Bennett, Thursday, May 19th, 1898.

¹ NAC, RG 18, D3, Vol. 1. RCMP, Yukon Records, Daily Journal, Lake Bennett.

² NAC, RG 18, D3, vol. 1. NWMP, Yukon Records, Daily Journal Lake Bennett, August 9, 1898.

³ NAC, RG 85, vol. 719, file 1004-31. W. D. McBride, Public Relations Officer, "The Story of the White Pass & Yukon Route."

by a group of British financiers. From tide-water on the Pacific Ocean at Skagway, the rail was pushed through to the head of Bennett Lake by July 6, 1899 and on through Caribou Crossing (Carcross) to Whitehorse a year later.¹ The rail passed through swaths of trees cut out of the sides of mountains, traversed muskeg bogs, spanned streams and rivers, and ran along lakes, placing dominant interruptions on the land.

The railway linked the interior of the Yukon Territory with the coast, and rendered obsolete other transportation avenues such as the Chilkoot Pass, the Dalton Trail and the popular boat route through Bennett Lake, Nares Lake, Tagish Lake, Marsh Lake and on up the Yukon River.² Bennett City also collapsed. The restaurants, bakeries, hotels, brothels, saloons and dance halls quickly faded from the landscape after the completion of the railway from Skagway to Carcross. But although the people disappeared, signs of their passing did not. The absolute destruction of forests, streams and lake shores and the remnants of abandoned saw mills, boat factories and shacks remained as reminders of the events of the past.

Transportation on the Southern Lakes from Whitehorse to the head of Bennett Lake was dramatically altered with the completion of the railway. Steamers were still operating, but instead of assisting miners in their quest for gold in the Klondike, they acted as branch lines to the WP & YR railway which had become the lifeline of the Yukon. Trails and roads also developed off the railway route. This was especially true of the Wheaton

¹ Roy Minter, White Pass: Gateway to the Klondike. Toronto: McClellan and Stewart, 1987.

² Gordon Bennett, Yukon Transportation: A History. Ottawa: Parks Canada, 1978.

and Watson river valley areas. Extensive exploration and mining were undertaken as a result of corridor development along the river valleys in the first decade of the twentieth century.¹ Applications to purchase and/or lease 160 acres of land for the purposes of mining covered much of the area by 1905. By 1910 mining interests had waned considerably, but the spider web of roads to remote areas opened for exploitation the moose, mountain sheep and mountain goats that inhabited the area.

The new development resulted in the establishment of settlements in the region. Carcross became the hub of the Southern Lakes region after the Klondike Gold Rush when transportation corridors were established through the White Pass to the head of the lake system. It was the former seasonal camp of the Tagish who harvested the caribou which crossed at the narrows where Bennett Lake flows into Nares Lake. As the terminus for steamer travel on the lake system and the railway head, it was expected that Carcross would be a major centre. But when the line was pushed on to Whitehorse in 1901, Carcross became just another maintenance station for the railway.² Other developments, however, ensured the existence of Carcross. In 1901, Bishop Bompas chose Carcross as the location for Chootla Anglican Residential School, which served to educate First Nations Children from all over the Yukon and northern British Columbia.³

¹ See NAC, RG 85, volumes 1524 and 1525 for applications.

² Frank Duerden, The Development and Structure of the Settlement System in the Yukon. Whitehorse: Department of Library and Information Resources, Government of Yukon, 1981, pp. 146-150.

³ H. Hellaby or M. Gibbs, "History of the Chootla [sic] School." Unpublished paper. Yukon Archives, Cor. 301, folder 6. For a social commentary on the effects of the school on its First Nations pupils see Ken Coates, "'Betwixt and Between": The Anglican Church and the Children of the Carcross (Chootla) Residential School, 1911-1954." Ken Coates and William Morrison, eds.,

Carcross was also the terminus of the river boat cruise to Atlin and Ben-My-Cree, the resort on Taku Arm of Tagish Lake.

Other communities in the region turned out to be temporary settlements. Initially the site of the famed Tagish houses, Tagish Post became the headquarters of Northwest Mounted Police for the areas south of Dawson City in 1896.¹ As the stop over for the Klondike-bound persons, the area experienced significant activity around the turn of the century both by those replenishing their supplies and those who wished to supply the miners. The transformation caused by the immigrants was so intense that a reserve which would protect the Tagish from white encroachment was supposed to have been established in 1898.² The reserve never materialized.³ Before the Order-in-Council was enacted, the threat to Tagish land was over because the completion of the WP & YR railway to Whitehorse reduced the importance of the community.

Resource extraction in the vicinity of Windy Arm of Tagish Lake led to the establishment of Conrad City in 1905. Carcross received much of the benefit as the supply depot for the mining community. Merchandise was transported via the WP & YR railway to Carcross and then by steamer to Conrad City. Speculative reports concerning the extraction potential of the

Interpreting Canada's North: Selected Readings. Toronto: Copp Clark Pitmann Ltd., 1989, pp. 150-168.

¹ NAC, RG 18, D3, Vol. 2. RCMP, Yukon Records, Daily Journal, Tagish, 1896.

² YA, Series 1, Gov. 1638. See Letter, Lyndwade Percila, Assistance Secretary, Department of the Interior to Fred White, Comptroller, North West Mounted Police. September 14, 1898.

³ YA, Series 1, Gov. 1638. Letter, D. A. E. Strickland, Inspector, North West Mounted Police, Tagish Lake, Upper Yukon to Z. T. Wood, Officer Commanding the Upper Yukon. August 16, 1898.

Montana Mountain mines were very optimistic, but progress in the mines was short-lived, and in 1917 the area was closed down.¹

Other prospective mining towns were also planned in the Southern Lakes Region. Developments around the turn of the century in the Wheaton and Watson River valleys caused speculators and land boosters to reserve land for the purposes of establishing a township.² South of Carcross, Montana Mountain was the sight of the Big Thing group and Venus group of silver mines developed around the turn of the century. The ore was shipped to Skagway via the WP & YR railway. An extensive system of roads and tramways was developed for mining purposes, and to assist in further exploration.³ The Little Atlin Lake area was also investigated but it, too, did not materialize. The grandiose plans of settlement were deserted when mineral prices fell on the world market and the mining companies, which the towns sought to serve, pulled out.

Smaller population pockets in the form of mining, mineral exploration and construction camps, however, frequently dotted the landscape, leaving their marks on the Southern Lakes region. Camp personnel showed little, if any, respect for the environment. The destruction caused by drilling, blasting and corridor development was significant, but so too was the amount of timber they used for fuel, steam production and shelter. Often times, when resources in the immediate

¹ Duerden, The Development and Structure of the Settlement System in the Yukon, pp. 147-148.

² NAC, RG 85, vol. 1524, file 3664. Application to purchase 160 Acres by Robert Lowe (Merchant) for the purposes of a town site around the Gold Hill area. The application was canceled July 23, 1908.

³ NAC, RG 85, vol. 186, files 202, 203, 204. H. Maclusin and D. D. Cairnes, Field Books, Notes on Surveys Around Windy Arm, 1906, Geological Survey Branch, Ottawa.

vicinity of the camp were extinguished, prospectors, explorers and road workers would travel to the periphery of the area or move to a different primary location, expanding the cycle of destruction. Lorne, Robinson's Crossing and Cowley, all settlements with origins in railway development located between Carcross and Whitehorse, suffered population loss and eventual abandonment. Robinson's Crossing was launched with hopes of a promising future with the development of the Wheaton and Watson river valleys in the 1910s and early 1920s but such settlement was limited according to mining speculation.¹

The first decade of mining activity in the Southern Lakes Region transformed what had appeared to newcomers to be an impenetrable and formidable landscape. Mining leases gave prospectors the exclusive right to use the environment in whatever way benefited them. No controls were placed on land use. River, lakes, creeks and tributaries were used as tools of prosperity, with little regard shown for the environmental impact the diversions and disturbances had on the larger ecosystem. Access roads opened up areas like the Wheaton and Watson river valleys to anyone who wished to prospect. Tramways and trails leading from mines to the WP & YR railway marked the mountainsides and interrupted the natural flow of mountains, hills, valleys, streams and lakes.

The marks on the land left by road construction were limited after 1900 because of the influence of the railway. Wagon roads and trails that would take business away from the WP & YR were be grudgingly set aside either for financial or practical reasons. For example, the mail-wagon

¹ Duerden, The Evolution and Nature of the Contemporary Settlement Patterns in a Selected Area of the Yukon Territory, pp. 19-21.

road from Bennett Lake to Selkirk was discontinued because it was "unfeasible."¹ In 1908, however, the Yukon Government built a rough forty-four mile wagon road from Whitehorse to Carcross in an effort to satisfy the criticism of many who opposed the railway's dominance.² Even in the instance of government intervention, however, corridor development was retarded by financial constraints. The Carcross/Lake Bennett areas remained in relative seclusion because of the decline of mining activity; traffic was limited mainly to weekend fishermen.³

By 1910, systems in which individual people and specialized goods could be moved independent of the railway were very much in demand. The Carcross to Tagish trail became an important link between these two communities. This route, established by the Tagish before the time of contact, afforded the consistent year-round connection which was needed because the lakes were often too windy in the summer and the ice too unstable for much of the winter. By the 1920s, the twenty mile road was upgraded from a trail to one of the more significant corridors in the Yukon to aid the approximately 170 people in the area, and to provide access to the mink and hay farms which lined the lake system.⁴

¹ NAC, RG 85, vol. 1167, file 351-1-2, part 1. See A Gobeil, Deputy Minister of Public Works, Ottawa to James A. Smart, Deputy Minister of the Interior, July 13, 1899.

² NAC, RG 85, vol. 608, file 2592. Robert Lowe to O. S. Finnie, Interior Department, Ottawa, August 7, 1922.

³ NAC, RG 85, int. 188, vol. 1168, file 351-1-2, part 2, pp. 17-18. Letter, J. Lorne Turner, Director, Lands, North West Territories & Yukon Branch to Comptrollers Office, Dawson, Y.T. April 17, 1935.

⁴ NAC, RG 85, int. 188, vol. 1168, file 351-1-2, part 1A, pp. 16-17. Memorandum, J. H. McNeil, Supt. of Works and Buildings to The Gold Commissioner, November 22, 1928.

In the 1920s, significant corridor development occurred in the Wheaton and Watson river valleys, the sight of numerous mines and extensive geological work. The addition of several large quartz mines such as the Mascot group up the Watson River and the Tally Ho and Carbon Hill groups on the Wheaton River augmented the construction and upgrading of over eighty miles of road in this area.¹ But, by 1935, low silver production rendered the extensive web of roads and trails useless. They became an avenue by which wood cutters, fisherman and big game hunting expeditions gained access to the Wheaton and Watson River valleys.²

Proposed land routes to the south, which would have brought extensive changes to the landscape, also fell by the wayside. The British Columbia government promoted the idea of developing the Yukon as its hinterland since Duff Pattullo visited the area and recognized its potential in 1897.³ The idea of an overland link to the south resurfaced in the 1930s with strong backing from the United States government, which wanted to establish a connection with Alaska. The proposed artery to the cities of the south revived the frontier aspirations of the north. Groups such as the International Highway Association of Yukon formed to promote the

¹ NAC, RG 85, int. 188, vol. 1168, file 351-1-2, part 1A, pp. 16-17. Memorandum, J. H. McNeil, Supt. of Works and Buildings to The Gold Commissioner, November 22, 1928.

² NAC, RG 85, int. 188, vol. 1168, file 351-1-2, part 2, pp. 17-18. Letter, J. Lorne Turner, Director, Lands, North West Territories & Yukon Branch to Comptrollers Office, Dawson, Y.T. April 17, 1935.

³ For more information on the background of these events see David Remley, "The Latent Fear: Canadian-American Relations and Early Proposals for a Highway to Alaska," and Robin Fisher, "T. D. Pattullo and the British Columbia to Alaska Highway," as found in Kenneth Coates, Editor, The Alaska Highway: Papers of the 40th Anniversary Symposium. Vancouver: University of British Columbia Press, 1985, pp. 1-24.

economic opportunities such a corridor would provide.¹ But the Depression and coinciding population loss of the Yukon, which had decreased from over 30,000 people at the height of the gold rush in 1898 to approximately 4,000 people, the majority of whom were native, in 1930, eliminated the feasibility of an overland route.

In the absence of an adequate overland transportation network, another type of transportation development took place in the Yukon. Air travel became important because it enabled individuals, whether they be miners or trappers, to gain entrance to areas without the need for a direct overland link.² Carcross was equipped with an airport in the summer of 1934 - a golf course was converted to an emergency landing strip which was primarily for the WP & YR air service to the north.³ Rivers and lakes enabled bush pilots to enter every corner of the southern Yukon, making even the most remote areas within the reach of human influence.

In 1942, the threat of Japanese attack on the Northwest during World War II provided the stimulus for extensive transformation of the Southern Lakes. The Alaska Highway, a major corridor to the south, skirted the Southern Lakes to the east and north and opened up the whole area for extended use. Its influence, however, was evident throughout the region. Carcross had all but disappeared when mining activity in the area dried up

¹ NAC, RG 85, int. 188, vol. 1168, file 351-1-2, part 2. T. A. Firth, President, International Highway Association of Yukon to Members, International Highway Association of Yukon, August, 1930.

² YA, Anglican Church Records, Cor. 261, file 17. Letter, Rt. Rev. A. H. Sovereign, D. D., Bishop, Anglican Church of Canada to Secretary, Department of Indian Affairs, Ottawa, August 21, 1933.

³ NAC, RG 85, vol. 1190, file 352-2/211, part 1. Extracted from G. A. Jeckell Report to Mr. Turner, January 10, 1936.

around 1915;¹ a group of Tagish at the Yukon's first Indian Reserve, established in 1905, and the Anglican residential school kept it on the map.² The construction of the Alaska Highway, however, revived the town. The Carcross-Tagish road was improved and further developed from Tagish to the Alaska Highway so that supplies could be moved through to Jakes Corner. This link to the southern artery became significant to the transformation of the western region of the Southern Lakes.

During the war, other North West Defense Projects, such as the spur pipeline of the CANOL project, constructed from Skagway to Whitehorse with a pumping station in Carcross, developed in the Southern Lakes. Supplying the projects created sustained pressure within the region. The WP & YR railway exclusively handled the needs of the US. military but the volume of construction material overloaded the railway system. The building of the Haines Cut-off road from its terminus at Haines, Alaska to Kluane National Park just east of the Yukon-Alaska border, helped supply the Northwest Defense Projects with material when the WP & YR railway proved unable to keep up with the demand. The Haines Road greatly eased the military traffic through the Southern Lakes Region but two years of intense military pressure left enduring marks on the land: wider more

¹ D. D. Cairns, "Geological Survey Report for the Yukon, 1909, 1914, 1915." H. S. Bostock, ed., Geographical Survey of Canada, Memoir 284, Yukon Territory. Ottawa: Queen's Printer, 1957, pp. 210-211.

² YA, Series 3, Gov. 1639. Letter and Map, I. O. Stringer, Bishop, Anglican Church to R. C. Miller, Mining Recorder. October 31, 1905. Yukon Archives, Gov. 1954. Also Letter, Bishop Bompas, Anglican Church to The Commissioner of the Yukon Territory. November 29, 1904. YA, Series 3, Gov. 1639. Letter, James Gibbon, Senior Surveyor, Survey Office to H. G. Dickson, Dominion Land Surveyor. March 7, 1905.

permanent roads, gravel pits and abandoned machinery and construction camps remained.¹

With the Alaska Highway skirting the area to the east, the Haines cut-off to the west and the WP & YR giving up their monopoly of travel through the region, the importance of the lakes in the transportation scheme of the Yukon declined after 1950. The construction of the Atlin Road from the Alaska Highway to Atlin in 1949 completely eliminated the need for steamers.² Improved automobile technology gave cars greater driving range and a higher degree of dependability which enabled individuals to use the roads. Motor vehicle transportation became a major force in the transformation of the Southern Lakes after the link to the south was established.

Vehicles provided the necessary freedom of movement and roads the avenues to ensure the transformation of the Southern Lakes region. Mining companies re-examined the feasibility of areas opened up by the Alaska Highway, the Carcross-Tagish Road and the Atlin Road. Other industries such as forestry thrived because the new corridors provided affordable entrance into areas which had not been exploited. Secondary industries such as supply stations for automobiles were needed for tourists and hunters from the south. The Alaska Highway and the corridors which developed from it, however, brought sustained pressure from the south. Before 1940, the land would be developed - mines, roads, towns - but

¹ NAC, RG 85, vol. 1515, file 351-2-21, part 2. J. M. Mills, Lands and Development Services Branch, Ottawa to R. A. Gibson, Director, Lands and Development Services Branch, December 3, 1947.

² "Atlin Highway Open All Types of Vehicles Less Than 25 Tons Gross," The Whitehorse Star. Friday, December 9, 1949. Vol. 49, no. 49, p. 1. See also NAC, RG 85, vol. 1078, file 351-2-7, part 1B. H. J. Woodman, "Inspection of the Atlin Road, May 17th and June 13th, 1950."

usually the pressures on the environment were concentrated over one or two years. Abandoned machinery and construction camps remained as the only evidences of development as the flora once again gained prominence over abandoned trails and pathways. The war time projects, however, built dams, bridges and permanent grade roads which cross streams, rivers and lake outlets permanently transforming even the environments on the bottom of rivers and lakes. Hard surfacing of the roads in the late 1970s and 1980s firmly established the corridors as dominant fixtures on the Southern Lakes landscape.

Areas such as the Wheaton and Watson River valleys received renewed interest in the 1960s. Major upgrades were implemented on these road systems in response to rejuvenated world metal markets.¹ Similarly, the Anvil Mine at Faro, a mining community north of Whitehorse, was the catalyst which sparked the construction of a highway to Skagway.² The upgrade of the old route from Whitehorse to Carcross and finally the completion of the highway to Skagway in 1975,³ completed the major road system in the Southern Lakes.

Mining companies were responsible for most of the changes in the land during the 1970s. Abandoned machinery, dormitories and mineral core sheds, deserted cook houses and refuse such as oil barrels, cans, boxes and lumber carelessly strewn about sites signal the use of the land. Roads

¹ See YA, Mss. 224, file 12. Map of claims.

² YA, YRG, Series 10, vol. 125, file 6. Memorandum, L. O. A. C. Hunt, Secretary, Department of Indian Affairs and Northern Development to the Advisory Committee on Northern Development, March 21, 1968.

³ YA, YRG, Series 10, vol. 125, file 7. Letter, A. D. Hunt, Director, Department of Indian Affairs and Northern Development (DIAND), Resource and Economic Development Group to J. Smith, Commissioner of the Yukon, September 14, 1967.

and trails up the sides of mountains, open mining shafts and valleys which look like garbage dumps, characterize the marks left by large scale mining. The inability of the government to regulate such activities and the reckless attitude of companies who treat the environment with such disregard disfigured much of the Wheaton Valley.

Settlement patterns in the Southern Lakes region also became increasingly intrusive during the post-war era. Carcross remained as the major center even after the closure of the Chootla Indian Residential School in the late 1960s.¹ By 1970, increased access from the Carcross road and Klondike Highway stimulated growth. Mining developments in the vicinity threatened to substantially increase the population of Carcross when companies prospecting on Montana Mountain wished to establish their base in the town, but to date it exists as an intersection of the two main routes to the Yukon's interior.² Tagish experienced a revitalization when the Carcross road linked the community to the Alaska Highway. Easy access to Tagish Lake gave rise to recreational housing in the late-1960s and 1970s, rejuvenated the stagnant Tagish economy as a small seasonal supply centre.³

¹ NAC, RG 85, vol. 906/25-1, file 4. Letter, J. W. Churchman, Director of Indian Affairs, DIAND to Assistant Deputy Minister. January 11, 1967.

² Frank Duerden, The Evolution and Nature of the Contemporary Settlement Patterns in a Selected Area of the Yukon Territory. Winnipeg: Center for Settlement Studies, University of Manitoba, 1971, pp. 135-152.

³ There are in the California Beach and Taku subdivisions on Tagish Lake proper, approximately 160 cottage lots but, as of 1981, no estimate has been made to the actual number of lots which have been developed. From personal observation, however, it appeared that the majority of these sites now have structures on the property. Yukon Government and the Department of Indian Affairs and Northern Development, Carcross Valley - Marsh/Tagish Lakes - Atlin Road: Land Management Planning Project, Volume 1 - Review Framework and Resource Data. Whitehorse: Final Draft published by the Yukon Government, June 1980, pp. 43-45.

Seasonal recreational housing placed their marks along the lake shores and river banks after 1970. Territorial government personnel and Canadian government bureaucrats from Whitehorse who desired a summer get-away were the primary consumers of the land around Tagish, Bennett, Marsh and Annie Lakes. Cabin sites were particularly in demand from the late 1960s. In earlier days, when recreational land was not available, the acquisition of such property was often times misrepresented under the pretense of a mine, timber or agricultural lease.¹ Prime sights besides lake tributaries, for example, transfigured themselves from minimal placer mining operations to elaborate cabins equipped with docks. In this way, the one time lessors who "work" the claim for two years, become the owners and, in the process, gain access to valuable crown land at no cost.²

In recent years, recreational housing in the Southern Lakes region has become prominent. The region hosts the highest rural population in the Yukon Territory. Along the Alaska Highway there are 121 recreational houses at Army Beach/McClintock, and another 172 from McClintock to Jakes Corner. The Tagish road, which accesses Tagish Lake, Crag Lake and Chootla Lake, hosts 112 semi-permanent seasonal dwellings in addition to the 157 lots in the California Beach/Taku subdivision near Tagish. The Atlin road had seven cabins in 1979, but in 1991, pressure for more recreational housing has opened up Tarfu and Snafu lakes. The availability of recreational leases will significantly increase this number.

¹ YA, YRG, Series 10, vol. 122, file 1.L. Chambers, Land Use Planner, Department of Local Government to Cheryl Swabey. July 15, 1975.

² YA, YRG, Series 10, vol. 122, file 1. Letter, Peter J. Gillespie, Administrator for the Yukon Territory, to J. Buchanan, Minister, DIAND. October 9, 1975.

The Carcross Valley, which includes the Annie Lake Road to the Wheaton and Watson River valleys, had 29 residential/recreational structures in the late 1970s, but land-use regulation changes have allowed for extensive recreational development in areas such as Spirit Lake and Emerald Lake along the Klondike Highway. Other areas, such as Millhaven Bay on Bennett Lake have also been targeted for recreational housing but growth has been stymied because the area is accessible only by motor boat.¹

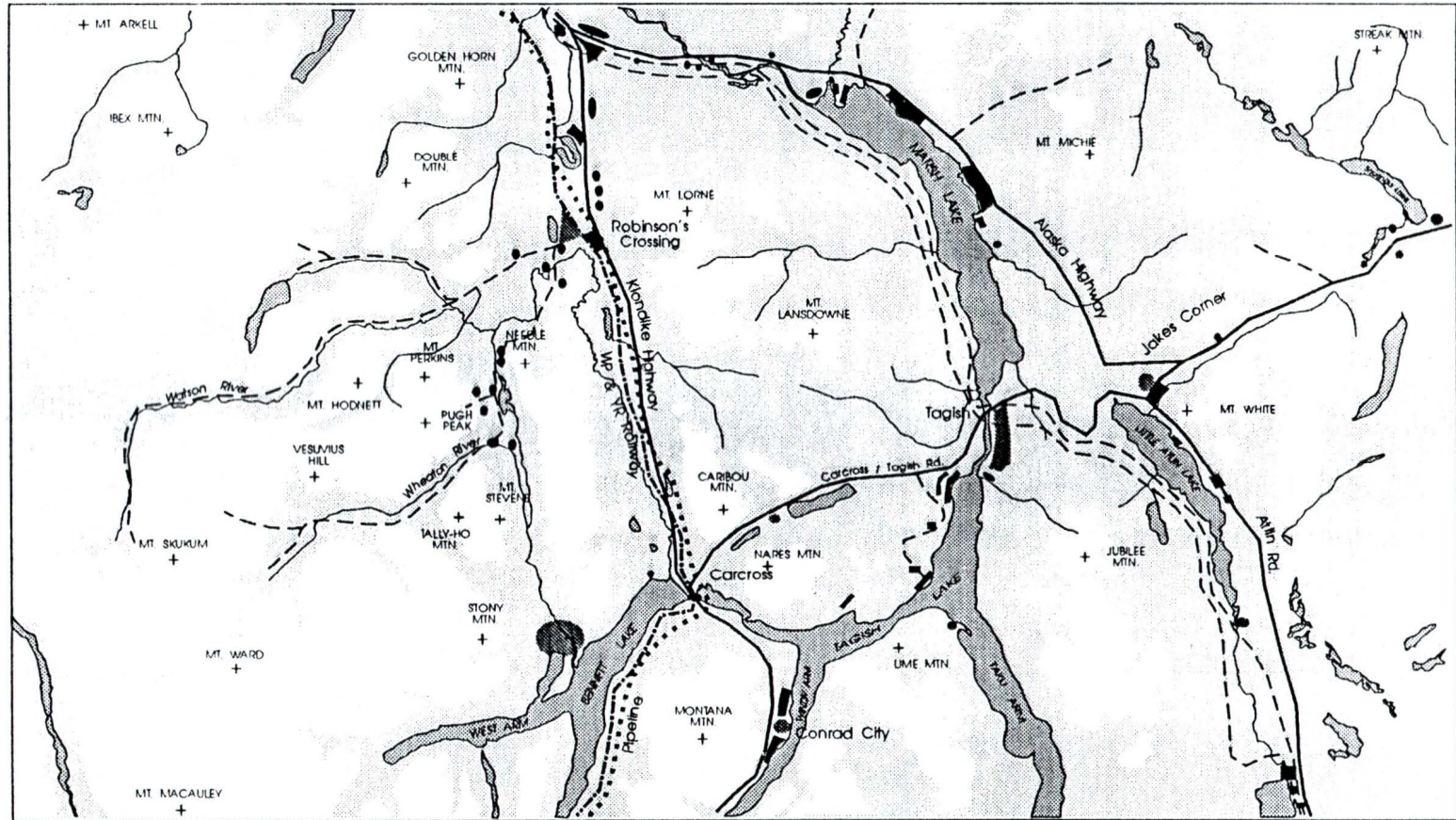
At first glance, the inclusion of semi-permanent and transient immigrants to the Southern Lakes region appears to limit the signs of human influence. Recreationalists, however, whether they be cabin owners or tourists, produced another set of environmental problems, ones which are disguised behind clever clichés about northern beauty and mystique.² Timber stands off the main corridors are being heavily cut to supply cabins and campsites with fuel for camp and stove fires. Enormous amounts of refuse are left by the hundreds of tourists who travel the roads.³









¹ Yukon Government and the DIAND, Carcross Valley - Marsh/Tagish Lakes - Atlin Road: Land Management Planning Project, Volume 1 - Review Framework and Resource Data, pp. 43-46.

² Introspect Inc. Research Consultants, "Carcross/Southern Lakes Area Tourism Development Strategy," p. vii. The report suggests that "small, attractive rural communities in a wilderness setting and the strong visual appeal of the lake and mountain environment" are what tourists in the 1980s and 1990s want.

³ Yukon Government and the DIAND, Carcross Valley - Marsh/Tagish Lakes - Atlin Road: Land Management Planning Project, Volume 1 - Review Framework and Resource Data, pp. 38-59. Although this report concludes that "there are few land use conflicts at the present time" it is quite obvious from the its previous findings that vegetation, wildlife, marine life and fowl are not considered in the above statement. The report is also inconclusive on First Nations land use.

MAP 3 MARKS ON THE LAND: 1898 - 1991



- | | | | |
|---|-------------------------|---|-----------------|
|  | Lowland / Valley |  | Housing |
|  | Lakes |  | Recreation Area |
|  | Railroad | | |
|  | Highway | | |
|  | Trail or Telephone Line | | |
|  | Pipeline | | |

Based on:
Yukon Government, Yukon Land Resource &
Inventory Atlas, Volume I.

10 km



S. Garner Cartographer

Increased tourism has marked the land in subtle ways. Seasonal settlements such as hunting and fishing lodges, popularized in the 1920s when the Ben-My-Cree lodge was established as the termination point for the luxury lake cruise on the steamship Tutshi, offer tourists a "real" Yukon experience.¹ Most contemporary big game hunting and fishing camps have established a base on one of the major transportation routes. A good example is the Spirit Lake Lodge on the Klondike Highway, which is run by descendants of Johnny Johns, the most famous big game guide in Yukon history. Other lodges and retreats are located on Emerald Lake and Crag Lake. From these bases the guides introduce their guests to the rugged peripheral regions of the Southern Lakes Region in areas such as the Primrose Lake and "Wild Wedge." Rental cabins and hotels in the area host bus loads of tourists from the cruise ships at Skagway making it another important link in the tourism network.²

Picnic areas and campgrounds have become characteristic marks by the lakes and streams of the Southern Lakes regions. Major campsites have been constructed at Tagish and Carcross in an effort to draw motorists from the Alaska Highway into the region.³ Almost every lake and stream along the Alaska Highway, the Carcross Road, the Tagish Road and the

¹ Yukon Archives, Series 10, vol. 122, file 1. J. W. Abbott, Officer-in -Charge. Report of a Developmental Survey into the Tagish-Carcross districts of the Yukon. November 16, 1946.

² Stephen J. Copen, Visitors Service Planner, "Visitor Services Development Plan: Carcross Dunes Territorial Nature Preserve." Whitehorse: Report prepared for the Lands, Parks and Resources, Yukon Government, 1984.

³ YA, YRG, Series ROF 1, vol. 45, file 4. Yukon Government, Department of Travel and Publicity, "A Survey of the Tourist Industry of the Yukon Territory," July 22-28, 1962.

Atlin Road has a road, serviced campsites and boat launches.¹ The extensive development brought on by tourism in the last decade has clearly left its imprint on the Southern Lakes region.

The Southern Lakes region is marked by a pattern of development. Each area is characterized by the marks of past human influence. In the western portion of the Southern Lakes, mining development scars the mountains, hillsides and valley floors. To the east and north, the Alaska Highway divides the plateaus, and tourist camps and settlements mark the lake shores and river banks. To the south, transformation is evident by the imprints of highways, railways and mines on the landscape. Few areas in the region are untouched; the marks of development remain as a legacy in the Southern Lakes region.

¹ Introspect Inc. Research Consultants, "Carcross/Southern Lakes Area Tourism Development Strategy." Whitehorse: Report prepared for the Department of Tourism, Tourism Planning and Development, 1985.

CHAPTER THREE: The Invisible Transformation

Historical assessments of the Yukon are preoccupied with the people and events which brought about change. This is the case even in the most recent works such as Ken Coates' and Bill Morrison's, Land of the Midnight Sun,¹ which covers in detail the fur trade, the gold rush, the Alaska Highway and large scale mining in the 1980s. But, although these developments shaped the land, their effects are not always explored; the development of roads and mines are detailed, but the disruption of a wildlife habitat is ignored, if recognized at all. It is easy to miss the animals and fish. They often fade into the background only to emerge in books as objects of exploitation for trappers, big game hunters and fishermen. Plants and birds are even more obscure in historical accounts; rarely are they mentioned past the introductory paragraphs.

Historiography specifically about wildlife is equally problematic. As is shown by Robert McCandless in Yukon Wildlife,² an analysis of the development of wildlife conservation in the Yukon, the realities of land-use can be masked by game reports, conservation policies and government officials. To be sure, tracing the history of wildlife utilization in the Yukon territory is not easy. The fur trade, big game hunting and commercial fishing, to name a few, created complex relationships between people and animals. Records of such activities are often not available or reliable, and the recent reports of the environmental effects of development are often

¹ Ken Coates and William Morrison. Land of the Midnight Sun: A History of the Yukon. Edmonton: Hurtig Publishers, 1988.

² Robert McCandless. Yukon Wildlife: A Social History. Edmonton: The University of Alberta Press, 1985.

biased towards industry. Unwittingly, historians continue to perpetuate common assumptions about the North such as "Canada's Yukon Territory contains an abundance of wildlife."¹ And so, the invisible historical transformation of animals, birds, fish and plants remains unexplored.

In the Southern Lakes region, wildlife utilization and development have disrupted plant and animal life. One hundred years of hunting, fishing, mining and development have affected the habitats of many fauna, including the trout in the lakes, the greyling in the streams, the trumpeter swans, geese and ducks that migrate through the bays, the fur bearing animals both in the water and on land, the moose and caribou in the low lying hills and the Dall sheep and mountain goats which tower over all on the high mountain sides. The flora have proven their adaptability and malleability amidst a century of forestry, fires and contamination. This chapter will examine the invisible transformation of the land by analyzing human exploitation of plants and animals, and the destruction of established habitats in the industrialization process.

The Tagish brought with them a world view of the relationship between the world around them and the supernatural powers of plants and animals which they depended on for survival. For example, Crow created the world, sun, moon, stars and humans, and as such formed not only a physical connection but a spiritual connection with the Tagish.² The fox brought flint, which he had stolen from the bear, but in exchange for fire,

¹ Ibid., p. xi.

² Mrs. Angela Sidney, Mrs. Kitty Smith, and Mrs. Rachel Dawson, My Stories Are My Wealth. Julie Cruikshank, ed. Whitehorse: Council for Yukon Indians, 1977, pp. 1-3.

the bear took away human immortality.¹ Similarly, plants and inanimate objects such as rocks and water and the elements such as wind, rain and fog and the seasons, summer, fall, winter and spring had spiritual connections to environmental stability.² Tagish beliefs created an intimate relationship with the land and resources. Spiritual accountability to the environment guided their decisions about the land and its resources, and helped maintain an equilibrium between technological advance and wildlife utilization.³

A detailed reconstruction of the relationship that the Tagish held with the environment is difficult because the Southern Lakes region is just now receiving extensive attention from anthropologists, ethnologists and archaeologists. Archaeological evidence, although it is improving with increasing scrutiny of the Southern Lakes Region, is somewhat inconclusive. Work done by Sheila Greer in the past decade provides a limited amount of data on Tagish seasonal cycles but most of the material is highly speculative. The use of animal migratory patterns and resource locations as indicators of human occupation is limited, given the variable nature of the ecosystem. Oral evidence is the best source for understanding the Tagish lifestyle but this study deliberately limits itself to the work of trained ethnologists such as Catherine McClellan, Julie Cruikshank and Sheila Greer out of respect for the enormous complexity of their work.

¹ Mrs. Angela Sidney, Tagish Tlaagú: Tagish Stories. Julie Cruikshank, recorder. Whitehorse: Council for Yukon Indians and the Yukon Government, 1982, pp. 1-20.

² Histories of the Tagish people show this relationship, for example the "Southwind Story" as told by Mrs. Angela Sidney in Tagish Tlaagú, pp. 37-39.

³ McClellan, My Old People Say, vol. 2, p. 574.

Some liberties have been taken to interpret manuscript copies of oral interviews although this is the exception rather than the rule.¹

The harvesting of game, fish, fowl, wild vegetables and fruit and other plant materials in the ever-changing ecosystem of the Southern Lakes Region of the Yukon made it essential for the Tagish to maintain a close and dynamic relationship with the plants and animals. A highly flexible and extremely mobile lifestyle was required to survive the harsh climate and landscape.² The Tagish yearly cycle depended upon big game, especially woodland caribou. The caribou, which occupied the secluded mature forests and open remote alpine meadows, and migrated through vast bodies of fresh water, were of primary importance and an integral link in the food chain. They were most vulnerable to human harvesting in the early fall, when their gregarious nature was greatest. Polygamous bulls collected a harem of 20 cows or more and migrated from Caribou Mountain to their rutting grounds near Squanga Lake.³ Tagish seasonal pattern centered around a slaughter of caribou at the "place where the caribou cross," (now called Carcross) and the Tagish Lake hills.

The Tagish spent the late summer and fall in large groups in which they communally harvested a variety of wildlife. Women, children and the elderly harvested and dried fish and small game. Berries, roots and wild

¹ For an in depth discussion on the need for a convergent history see, Julie Cruikshank, "Legend and Landscape: Convergence of Oral and Scientific Traditions in the Yukon Territory." Arctic Anthropology. (1981), volume XVIII-2, pp. 67-92.

² Peter J. Usher and Lindsay Stapes, "Subsistence in the Yukon." (Whitehorse: A Report Prepared for the Economic Development Department, Council for Yukon Indians," 1988), pp. 113-115.

³ Canada, Environment Canada Wildlife Service, Caribou: Hinterland Who's Who. Ottawa: Information Canada, 1973, p. 2.

vegetables were gathered and preserved in moose and caribou intestines for their winter stores. Camps by Annie Lake, Bennett Lake, the North West Arm of Tagish Lake, Snafu Lake and Marsh Lake are examples of bases where different wildlife utilization activities occurred in the fall.¹ Resources, which were plentiful and easy to harvest in the summer months, were often scarce and extremely hard to procure in the harsh winter climate. Groundhog, marmot, gopher, beaver, tree squirrel, porcupine and rabbit, although not the mainstay of Tagish diet, were very important for filling the winter caches.

Mountain sheep, mountain goats, deer and moose were staples in the cold season when individual families depended on their meat, skin and bones. Hunting blinds were used to harvest sheep and goats in the mountainous Wheaton and Watson river region.² Snares fashioned out of sinew were used on the lower plateaus and hillsides to assist in the harvesting of moose and deer. Once the big game kill was made a temporary kill site was established:³ all members of the community assumed responsibility for butchering, drying and storing the meat.⁴ Other fur bearing animals, such as wolf, fox, martin and lynx were utilized for

¹ Greer, "Traditional Land-Use Patterns of the Carcross-Tagish Band." Greer, Wheaton-Watson Resource Study: Culture History and Heritage Resources Watson and Wheaton Valleys.

² Greer, Site Locations and Archaeologically Significant Areas in the Southern Lakes District, Yukon territory. Final Report, pp. appendix A. Sheila C. Greer, "Field Report of the 1982 Southern Lakes (Yukon) Archaeology Project." Edmonton: Unpublished Report Prepared for the Archaeological Survey of Canada, 1982, pp. 9-15. Other sites of this type have been noted by Greer in "Prehistoric Land-Use Patterns: Recent Research in the Southern Lakes Region, Yukon." They include; Desquanga, which is situated beside Squanga Lake, Nustsehe, situated near Tarfu Lake and Loo Cho, situated on Little Atlin Lake.

³ Greer, "Traditional Land-Use Patterns of the Carcross-Tagish Band," pp. 7-32.

⁴ McClellan, *My Old People Say*, pp. 97-99.

their furs which provided comfortable protection in the extreme sub-Arctic climate.¹

Fish were also an integral part of the Tagish subsistence cycle. Whitefish, trout (char), pike, greyling and inconnu were caught and processed in large quantities as they were a relatively consistent and manageable resource.² Spring salmon were also harvested by the McClintock River, but to a much lesser degree.³ At Tagish Lake Narrows and Nares Lake, family groups gathered to harvest fish and game after the ice broke up in the early spring. These sites abounded with a variety of wildlife; sheep and moose in the surrounding mountains and hillsides, and plentiful runs of whitefish, greyling and trout in the streams served to replenish the Tagish after the long harsh winter.⁴ It is likely that early spring was the time for mourning deaths, celebrating marriages and performing various puberty rituals amongst other acts of spiritual significance such as dancing and feasting.⁵

¹ McClellan, My Old People Say, vol. 1, pp. 107-166. Greer, Site Locations and Archaeologically Significant Areas in the Southern Lakes District, Yukon territory. Final Report. Greer and LeBlanc, "A 1983 Update on Yukon Culture History." Greer, "Prehistoric Land-Use Patterns: Recent Research in the Southern Lakes Region, Yukon." Greer, "Traditional Land-Use Patterns of the Carcross-Tagish Band." Greer, Wheaton-Watson Resource Study: Culture History and Heritage Resources Watson and Wheaton Valleys.

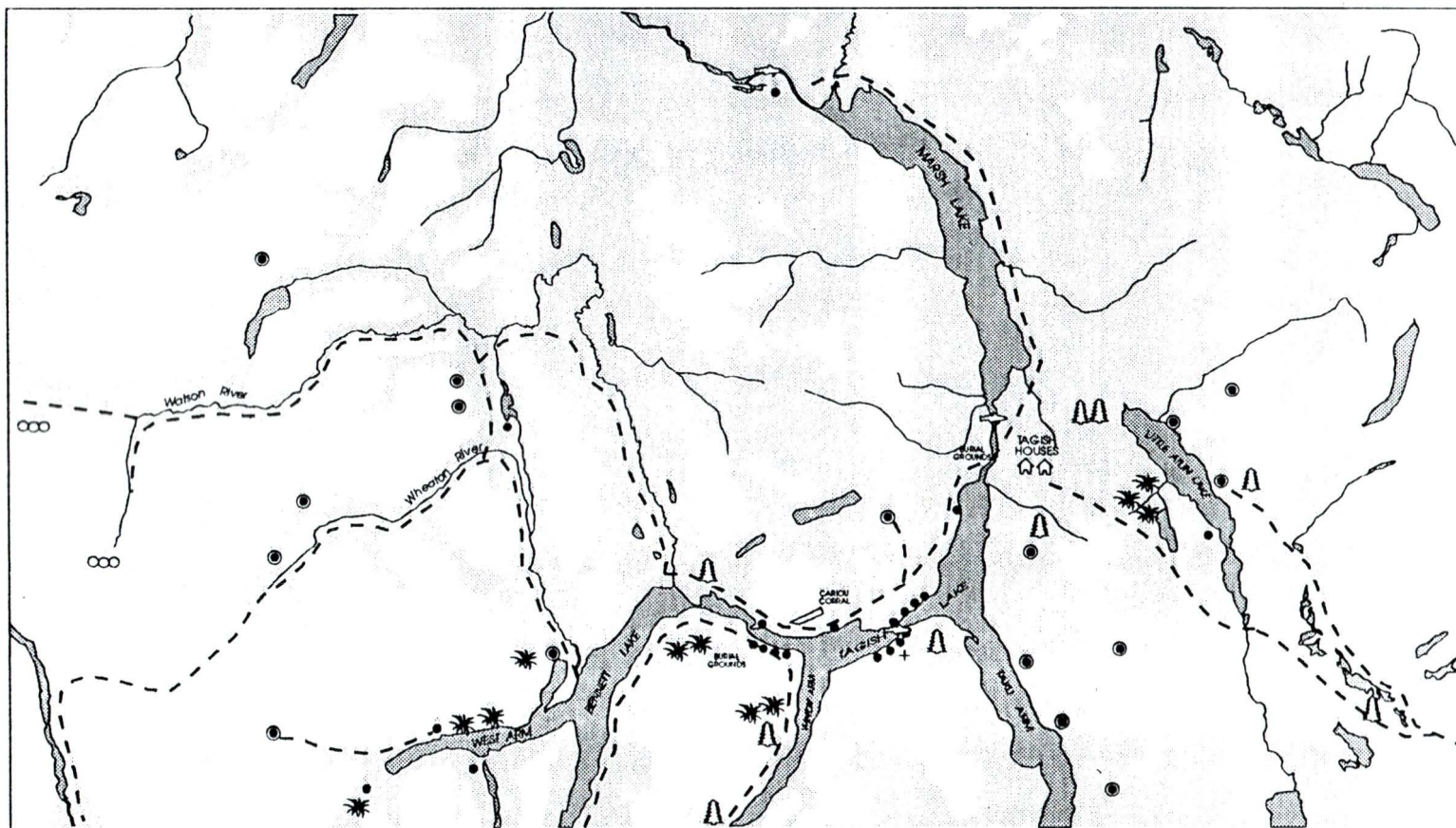
² McClellan, My Old People Say, vol. 1, pp. 185-194 and Greer, "Prehistoric Land-Use Patterns: Recent Research in the Southern Lakes Region, Yukon."

³ See Greer, "Traditional Land-Use Patterns of the Carcross-Tagish Band."

⁴ Greer, Site Locations and Archaeologically Significant Areas in the Southern Lakes District, Yukon territory. Final Report. Greer and LeBlanc, "A 1983 Update on Yukon Culture History." Greer, "Prehistoric Land-Use Patterns: Recent Research in the Southern Lakes Region, Yukon." Greer, "Traditional Land-Use Patterns of the Carcross-Tagish Band." Greer, Wheaton-Watson Resource Study: Culture History and Heritage Resources Watson and Wheaton Valleys.

⁵ McClellan, My Old People Say, Vol. I, pp. 99-100.

MAP 4
PRE - 1898 WILDLIFE UTILIZATION



□ Lowland / Valley

▨ Lakes

- · - Established Trails

● Wildlife Utilization (Hunting, Fishing, Gathering)

• Seasonal Gathering Place

* Gathering Ground

▲ Forest Utility

∞ Sheep Blinds

⇨ Fish Trap

10 km



Based on:
Greer, "Traditional Land Use Patterns".
McClellan, "My Old People Say".

S. Garner Cartographer

Other seasonally harvested resources, although apparently not a significant aspect of Tagish subsistence, included migrating geese, ducks and swans. Fowl such as ptarmigan and grouse were plentiful in the area and were harvested as a supplement to the main diet of big game.¹ Other birds such as loons, owls, eagles and crows held superhuman power and ceremonial significance.² Wild fruits and vegetables were also gathered. The Tagish harvested and processed large variety but limited quantity of berries including soapberries, high and lowbush cranberries, highbush currants, stone berries, moss berries, blue berries, strawberries, rose hips, elder berries, thimble berries, Saskatoon berries and Arctic raspberries. A variety of roots, especially the bear root or "Indian sweet potato," wild celery or rhubarb, wild onions, a variety of tree bark and mushrooms were all included in the Tagish diet and used for a variety of medicinal purposes.³

Recurring wildlife patterns enabled the Tagish to predict and assume control over certain resources. Familiarity with the location of salt licks, which attracted big game during the late fall, migration patterns of caribou, streams where certain species of fish spawned, groundhog, marmot and gopher grounds and seasonal fruits and vegetables enabled them to stabilize and plan their subsistence activities.⁴ The ebb and flow of wildlife owing to abnormal fluctuations in temperature, for example, may

¹ McClellan, My Old People Say, vol. 1, pp. 167-175 and Greer, "Prehistoric Land-Use Patterns: Recent Research in the Southern Lakes Region, Yukon."

² *Ibid.*, p. 167.

³ McClellan, My Old People Say, vol. 1, pp. 199-214. The archaeological record does not hold many clues to flora remains. However, since there have been no major climatic shifts it can be assumed that vegetation has remained somewhat constant. The only factor which may have relevance is forest fires which can change the composition of floral patterns in a region. See Workman, Prehistory of the Aishihik-Kluane Area, p. 106.

⁴ Greer, "Traditional Land-Use Patterns of the Carcross-Tagish Band," pp., 7-32.

have placed some limitations on their ability to control resources. However, the ability to harvest wildlife up to the carrying capacity of the land resulted in a natural increase in human population.¹

Concurrently, improved technology imported from coastal regions, such as fish and game traps and preservation with smoke drying, enabled the Tagish to exploit a greater variety and quantity of each resource. Traps and weirs caught greater amounts of trout, greyling, salmon and inconnu than the old techniques of spearing.² Caribou and moose corrals constructed on migratory routes were used in conjunction with the Tagish harvesting technique of snaring.³ The imported technology of drying, smoking and storing game and fish enabled the Tagish to maintain their subsistence base and eventually create a surplus.⁴

The demand for fur bearing animals provided the impetus for wholesale social and economic change amongst the Tagish. Up until the early nineteenth century, trade between the Coastal Tlingit and the Tagish was limited to such things as moose and caribou skins, mountain goat wool, gopher skin robes and fresh water fish.⁵ But after the rapid extermination of the sea otter on the North West Coast around 1800, inland furs were in demand. Beaver, muskrat, lynx, fox, wolf, mink and especially martin were all extensively trapped in the Southern Lakes

¹ Henry F. Dobyns. Their Number Become Thinned: Native American Population Dynamics in Eastern North America. Knoxville: The University of Tennessee Press, 1983, pp. 34-45.

² Greer, "Traditional Land-use," pp. 8-19, 24, 26-30. McClellan, My Old People Say, Vol. 1, pp. 192-193 talks about aboriginal style fishing which included spearing and hooking.

³ Ibid., pp. 21-23, 26-30.

⁴ McClellan, My Old People Say, vol. 1, pp. 215-218.

⁵ McClellan, "Culture Change and Native Trade," pp. 125-127.

region. The Coastal Tlingit, who were familiar with fur trade practices from the coast, set themselves up as middlemen and became the medium whereby the pelts were exchanged for European goods.

By the middle of the nineteenth century, wildlife utilization in the Southern Lakes region was more related to affluence and the acquisition of European trade items than to subsistence. Trade for firearms and ammunition dates back to turn of the nineteenth century when the Russians entered the area.¹ Later, the Tlingit traders limited the gun trade by raising the price: "silver fox fur as high as the barrel," was the going rate for a muzzle loader.² Stories like this have been told about the fur trade from New France to the Yukon and are often exaggerated. The point, however, is a valid one; by the early 1800s, the ability to own a gun represented status and place in Tagish society. Other European trade items such as traps, files, hatchets and gill nets revolutionized the harvesting of resources. The labour intensive stone, bone and antler tool industry, animal snaring and fish traps and weirs became obsolete.³

To many Tagish, fur bearing animals became valued more for their skin than for their food value. Other resources were also exploited in their pursuit of trade goods. Big game and fish were increasingly exploited to feed a growing human population, but also to feed domesticated animals, such as dogs. Pack dogs became indispensable in the Tagish yearly round in the mid-1800s for transporting trade goods to other inland nations and

¹ Ibid., pp. 138-139.

² Ibid. This quote is taken from an oral account given by chief Dakluwedi.

³ McClellan, My Old People Say, vol. 1, p. 90. This pattern of replacement is also evident in the ethnographic data compiled by Sheila Greer in "Traditional Land-Use Patterns."

for working their own trapping grounds. Tagish acculturation, resulting from their intimate ties with the Tlingit during this period, produced further changes. Most notably, a movement to more sedentary living taxed the forests for the construction of permanent shelters, such as the Tagish houses.

The invisible transformation of the Southern Lakes region was augmented to a much greater degree in 1897, when the lake system provided the most popular transportation corridor to the gold fields. Over the period of two years, thousands of foreign fortune seekers traveled through the heart of the area. Stories have been told by the Tagish of offering moose meat to passers by and unexpectedly receiving gold coins in return for their labour. Not knowing the value of the coins they skipped them across the rivers and lakes.¹ This unlikely ending, however, should not dissuade one from recognizing the utilization of game over and above that needed for subsistence.

Hunting and fishing activities along the corridor were extensive, and seriously depleted game stocks. It is clear from evidence left by Frederick Schwatka on his first trip through the area in 1885 that a great number of caribou still migrated over "the place where the caribou cross."² Sometime in the late 1800s, however, they ceased to migrate and instead a severely depleted number of animals moved further north into the Squanga Lake

¹ Jim Smarch, Tagish elder, oral interview, Carcross, Yukon Territory, March - 1991.

² See Frederick Schwatka, "The Great River of Alaska." The Century Illustrated Monthly Magazine. May 1885 to October 1885, vol. XXX, new series vol. VIII, p. 742.

area.¹ It has been suggested by anthropologist, Catherine McClellan that a warming trend was responsible for the movement but it is peculiar that once this transportation corridor was opened and came into full use by thousands of transient prospectors, the caribou ceased to exist. It is possible, although there is no direct evidence, that an entire herd of caribou based in the Montana Mountain area was slaughtered by prospectors and by Tagish, who, in the words of Schwatka, "had no fear of the game law, no sportsman's qualms of conscience, nor in fact compassion of any sort."² The construction of the largest sawmill and boat building operation on the Yukon at Carcross in 1897 further eroded the caribou habitat.³ By 1902, a few caribou could be found in the Montana Mountain and Caribou Mountain areas but for all practical purposes, the large migration of woodland caribou through the Southern Lakes region was destroyed.

Wildlife adapted to the changing harvesting patterns and to the environmental transformation of the Southern Lakes region. Prospectors hunted extensively when forced to stop over due to weather and

¹ When Dawson traveled through the area in 1887 he made no mention of caribou in the area although the name "Caribou Crossing" is mentioned. The likelihood of there being caribou in the region in the summer when his expedition went through is unlikely. See George Dawson. Report On An Exploration in the Yukon District, N.W.T. and Adjacent Northern Portion of British Columbia, 1887. Reprinted with permission. Whitehorse: The Yukon Historical and Museums Association, 1987, p. 166B.

² McClellan stipulates that moose displaced the caribou. See Catherine McClellan, My Old People Say: An Ethnographic Survey of Southern Yukon Territory, Part 1. Ottawa: National Museums of Canada, 1975, pp. 108-109. My assumption here is based on reports of explorers, in particular Schwatka, who wrote about the exploitive actions of the Tagish especially in their interaction with wildlife. See Frederick Schwatka, Along Alaska's Great River. Anchorage: Alaska Northwest Publishing Company, 1983, p. 32.

³ R. Coutts, Yukon: Places and Names. Sidney: Grey's Publishing Limited, 1980, p. 47. A great amount of meat was being supplied to Dawson City during this time. For a discussion see McCandless, Yukon Wildlife, pp. 47-48.

transportation difficulties. Boat building at Lake Lindeman and Bennett City, the origin of river travel in the Yukon, had devastating consequences for wildlife as forests were cleared off the hillsides to be milled for timber. In fact, all along the corridor from Carcross to the McClintock River the hillsides were stripped, first for boat construction and fire fuel and later for steamships. Big game animals more suited to the variable habitats constructed by man entered into the region. By 1900, moose had taken over many of the areas left vacant by the once thriving caribou herds, providing the ecosystem with a viable large game substitute.¹ But the social structure of harvesting moose was very different than that of caribou. The heightened difficulty in finding and killing a solitary moose undoubtedly affected predatory animals, such as wolves and bears.

After the Gold Rush, the plant and animal life of Southern Lakes region continued to experience the effects of mining activities. Blasting, drilling, the use of streams for power production, tailings disposal and tramway construction significantly altered the environment. So too did the arrival of over one hundred prospectors who established settlements in the early 1900s such as Conrad City, Carcross and Robinson's Crossing or semi-permanent miners who lived out of tent-towns. Both the flora and fauna was taxed to the limit as these people exploited not only the mineral resources but the other resources necessary for food and shelter.²

The seasonal and episodic character of mining in the Southern Lakes forced many miners to look elsewhere to make a living. The demand for

¹ McClellan, *My Old People Say*, vol. 1, pp. 108-109.

² YA, Mss. 628.542 Har. Hardy Associates (1978) Ltd., (G. A. Singleton, O. A. Steen, K. Weagle and D. Weir, "Fish and Wildlife Habitat Recovery in Placer Mined Areas of the Yukon." Unpublished Final Report prepared for the Department of Indian Affairs and Northern Development, 1978.

muskrat, mink, beaver, fox and marten furs for southern fashions made trapping in the North a very lucrative business. Prospectors turned into trappers, especially during the winter months when the mines were closed, and exploited fur bearing creatures to the point of extinction.¹ When one area was depleted they moved onto the next, not worrying about the void they left behind. Late in the century, the demand for feathers and plumage by the fashion industry enticed many entrepreneurs to fire large cannon style buck shot guns mounted on boats into bird habitats, nearly wiping out the trumpeter swan and other waterfowl.²

Tagish trappers were less likely to over-harvest an area but they too became more efficient. Competition for resources was common amongst natives and whites and often resulted in unnecessary slaughter of animals. Kills of moose and caribou reached epidemic proportions in 1919 when Tagish trappers were reported to have shot cows carrying calves and utilizing only the unborn calf. Similar reports were taken by the R.C.M.P of sheep and moose taken only for their tallow.³ The killing seemed to be a reaction against the common trapping methods of white trappers who took fur bearing animals by poisoning moose, bear and sheep carcasses.

Increased use of dog teams for maintaining trap lines created food shortages. Underfed and malnourished dogs caused many trappers to slaughter big game unselectively. Neville A. D. Armstrong, a member of

¹ See Ken Coates, Best Left as Indians: Native-White Relations in the Yukon Territory, 1840-1973. Montreal: McGill-Queen's University Press, 1991, pp. 56-66.

² Jim Hawkings, "Rough Outline for Swan Paper." Whitehorse: Unpublished paper prepared for the Canadian Wildlife Service, 1991.

³ Yukon Archives, Gov. 1889, vol. 12-3b, file 2. Report, Sergt. C. S. Harper, R.C.M.P. to the Commanding Officer. July 2, 1919.

the Advisory Board on Wildlife Protection, reported that "two trappers and ten dogs consume ... thirty moose per season."¹ This unpopular view was quickly discounted by Yukoners, including the R.C.M.P., who disagreed with his opinions, especially those which advocated trapping restrictions. In the opinion of most newcomers, unemployed miners in the Southern Lakes could hardly afford more restrictions on legitimate livelihoods. Other domesticated animals, such as horses and cattle, reduced the amount of grassland, further affecting the sensitive habitats of wildlife. Meadows around Little Atlin Lake, Tagish Narrows and Carcross were cut for domestic use. In response, game moved further away from human population centers although land-use, whether mining, trapping or haying, in many areas of the Southern Lakes made this virtually impossible.

In the 1910s, the Canadian government determined that management was needed to revitalize the obvious depletion of game in the Yukon. Frederick Congdon, M.P., Yukon Commissioner for several years and a member of the Committee of Conservation, wrote the only policy paper for the Yukon during this early period -- "Fur Bearing Animals and How to Prevent Their Extinction," -- outlining the menace wolves created in the ecosystem.² This view was incorporated by the Yukon Fish and Game Association from the Alberta model, which perpetrated the myth of Alberta stockmen who saw wolves as a direct threat to their superior land use methods. The Yukon government, like that in Alberta, expanded the systematic poisonings which had been characteristic of the Yukon's non-

¹ See McCandless, Yukon Wildlife, pp. 56-57.

² See, Robert McCandless, Yukon Wildlife: A Social History, p. 104-106.

aboriginal hunters for several years. Many of the predatory or scavenging species of animal were brought to the point of extinction because of their perceived uselessness in the northern ecological cycle.¹ Those animals which threatened economic ventures were not tolerated. Fur bearers suffered great losses because of the indiscriminate use of poison which not only killed the targeted wolf but all animals which ate the contaminated carcasses.

The government tried to control wildlife exploitation during the 1920s, but management had little to do with conservation or preservation. Records kept by the government on fur harvests were sporadic and incomplete but provide the only glimpse as to the amount of game that was taken. A list of licensed game harvesters in 1921 shows a total of 27 fur traders and 11 game dealers were active in the Yukon. M. Watson was the only person to provide these services in the Southern Lakes area, although with the proximity of Whitehorse many hunters and trappers would have dealt their meat and pelt there. The trade in provisions, especially big game meat, was a thriving business. Johny Johns, a Tagish native, and B. Silas of Carcross, together earned over \$900 dollars in 1927.²

Licensing to control the amount of hunting done during parts of the year when game was reproducing were ineffective. This is reflected in a statement about this period by W. G. Brown, Commissioner for the Territory in 1952 that, "although hunting licenses were, in theory, required, in practice everyone carried a gun and killed when and where

¹ The program of poisoning was abandoned in the late 1950s for economic reasons. See McCandless, Yukon Wildlife, p. 90-92.

² YTA, YRG, Series 3, vol. 12, file 13-12A. Statement of Game Purchased by Waechter Bros. Co., 1927.

game was found, irrespective of the season."¹ Indicative of the ignorance often displayed by the leadership of the Yukon, Brown also argued that the effects on game were minimal because "the Yukon Territory was, to a great extent, an isolated area and did not attract the tourist and big game hunter."²

In reality, however, big game hunting was big business in the Yukon. This was especially true for the Southern Lakes which had become renowned for its sport wildlife. World famous big game guide, Johny Johns, led numerous expeditions into the Wheaton and Watson River valleys as well as the Little Atlin Lake area. Johns guaranteed that the hunters would "bag" their trophies. The hunters, interested only in the number of points on the antlers or the span of the head, paid little heed to the great amount of waste left behind when they took only the head and hooves.³

Prior to 1920, Territorial law stated that a non-resident hunter could legally kill 2 sheep, 2 goats, 2 moose, 6 caribou, with no restrictions on bear. "Bags" by one non-resident hunter on a single hunt equaled enough wild meat "to support five men for a year, ten men for six months, or sixty men for a month."⁴ Many hunters could not even export the number trophies they had killed. The territorial government's plans to restrict kills by

¹ NAC, RG 85, vol. 150, file 400-11-12[5]. W. G. Brown. "Wildlife Management in the Yukon Territory, Canada."

² Ibid.

³ The books of stories that were published as result of big game hunts to the Yukon are rather extensive and show the destructive attitude of even the most conscientious hunter. For two examples see, Harry A. Auer, Camp Fires in the Yukon. Cincinnati: Stewart & Kidd Company, 1917, and James H. Bond, From Out of the Yukon. Portland: Binfords & Mort, 1948.

⁴ YA, YRG, Series 3, Gov. 1889, vol. 12-3B, file 1. Chas. H. Baxter, Hunter and Guide to George MacKenzie, Commissioner Yukon Territory, March 6, 1920.

appointing Johns and other chief guides as "ex-officio Game Guardian," was ineffective.¹ The depletion of wildlife was obvious. Dr. Elting, a well known American big game hunter who return to the Yukon every year observed in 1923 the "absolutely conclusive" evidence that game was "steadily declining" and in some districts had "almost entirely, if not completely, disappeared."²

But at a time when the economy of the Yukon was in such dire need of a boost, big game hunting was one of the few bright spots. Hunters from all over the world paid upwards of \$5000 for a 60 day hunt which "included everything except personal effects and licenses."³ In 1921, \$50,000 dollars was spent by a total of 18 hunters.⁴ The government was willing to overlook the hazards of big game hunting because of the large amounts of money brought into the area. Their indifference to a call for game preserves to limit the decline of game is reflected in a statement by George MacKenzie, Yukon Gold Commissioner in 1923: "The Territory is so large and the population so sparse that large areas are, for all intent and purposes, natural sanctuaries."⁵

The territorial government did try to alleviate some of the strain on wildlife. Amendments to the Yukon Territorial Game Ordinance in 1923

¹ YA, YRG, Series 3, Gov. 1889, vol. 12-4B, file 3. Letter, John Black, Legal Advisor, Yukon Government to the Gold Commissioner, Yukon Government. December 5, 1923.

² YA, YRG, Series 3, Gov. 1889, vol. 12-4C, file 2. Dr. Elting to George MacKenzie, Yukon Gold Commissioner. February 22, 1923.

³ YA, YRG, Series 3, Gov. 1891, vol. 12-7B, file 3. T. M. Higgins, Territorial Agent to The Sportsmen's Bureau of Canada. October 15, 1928. Prices were based on a two person rate.

⁴ YA, YRG, Series 3, Gov. 1889, vol. 12-4B, file 1. Gig [sic] Game Hunters List for 1921.

⁵ YA, YRG, Series 3, Gov. 1889, vol. 12-4C, file 2. George MacKenzie, Yukon Gold Commissioner to Dr. Elting. July 6, 1923.

disallowed First Nations chief guides, limiting them to inferior positions as camp helper, cooks or horse tenders.¹ Johny Johns was one of the only natives allowed to remain in the industry. His brother, Peter Johns, was issued a license some years later but only after the police reported that he spoke "very good English" and "creat[ed] the impression of being an intelligent type of Indian."² The government's limitation of the number of guides designed to protect whites in the Big Game industry did little to protect wildlife.

Other government regulations, which on the surface seemed motivated by conservation, proved to be revenue oriented. In 1920, the price of big game licenses for non-residents was raised from \$50 to \$100 dollars, and the bag limit lowered to "one Moose, 1 Mountain Sheep, 1 Mountain Goat, 2 Caribou, 6 Bear (Grizzly, Black or Brown)."³ Extra Game Permits, however, enabled hunters to take greater amounts of game for the additional fee of \$25 dollars.⁴ Those who wanted the specimens for museum and personal collections were permitted to take whatever number they desired. The decline of moose, mountain goats and sheep and caribou continued throughout the 1920s.⁵

¹ McCandless, Yukon Wildlife, p. 58-60.

² YA, YRG, Series 3, Gov. 1896, vol. 12-18B, file 3. G. A. Jeckell, Controller to Johny Johns. With accompanying police report. September 11, 1939.

³ YA, YRG, Series 3, Gov. 1891, vol. 12-7B, file 3. Letter, H. M. Higgins, Territorial Agent, Yukon Government to The Sportsman's Bureau. October 15, 1928.

⁴ YA, YRG, Series 3, Gov. 1889, vol. 12-3B, file 1. Letter, Chas. H. Baxter, Hunter and Guide, Alaska and Yukon Territory to Mr. George P. MacKenzie, Commissioner, Yukon Territory. March 6, 1920.

⁵ YA, YRG, Series 3, Gov. 1898, vol. 12-23B, file 3. Letter, J. Dewey Soper, Dominion Wildlife Officer for Alberta and the Territories, Canadian Wildlife Service to Dr. Harrison R. Lewis, Chief, Canadian Wildlife Service. October 27, 1950. See also, Norman Barichello and Jean Carey, "Mountain Goat Status and Management in the Yukon." Whitehorse: Unpublished report for the

The "golden" years of trophy hunting were not kind to the wildlife of the Southern Lakes region. The animal frontier receded further from the settlements, making it necessary for the guides to make use of every corner of the Southern Lakes region. Instead of declining as a result of game depletion, trophy hunting only gained momentum. Extended hunting areas were made possible by the pioneer roads constructed by the mining industry and aviation. In 1930, the territorial government openly advertised the "happy hunting ground of the live Big Game Hunter"¹ although, by 1932, the decline of "notable trophies" was beginning to concern some government officials.²

Meanwhile, the fur trade industry experienced many changes. A "remarkable and alarming decrease" in the numbers of fur bearers in the wild,³ and an increase of fur prices on the world market in the late 1920s, induced many trappers to start large fur farming operations in the Southern Lakes region. Farmers stocked their ranches with mink and fox by trapping male and female breeders during the late summer. Permission granted by the territorial government enabled them to circumvent seasonal regulations for trapping fur.⁴

Government of the Yukon, Department of Renewable Resources, Fish and Wildlife Branch, 1988, and W. G. Johnston, D. G. Larsen, H. A. McLeod and C. A. McEwen, "Moose Population Dynamics and Habitat Use, Southern Yukon River Basin." Whitehorse: Unpublished Report for the Government of Yukon, Department of Renewable Resources, 1984.

¹ YA, YRG, Series 3, Gov. 1892, series 3, vol. 12-8C, file 5. T. M. Higgins, Territorial Agent to Richard Borden. January 13, 1930.

² YA, YRG, Series 3, Gov. 1895, vol. 12-16A, file 2. T. M. Higgins, Territorial Agent to G. A. Jeckell, Comptroller. July 29, 1936.

³ YA, YRG, Series 3, Gov. 1892, vol. 12-8A, v. 5, file 1. Letter, W. V. Bruce, Inspector, R.C.M.P. to G. I. MacLean, Gold Commissioner. February 11, 1929.

⁴ Council For Yukon Indians, "Feasibility and Impacts of Fur Farming in the Yukon." Unpublished report, no date.

By 1932, at the height of the fur ranching enterprise, there were nine major fur farms operating in the Carcross-Tagish area, placing considerable strain on the resources of the region. Caribou and moose were favorite targets for the farmers who needed to feed their fox, mink and marten until such time that their pelts were worth taking. Fish were also exploited. Fur farmers needed only to carry a domestic license which entitled them to unlimited commercial fishing. In 1944, a Northwest Canadian Fisheries Survey said about the exploitation of fish by fur farmers in the Tagish-Carcross area that, "enormous quantities of fish were taken from the lakes, amounting at the peak between 1925 and 1935 to some thousands of pounds a week."¹ Despite early warnings from the R.C.M.P. that the whitefish, lake trout, and cisco stocks were being seriously depleted in Bennett, Tagish and Marsh lakes the practices continued free from government regulation.² Fish and large game steadily declined in the lakes and forests until, in 1932, the Tagish people living off the land were forced to move to Little Atlin Lake to survive.³

For many Southern Lakes residents, wildlife was considered only in the light of their usefulness for economic success.⁴ Utilizing the resources was key to the economic success of fur farming. George Barrett, a fur

¹ V. Wynne-Edwards, "The Yukon Territory." North West Canadian Fisheries Survey in 1944-1945. Ottawa: Bulletin of the Fisheries Research Board of Canada, No. LXXII, 1947, p. 18.

² See N. Seigel and C. McEwen, A Historical Overview of Fishing in the Yukon. Whitehorse: Report prepared for the Department of Fisheries and Oceans, Pacific Rim Division, 1984, p. 58.

³ YA, YRG, Series 3, Gov. 1893, vol. 12-11B, file 1. Patsy Henderson and 11 others, Carcross First Nations to Mr. J. Hawksley, Indian Superintendent, Department of Indian Affairs. May 10, 1932.

⁴ YA, YRG, Series 1, Gov. 1893, vol. 12-11A. Letter, J. A. Jeckell, Territorial Treasurer, Yukon Government to Messrs. Crosby Brothers. February 25, 1932.

farmer from Tagish, planned to move his operations into the Little Atlin Lake area in 1933 because of the lack of fish and game in the area. He was duly refused, but only after direct intervention from Indian Superintendent, Reverend John Hawksley, and the fear that the Tagish would "be starved out of this section of the country."¹ The depression in the 1930s offered a reprieve for most species of wildlife in the Southern Lakes region. After 1932, because of the lack of food and falling fur prices, the fur ranching industry in the Southern Lakes steadily declined. In 1935, five mink farms and one fox farm remained in operation.

Direct exploitation -- whether of fish, birds or animals -- by commercial enterprises, such as trapping, big game hunting and fur farming, played a large role in the invisible transformation of the Southern Lakes region between the Gold Rush and W.W.II. The same, however, can be said of industrial land use, such as transportation development and mining, which affected wildlife habitats. The Marsh Lake White Pass and Yukon Route dam, for example, raised the level of lakes and streams by some five to ten feet in 1926, thereby destroying many important fish habitats including the McClintock River salmon run.² Logging, mining and corridor construction activities from 1910 to 1940 (see chapter 1 for discussion) disrupted and diverted streams and tributaries dislocating Arctic greyling and inconnu from their spawning areas. Lake bottom

¹ YA, YRG, Series 1, Gov. 1893, vol. 12-11B. Letter, John Hawksley, Indian Superintendent, Department of Indian Affairs to G. A. Jeckell, Comptroller, Yukon Government. July 15, 1932.

² The fish are still able to make the upstream migration but the harvesting ability due to the raised water level has been reduced significantly. Salmon depending on the McClintock habitat for spawning probably travel farther upstream. See Tanner, Trappers, Hunters and Fishermen, pp. 58-63.

habitats were significantly altered, especially near the shores.¹ The use of lakes as large garbage dumps for mine tailings, excess gravel, and other unusable items such as machinery, barrels, lumber and general refuse undoubtedly affected lake trout, whitefish and northern pike. Dock dredging, both at Carcross and Tagish during the height of steamer travel, disrupted lake vegetation vital to the fishery. And bridges, which were constructed over streams and narrow portions of lake reduced the quality of habitats in the region.

Land-use practices such as mining activities, hydro-electric generating plants, pipeline routing and highway construction, to name a few, also affected the waterfowl utilization of spring staging sites, the production regions of summer breeding, the molting area during late summer and pre-fall migration staging sites.² Direct exploitation was restricted due to the early international regulations placed on waterfowl with the Convention for the Protection of Migratory Birds signed by Canada, United States and Mexico in 1916. Federal legislation, which followed the treaty, eliminated the hunting of ducks, geese and swans in the spring and late summer. But the shrinking of wetland areas due to mining and corridor development decreased the number of habitats causing migratory birds to gather in a smaller number of locations.

Corridor projects during and after W.W.II continued to invisibly transform the land. The construction of the Alaska Highway, the upgrade of the Carcross-Tagish Road and the Whitehorse-Carcross road in the early

¹ YA, YRG, Series 1, Gov. 1904, vol. 28798. Letter, Jim Hughes to J. A. Jeckell, Comptroller, Yukon Government. July 11, 1945.

² Malcolm Dennington, "Some Important Migratory Bird Habitats in the Yukon Territory." Whitehorse: Unpublished Paper for the Canadian Wildlife Service, 1985, pp. 5-8.

1940s, cut not only a swath of trees and rock through the Southern Lakes landscape but also dislocated wildlife for several miles on either side of the construction. "Wild wedge," the name that the locals gave to the area bordered by the Alaska Highway, the Carcross Road and the Klondike Highway, held a number of animals including moose, caribou and bear within its triangular confines.¹ The woodland caribou, once displaced from Caribou Crossing on account of human influences around 1900, were further restricted from migrating to the Squanga Lake area because of highway traffic.² The shrinking of their habitat base reduced the size of the herds, as did hunters who relished the ease of captive targets.

Direct exploitation by construction crews on the highways also occurred. This is especially true of the Alaska Highway. Reports of army personnel shooting animals for sport, and of fish taken with dynamite so that the soldiers could have fresh meat, were common.³ The Canadian government maintained that there was no depletion of game during the war,⁴ but wildlife conservation groups in the United States continually

¹ Jamie Bastedo. "A Resource Survey Method for Environmentally Significant Areas (ESA) in the Yukon With Results from the Bennett Lake/Carcross Dunes/Tagish Lake ESA." Waterloo: Unpublished Masters Thesis, Regional Planning and Resource Development, University of Waterloo, 1982, p. 138.

² See David A. Gauthier, W. Kent Brown and John B. Theberge, "Movement and Behaviour of the Burwash Caribou Herd Relative to the Proposed Alaska Highway Gas Pipeline." Arthur M Martell and Donald E. Russell, eds., Caribou and Human Activity: Proceedings of the 1st North American Caribou Workshop, Whitehorse, Yukon, 28-29 September, 1983. Ottawa: Canadian Wildlife Service Special Publication, Minister of Supply and Services, 1985, pp. 27-34.

³ YA, YRG, Series 2, Gov. 1897, vol. 20A. Letter, Sgd. Ira N. Gabrielson, Director, US. Department of the Interior, Fish and Wildlife Service to Hoyes Lloyd, Supt. of Wildlife Protection, National Parks Bureau. October 21, 1942.

⁴ YA, YRG, Series 2, Gov. 1897, vol. 20A. See, letter, J. E. Gibben, Acting Controller, Yukon Government to Hoyes Lloyd, Supt. of Wildlife Protection, National Parks Bureau. November 21, 1942.

reported with authority that American soldiers were killing wildlife "just for the sport of it." No action was taken by the Canadian government.¹

The roads constructed during the war provided greater access to resources after the withdrawal of army personnel. The best example is the CANOL road which saw extensive big game hunting during the 1950s.² The resurgence of big game hunting, however, also affected the Southern Lakes region. Improved access and automobiles enabled guides like Johnny Johns to offer hunting packages for shorter periods of time and for less money, thereby expanding the demand. By 1952, over 100 non-resident hunters were issued licenses; an estimated excess of \$200,000 per year was injected into the Yukon economy.³

Several restrictions were placed on the harvesting of wildlife after the war because of an increase in hunters and tourists to the area. The legal sale of game meat by non-natives was prohibited in 1947 and by natives in 1952. In 1949, the Yukon Game Ordinance was revised providing for the realities of expanding land use in the Yukon. Legal borders, in the form of trap lines, game sanctuaries and restricted areas for guided hunting, and strict seasonal harvesting limits resolved, in a spatial way, some of the political struggles between wildlife users and developers.⁴

¹ YA, YRG, Series 1, Gov. 1897, vol. 12-20B. Letter, Sgd. Albert M. Day, Acting Director, U. S. Department of the Interior, Fish and Wildlife Service to Mr. R. A. Gibson, Director, Lands, Parks and Forests Branch, Department of Mines and Resources, Ottawa. January 19, 1943.

² YA, YRG, Series 2, Gov. 1898, vol. 12-21A. T. M. Higgins, Territorial Agent to J. E. Gibben, Acting Controller, Enclosure of 1949 Game Takes, December 7, 1949.

³ NAC, RG 85, vol. 150, file 400-11-12[5]. W. G. Brown. "Wildlife Management in the Yukon Territory, Canada."

⁴ McCandless, Yukon Wildlife, p. 154.

The government's policy of leaving conservation to each individual or company was not effective.¹ Oil spills from hastily constructed and poorly maintained pipelines went unchecked, even though the government was fully aware of the damage being done to the plant and animal life of the Southern Lakes region (see chapter 1 for discussion). Exploration for minerals and oil provided the impetus for access roads and mining development which intensified in the 1950s. Extensive road-building was undertaken in the Wheaton and Watson river valleys. Large scale mining followed in 1970. Commercial fishing ventures, including fish farming, were also planned, but by 1960, suitable habitats for such operations were nearly impossible to find. The expense of spreading fish farming over two or three hundred miles made them economically unfeasible.²

Sport fishing lodges and wilderness adventure companies active in the Southern Lakes region experienced rapid growth in the 1950s.³ The government introduced licensing and fishing limits as a means of monitoring the industry, but by 1960, fishermen had to go further afield to catch their quota. Fly-in fishing to remote areas such as Primrose Lake became common place.

The fur industry was also affected. Snow machines, airplanes and automobiles enabled more part-time trappers to participate and assisted full time trappers to extend their lines. The failure to register their traplines displaced many aboriginal harvesters; their lines were taken over

¹ YA, YRG, Series 2, Gov. 1895, vol. 12-15A. See Letter, G. A. Jeckell, Comptroller, Yukon Territory Government to T. B. Caulkin, Superintendent Commanding "B" Division, R.C.M.P.. August 7, 1935.

² NAC, RG 85, vol. 801/20-2, file 2. Northern Canada Produce Limited, Proposal for Yukon Territories, 1976.

³ Seigel and McEwen, Fishing in the Yukon, pp. 63-76.

by non-aboriginal trappers.¹ The demand for furs had steadily decreased since the 1940s, making large commercial ventures like fur farming unprofitable. By 1964, only one fur farming operation remained at in the Southern Lakes region.²

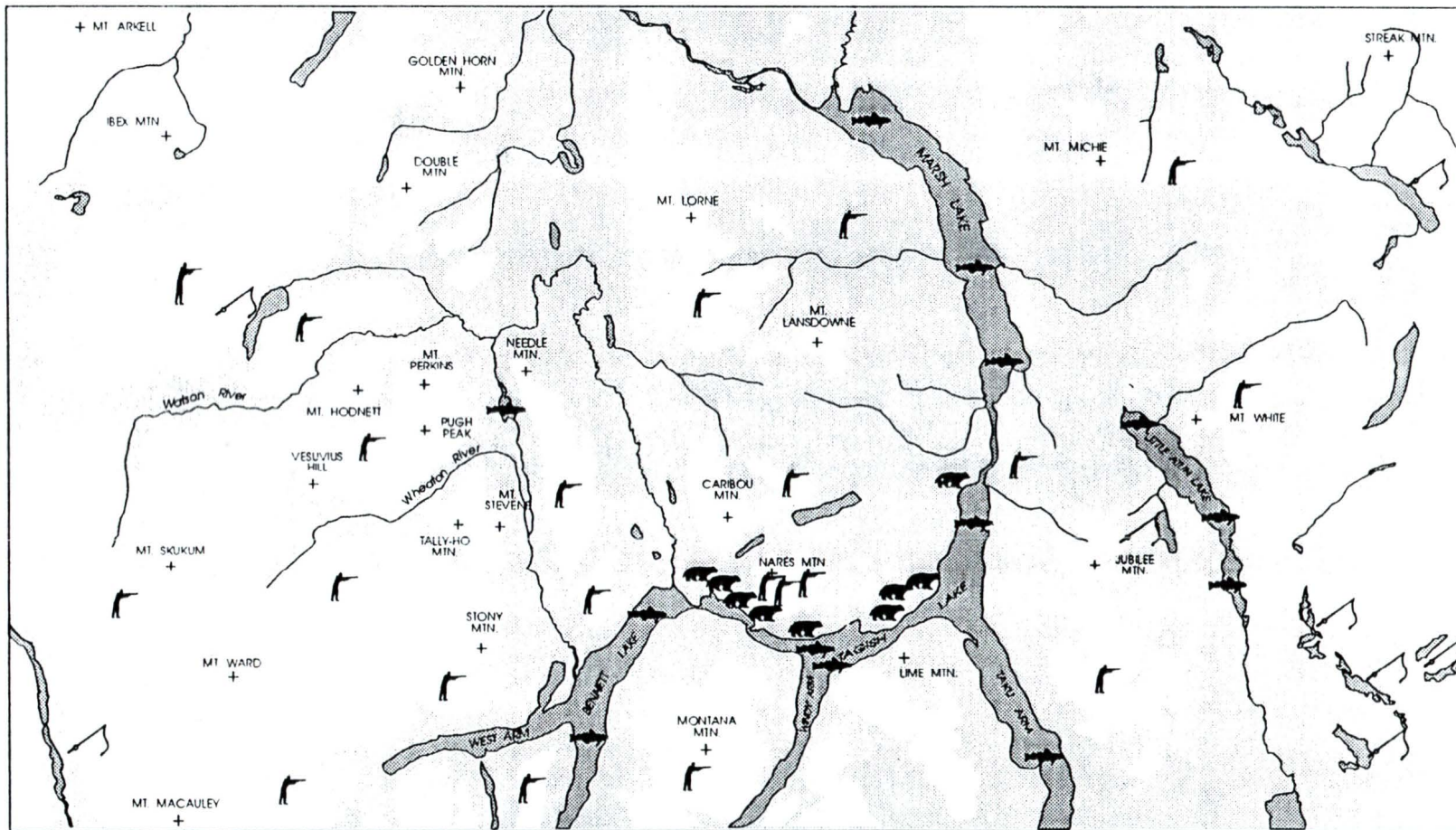
Changing economic realities within the Yukon were characteristic of those taking place on an international level. By the 1970s, Canadians and foreigners wishing to experience the last North American frontier brought cameras rather than guns and fishing rods to the Southern Lakes region. This paradoxical shift placed a new emphasis on the preservation of wildlife. This new economic environmentalism, connected to tourism, raised the awareness of Yukoners as to the ecological benefits of a sustained wildlife population. Greater efforts by environmentalists and governments to protect sensitive habitats resulted in the termination of at least one major project, the Alaska Highway Gas Pipeline. Hunting bans in certain areas such as "Wild Wedge" in the last twenty years brought the number of animals in the Caribou Mountain and Squanga Lake regions to new highs despite highway disturbances.³ Caribou herds in the region have increased, according to figures tabulated in 1986, to 600 head. Woodland caribou are now open for regulated seasonal hunting in general

¹ Coates, Best Left as Indians, pp. 63-64.

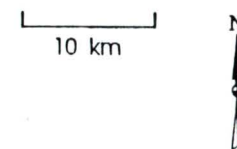
² YA, YRG, Series 4, Gov. 1895, vol. 12-15A. Letter, F. H. Osborn, Territorial Treasurer, Yukon Government to Messrs. Isaac A. Schoen & Sons, Inc., Furriers, New York. November 28, 1935. For fur statistics and a greater discussion on the economic aspects of fur ranching see Tanner, Trappers, Hunters and Fishermen, pp. 11-39.

³ In comparing two reports, D. Larsen, "A Progress Report on the Squanga Lake Woodland Caribou Immobilization Program, November 25, 1978." Unpublished report for the Yukon Game Branch, and Doug Larsen, "Mountain Caribou Movements in the Squanga Lake Area: A Progress Report, March 1980," Unpublished report prepared for the Yukon Wildlife Branch, there was a noticeable increase in herd sizes over this two year period.

MAP 5
INVISIBLE TRANSFORMATION: 1898 - 1991



- Lowland / Valley
- Lakes
- Fur Farming
- Commercial Fishing
- Big Game Hunting
- Sport Fishing



Based on: Bastedo, "Environmentally Significant Areas".

S. Garner Cartographer

areas."¹ Likewise, waterfowl management has brought many migratory birds back to significant levels. As late as 1980 the Yukon government placed strict controls over sensitive migratory habitats in an effort to try and protect them from the destructive changes that have affected many of the Yukon's wetlands.²

Placing wildlife over and above resource development, if only for purposes of public image, was a new and important step in preserving and maintaining the ecosystems of the Southern Lakes region. But wildlife are still subject to more discreet forms of habitat destruction which take place out of the public eye. For instance, water and air pollution has not been confined to identifiable refuse. Annie Lake, Crag Lake, Chootla Lake, Little Atlin Lake, Tarfu Lake, to name a few of the smaller systems, have been polluted from their extensive use by motorized boats. Aquatic life is affected by the raw sewage that pours into the lake out of range of cabin swimming holes. Fish stocks have been depleted by sport and commercial fisherman, in spite of the artificial stock that is planted into the lakes to avoid claims of over-usage. Even the big game in the most remote areas of the Southern Lakes are seriously affected by hunting parties which, as noted on the walls of the hunting cabins, kill large amounts of game.³ Pollution from mines released directly into the water and air contaminate vegetation in the Southern Lakes region as well. Wind patterns deposit contaminants from

¹ Barney Smith and Greg Hare, Hunting Patterns in the Yukon: 1979-1986. Vancouver, Yukon Government, Fish and Wildlife Branch, 1988, p. 7.

² Canada, Canadian Wildlife Service, Yukon Waterfowl Management Plan, 1991-95. Whitehorse: Yukon Waterfowl Technical Committee, 1991.

³ Personal observation on land use tour. September, 1991.

as far away as Siberia contributing to the degradation of the plant life in the Southern Lakes and makes it unsuitable for consumption.

The fragile ecosystem of the Southern Lakes region has been drastically affected by the economic decisions made by governments and residents of the Southern Lakes region. Direct exploitation and habitat destruction have caused many species to remove themselves from areas of human influence. Yet many people hold onto the romantic idea that the Yukon remains a frontier -- a permanent wilderness. Tourists look out of the windows of their buses, recreational vehicles and automobiles and see the breath taking beauty of the Southern Lakes, but they do not realize that when they stop at Carcross for a frontier meal that they are situated on the very ground on which, not less than a century ago, Tagish harvested from a thriving herd of migrating caribou. Nor do they perceive when they take a wilderness drive into the Wheaton and Watson river valleys, that a short distance away, a mine is releasing potentially hazardous waste into the air and water. But if they were there when a Tagish elder fishing off the railway bridge at Carcross became extremely upset at a 25 pound northern pike being caught because it signified that "scum" fish were becoming more prominent in the water than the lake trout. If they could see the disgust on her face when the radio reports warn them not to pick their year's supply of berries because of air pollution up the Skagway road. If they could share the tear that came with the realization that moose and caribou meat might not be a part of this year's diet, they might view the invisible transformation of this land in a little different light.¹

¹ Bruce Shelvey, personal observation at Carcross, Yukon Territory. September 1991.

CONCLUSION

Frontier, wildlife and wilderness: these words conjure up images of pristine, untouched environments, where waters flow unchecked and nature rules as far as the eye can see. For many people, northern and peripheral regions embody this wilderness fantasy where one can escape from the controlled, over built environments of the south and be free to roam beyond the boundaries of reason and scientific calculation. But does such a place exist?

It may be that the definition of wilderness has changed. The frontier person of yesteryear challenged the virgin environment with technological armaments. They sought to tame the wild and transfer old world lifestyles to even the harshest climates.¹ Modern people, on the other hand, take technology for granted. We look at the mountains on the horizon and think we are in the wild without taking into account the deck of the cabin on which we stand. Perhaps even more ironic is the realization that we have come to perceive roads and bridges as part of the natural landscape, boats as integral to marine life, and airplanes and helicopters as regular fixtures in the sky.

Morgan Sherwood, in his article, "The Wilderness and Alaska," argues that true wilderness areas are a thing of the past.² No matter where one travels, he says, there is evidence of a human presence. Primarily, Sherwood challenges our conception of the wild, he concludes:

¹ Alfred Crosby in Ecological Imperialism: The Biological Expansion of Europe, calls this concept the transferal of Neo-Europe's.

² This article first appeared in Environmental Review 9, no. 3 (Fall 1985), pp. 197-209.

"existing definitions of wilderness as a place where there is solitude, a low man-land ratio, biological integrity, and wildlife, do not work because disruptive modern technologies are not taken into account."¹ He proves, through a series of excellent examples, that Alaska has lost its frontier identity.

The Southern Lakes region, Yukon Territory is an example of Sherwood's "paradise lost." By his definitions of the term, it is evident that the area no longer exists as wilderness. The history of human occupation of the region has left a plethora of environmental scars. The wilderness region of the Southern Lakes, as traditionally defined, is lost forever.

To some, the absence of telephones and flush toilets justifies a designation of wilderness; for others it is a place where they can be alone. Solitude in Sherwood's definition "inspires a kind of subtle unease and quiet wonder ... a large category that dwells on the literary and psychological effects of wilderness on the individual."² Robert Service-type images, of the pioneer braving it out in a small log cabin and wrestling not only with the environment but his own humanity, come to mind.

If the truth were told, the Tagish were the first and only frontier people in the Southern Lakes region. Not did they encounter real solitude; they experienced authentic wilderness. When Caucasian immigrants entered the area and founded settlements, their unease over having discovered an inhabited, yet "undeveloped" country was evident. To place themselves on the frontier, they restructured their ideology about humanity

¹ Morgan Sherwood, "The Wilderness and Alaska," in Mary Childers Mangusso and Stephen W. Haycox, eds., Interpreting Alaska's History: An Anthology. Anchorage: Alaska Pacific University Press, 1989, p. 448.

² *Ibid.*, p. 437.

and placed the Tagish alongside the animals, assuming that they were a part of the environment. As a technological society with the ability and desire to reshape the frontier, the newcomers ignored obvious discrepancies in their judgments. On many levels, their crudely-made rafts and industrial tools were scarcely "superior" to the sophisticated Tagish material culture, as exemplified by the intricate detail of a potlatch rattle or a ground hog snare.

In recent years, the lack of solitude has become increasingly difficult to ignore as development progressively shrinks the wild. Trails became wagon roads which later developed into railways or highways. Stone adze were replaced by axes, axes by chain saws and chain saws by bulldozers. Since 1950, the Southern Lakes have taken on the characteristics of a developed area.

Most people have lost their ability to appreciate the beauty and integrity of wilderness. Most southerners viewed "undeveloped" country as an economic opportunity; the eagerness of companies and governments to control the northern environment stands out. Cabins that rest serenely by the lake shore are equipped with electricity. Hunting and fishing lodges have satellite TV's as standard fare so that guests will not have to miss sporting events taking place on the other side of the continent. The Southern Lakes, by definition of remoteness and solitude, is not a wilderness.

Sherwood's analysis of wilderness also draws heavily from Frederick Jackson Turner's famous frontier thesis. For Turner, the critical point of settlement -- and, by definition, the end of wilderness -- is a person to land ratio of 2 persons to 1 square mile. The ratio holds little meaning in a

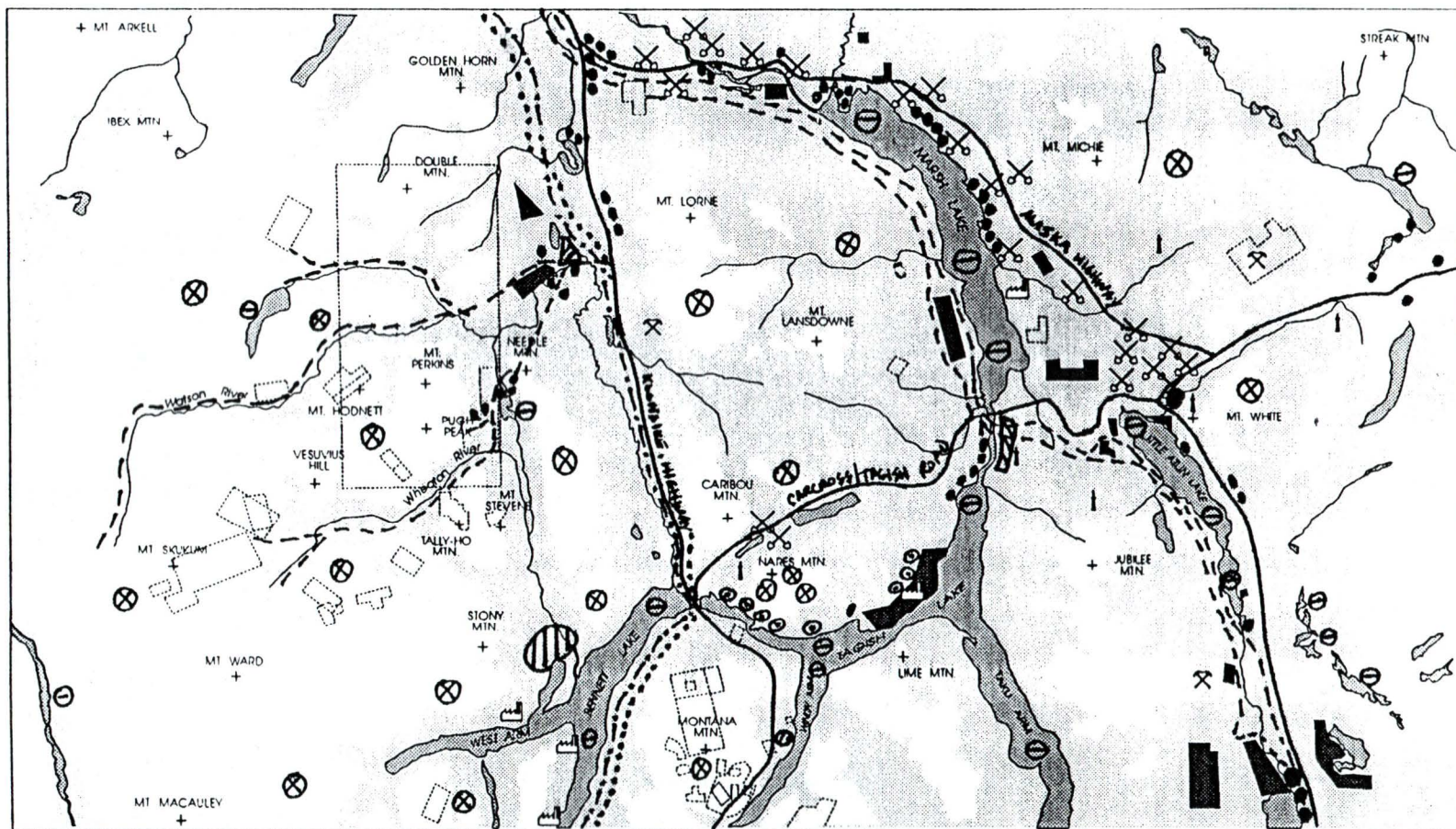
northern region. For example, the 1981 ratio for the whole of the Yukon is approximately 20 square kilometers to 1 person; the territory as a whole would definitely qualify as an unsettled area.¹ When considering the Southern Lakes, however, the ratio does not take into account the hundreds of rural and seasonal people in the region, nor does it take into consideration the concentrated population in larger centers, such as Whitehorse. It is likely the land-to-person ration would be 30 or 40 to 1.

But consider if you will this map of the Southern Lakes, which marks developments which have taken place over the last one hundred years. When one considers the roads, mines, sawmills, railroads, traplines, settlements, recreational housing, campgrounds, air travel, big game hunting, commercial and recreational fishing, lodges, retreats, geological surveys and tourist attractions, amongst other environmental impacts, it is clear that human activity has had an impact that can not be encapsulated by Turner's ratio. Even the most remote places in the Coastal Mountain range are marked. Deep in the Wheaton valley, an area once known for its mountain sheep or mountain goat, pink surveying ribbon is a prominent feature on the landscape. Geologists and mining speculators have scoured and core-drilled along the mountain side, which is neatly divided into one hundred foot square sections. Even this isolated part of the Southern Lakes region is no longer an area having "biological integrity and the absence of man and his work."²

¹ Figures were based on 1981 demographic counts. See Government of Yukon, Yukon Data Book, 1986-87. Whitehorse: Government of Yukon, 1986. Total land mass = 478 034; population = 23 153; exact ratio = 20.65.

² Sherwood, "The Wilderness and Alaska," p. 441.

MAP 6 THE LOSS OF WILDERNESS 1898 - 1991



- | | | | |
|---------------------------------|--------------|----------------------|-------------|
| Lowland / Valley | Mining Claim | PIPELINE | FISHING |
| Lakes | Gravel Pit | TRAIL/TELEPHONE LINE | HUNTING |
| Mine | HIGHWAY | RECREATIONAL | FUR FARMING |
| Haying / Agriculture | RAILROAD | HOUSING | |
| Monitoring Station (Obs. Tower) | | | |
| Sawmill | | | |

10 km



Based on: Yukon Government, Yukon Land Resources & Inventory Atlas, Volume 1.
Jamie Bastedo, "A Resource Survey Method for Environmentally Significant Areas".

S. Garner Cartographer

There are other signs of continued environmental change and the elimination of wilderness. In 1991, the Canadian Wildlife Service received several reports from the Southern Lakes region that people became sick from consuming fish. Concern mounted as water tests revealed that there was a high P.C.B. content in the lake system. Tracing the trail of contaminants over hundreds of kilometers of lake led scientists to Mt. Skukum, located on the eastern edge of the Coastal Mountain range at the head of the Wheaton River. They discovered that the pollution came from a separation mill at a gold and silver mine. Tailings treated with cyanide, used during the reduction process, had been disposed on the side of Mt. Skukum. Rain and snow melt washed through the crushed rock and down into a tributary of the Wheaton river. From this source, over three hundred kilometers of river and lake have been contaminated. The issue received little if any press.

The people close to the land knew of the mine's harmful effects. In fact, people at the Carcross reserve have known about headwater pollution since the mine opened in the early 1980s. But the Mount Skukum mine represents only one of several industrial developments that have harmed the environment. Air pollution from industrial activity hundreds of miles away creates what is called "Arctic haze." Winds which swirl through the mountains in the Southern Lakes dispose of the toxins on berries and other plants. The effects are manifested in the gizzards of ptarmigan and grouse and in the liver of caribou and sheep. There is noise pollution too. Transport trucks pound the highways around the clock as do cars and tour buses. Airplanes and motorboats round out the chorus from the sky and water.

Human activity has changed the environment despite persistent attempts to portray the region as wilderness. One needs only look as far as the land claims process in the Southern Lakes for evidence that Canadian society continues to value a manipulated environment more than unaltered land. The Tagish must prove their rights to small parcels of land by providing detailed archaeological or historical evidence of human occupation, which invariably requires some form of environmental manipulation.

Sherwood's final criterion for wilderness is the presence of wildlife, especially big game. The 1991 Vacation Guide to Canada's Yukon draws attention to the issue. In an advertisement labeled "Wildlife Guaranteed" the caption reads, "We know that most folks come to the Yukon hoping to catch a glimpse of the North's majestic wildlife. Unfortunately, very few actually do."¹ The company goes on to promote their "wildlife" tour in the carefully controlled and regulated Kluane National Park, located to the east of the Southern Lakes. Tourism in the Yukon celebrates the achievements of humans such as the Klondike Gold Rush or, more recently, the 50th anniversary of the construction of the Alaska Highway rather than its supposed wildlife. Tourists wishing to experience Yukon wildlife are encouraged to visit the Frontierland Theme Park, located on the Klondike Highway, which provides a small glimpse of what used to be: live stone sheep can be observed in captivity.

It has only been in 1970s and 1980s that environmental protection emerged as a major public issue. Wildlife management has become a

¹ Government of Yukon, 1991 Vacation Guide to Canada's Yukon: Yukon the Magic and the Mystery. Whitehorse: Tourism Yukon, 1990, p. 56.

multi-million dollar activity in the Yukon, quite a change from the laissez-faire policy of the past. Game officials travel in planes and helicopters counting the animals and providing assurances that there is wildlife in the area. They place electronic devices on selected specimens so that their moves can be followed. Wardens controlling the "Wild Wedge" have recently determined that caribou in the region have outgrown their habitat; hunters can now purchase a license for the privilege of keeping the animal population under control.

One hundred years of industrial development have ensured that the Southern Lakes region is no longer a wilderness in the traditional understanding of the term. The forces of change have both visibly and invisibly transformed the land and resources. Many northerners wish, as Sherwood does, that environmental degradation of the past will fade into the landscape and the wilderness will return. His article ends with a hopeful thought, "there are still ways, however, to reverse or at least ameliorate the damage."¹ But humans take pride in the developments of the past. Few, except for those promoting a "wilderness experience", boast about an area that is "underdeveloped." Even though industrialization has failed to provide a sustainable industry in the North, new schemes for development will continue. The "Wild Wedge" is not prodigiously flowing rivers, crystal clear, undefiled lakes, majestic untouched mountains and gracefully tree mantled plateaus. That "wilderness" may be lost forever.

¹ Ibid.

BIBLIOGRAPHY**Archival Sources****National Archives of Canada**

Records of the Royal Canadian Mounted Police (RG 18)
Yukon Records

Records of the Geological Survey of Canada (RG 45)

Records of the Northern Affairs Program (RG 85)

Yukon Archives

Manuscript Collection

Records of the Anglican Church of Canada - Yukon Diocese

Yukon Record Group, Series 1 to 3, 10

Government Publication and Reports

British Columbia Government. Narcisse Belleau Gauvreau. Abstracts from Reports on the Peace River and Cassier Districts made by British Columbia Land Surveyors to the Department of Lands -- 1891-1928. Victoria: Minister of Lands, 1929.

Canada. Canada Year Book 1990. Ottawa: Ministry of Supply Services Canada, 1989.

_____. Canadian Forestry Service, Pacific Forestry Centre. E. T. Oswald and B. N. Brown, Forest Communities in Lake Laberge Ecoregion, Yukon Territory. Victoria: Supply and Services Canada, 1986.

_____. Canadian Forestry Service. E. T. Oswald and B. N. Brown, Ecoregions of Yukon Territory. Ottawa: Fisheries and Environment Canada, 1977.

_____. Canadian Wildlife Service. Dennington, Malcolm. "Some Important Migratory Bird Habitats in the Yukon Territory." Whitehorse: Unpublished Paper, 1985.

_____. Canadian Wildlife Service. Gauthier, David A., W. Kent Brown and John B. Theberge, "Movement and behavior of the Burwash

Caribou Herd relative to the proposed Alaska Highway Gas Pipeline." Arthur M. Martell and Donald E. Russell, eds., Caribou and Human Activity: Proceedings of the 1st North American Caribou Workshop, Whitehorse, Yukon, 28-29 September, 1983. Ottawa: Minister of Supply and Services, 1985.

_____. Canadian Wildlife Service. J. Dewey Soper, "The Proposed International Yukon River Power Project In Relation to Wildlife: A Preliminary Investigation," Ottawa: Unpublished Report.

_____. Canadian Wildlife Service. Jim Hawkings. "Rough Outline for Swan Paper." Whitehorse: Unpublished paper, 1991.

_____. Canadian Wildlife Service. Yukon Waterfowl Management Plan, 1991-95. Whitehorse: Yukon Waterfowl Technical Committee, 1991.

_____. D. D. Cairns. "Geological Survey Report for the Yukon, 1909, 1914, 1915." H. S. Bostock, ed., Geographical Survey of Canada, Memoir 284, Yukon Territory. Ottawa: Queen's Printer, 1957.

_____. Department of Fisheries and Oceans. Seigel, N., and C. McEwen, A Historical Overview of Fishing in the Yukon. Whitehorse: Pacific Rim Division, 1984.

_____. Department of Indian Affairs and Northern Development. G. A. Singleton, O. A. Steen, K. Weagle and D. Weir. "Fish and Wildlife Habitat Recovery in Placer Mined Areas of the Yukon." Unpublished Final Report, 1978.

_____. Environment Canada Wildlife Service. Caribou: Hinterland Who's Who. Ottawa: Information Canada, 1973.

_____. Fisheries Research Board. Wynne-Edwards, V. "The Yukon Territory." North West Canadian Fisheries Survey in 1944-1945. Ottawa: Bulletin of the Fisheries Research Board of Canada, No. LXXII, 1947.

_____. House of Commons Debates. Friday, May 5, 1944. "CANOL Project: Development of Oil Resources of Northwest and Yukon Territories."

_____, Northwest Territories and Yukon Branch. The Yukon Territory, 1926/Department of the Interior, Northwest Territories and Yukon Branch. Ottawa: King's Printer, 1926.

_____. Pacific Forest Research Centre, E. T. Oswald and J. P. Senyk, Ecoregions of Yukon Territory. Victoria: Fisheries and Environment Canada, 1977.

Northwest Territories, John Donihee and Paul A. Gray. A Review of Road Related Wildlife Problems and the Environmental Management Process in the North. Yellowknife: Department of Renewable Resources, Information Report No. 2, 1982.

Yukon Government. Bureau of Statistics. Yukon and Canada: A Comparative Analysis: 1981 Census Profiles, Vol. 2. Whitehorse: Government of Yukon, 1985.

_____. Bureau of Statistics. Yukon Statistical Review: First Quarter, 1986. Whitehorse: Government of Yukon, 1986.

_____ and Canada. Department of Indian Affairs and Northern Development. Carcross Valley - Marsh/Tagish Lakes - Atlin Road: Land Management Planning Project, Volume 1 - Review Framework and Resource Data. Whitehorse: Yukon Government, 1980.

_____. Conservation and Management Services Branch. F. H. R. Jackson. "Yukon Forest Reconnaissance Survey 1944." Whitehorse: Unpublished paper, 1944.

_____. Department of Renewable Resources. Davies, D., C. E. Kennedy and K. McKenna. Resource Inventory - Southern Lakes. Whitehorse: Land Planning Branch, 1983.

_____. Department of Tourism. Tourism Planning and Development. Introspect Inc. Research Consultants. "Carcross/Southern Lakes Area Tourism Development Strategy." Whitehorse: Unpublished report, 1985.

_____. Department of Tourism. 1991 Vacation Guide to Canada's Yukon: Yukon the Magic and the Mystery. Whitehorse: Tourism Yukon, 1990.

_____. Department of Travel and Publicity. "A Survey of the Tourist Industry of the Yukon Territory," Whitehorse: Unpublished Report, 1962.

_____. Environmental Protection Service. Munro, D., and K. Weagle. "An Environmental Study of the White Pass & Yukon Route Pipeline from the B.C. -Alaska Border to Whitehorse, Yukon." Whitehorse: Unpublished report, 1976.

_____. Fish and Wildlife Branch. Barney Smith and Greg Hare. Hunting Patterns in the Yukon: 1979-1986. Vancouver: 1988.

_____. Fish and Wildlife Branch. Doug Larsen. "A Progress Report on the Squanga Lake Woodland Caribou Immobilization Program, November 25, 1978." Whitehorse: Unpublished report, 1978.

_____. Fish and Wildlife Branch. Doug Larsen. "Mountain Caribou Movements in the Squanga Lake Area: A Progress Report, March 1980," Unpublished report, 1980.

_____. Lands, Parks and Resources. Stephen J. Copen. "Visitor Services Development Plan: Carcross Dunes Territorial Nature Preserve." Whitehorse: Unpublished report, 1984.

_____. Department of Renewable Resources. W. G. Johnston, D. G. Larsen, H. A. McLeod and C. A. McEwen. "Moose Population Dynamics and Habitat Use, Southern Yukon River Basin." Whitehorse: Unpublished Report, 1984.

_____. Department of Renewable Resources, Fish and Wildlife Branch. Norman Barichello and Jean Carey. "Mountain Goat Status and Management in the Yukon." Whitehorse: Unpublished report, 1988.

_____. Yukon Data Book, 1986-87. Whitehorse: Government of Yukon, 1986.

_____. Yukon Territorial Council. M. R. Fajrajsl, "Multiple use of Forest Lands of the Tagish-Marsh Lakes Area." Whitehorse: Unpublished report, 1972.

Newspapers

Dawson Daily News, 1910-1920.

Examiner [Yukon Territory], 1968.

Northern Lights [Anglican Church Newsletter], 1912-1915.

The Whitehorse Star, 1945-1980.

Primary Sources: Books and Articles

Auer, Harry A. Camp Fires in the Yukon. Cincinnati: Stewart & Kidd Company, 1917.

Bancroft, Hubert Howe. History of Alaska, 1730-1885. San Francisco: The author, 1886.

Bond, James H. From Out of the Yukon. Portland: Binfords & Mort, 1948.

Dall, William. Alaska and Its Resources. Boston: Lee and Shepard, 1870, p. 100.

Darwin, Charles. The Origin of Species By Means of Natural Selection or The Preservation of Favoured Races in the Struggle for Life. J. W. Burrows, ed. Baltimore: Penguin Books, 1968.

_____. Charles Darwin's Beagle Diary. Richard Darwin Keyes, ed. New York: Cambridge University Press, 1988.

Dawson, George M. Report On An Exploration in the Yukon District, N.W.T. and Adjacent Northern Portion of British Columbia, 1887. Whitehorse: The Yukon Historical and Museum Association, 1987. Reprinted from Geological and Natural History Survey of Canada, Annual Report (New Series) Volume III, Part I, 1887-88. Montreal: William Foster & Co., 1889.

Drake, Lawrence. "New Frontier: The Pacific Northwest." Colliers (November 20, 1943), p. 58-70.

Guédon, George. "Explanation of Indian Map of the Rivers, Lakes, Trails and Mountains From the Chilkat to the Yukon Drawn By the Chilkat Chief, Kohklux, in 1869." Mazama (April 1901): pp. 75-82.

Krause, Aurel and Arthur. Zur Tschuktschen-Halbinsel und zu den Tlinkt-Indianern 1881/82. Berlin: Deitrich Reimer Verlag, 1984.

Schwatka, Frederick. Along Alaska's Great River. Reprinted Edition. Anchorage, Alaska: Alaska Northwest Publishing Company, 1983, pp. 27-40.

_____. A Summer In Alaska. St. Louis: J. W. Henry, 1893, pp. 57-60.

_____. Report of a Military Reconnaissance in Alaska Made in 1883. Washington: 1885.

_____. "The Great River of Alaska." The Century Illustrated Monthly Magazine 30 (May 1885 to October 1885): pp. 742.

Sidney, Angela. Tagish Tlaagú. Whitehorse: Council for Yukon Indians and Government of Yukon, 1981.

_____, Mrs. Kitty Smith, and Mrs. Rachel Dawson. My Stories Are My Wealth. Julie Cruikshank, ed. Whitehorse: Council for Yukon Indians, 1977.

White, Gilbert. The Natural History of Selbourne with Observations on Various Parts of Nature and the Naturalist's Calendar. Sir William Jardine, ed. London: George Routledge and Sons Limited, 1880.

Secondary Sources: Books and Articles

Abele, Frances. "Canadian Contradictions: Forty Years of Northern Political Development," in Kenneth S. Coates and William R. Morrison, eds., Interpreting Canada's North: Selected Readings. Toronto: Copp Clark Pitman Ltd., 1989, pp. 312-313.

Asch, Micheal. Home and Native Land: Aboriginal Rights and the Canadian Constitution. Toronto: Methuen Publications, 1984.

Barker, Kenneth. The NIV Study Bible: New International Version. Grand Rapids: Zondervan Bible Publishers, 1985.

Bate, Jonathan. Romantic Ecology: Wordsworth and the Environmental Tradition. New York: Routledge, 1991.

Bate, D., C. E. Kennedy and K. McKenna. Resource Inventory-Southern Lakes. Whitehorse: Government of Yukon, Department of Renewable Resources, 1983.

Becker, Ethel Anderson. Klondike '98: Hegg's Album of the 1898 Gold Rush. Portland: Binfords & Mort, 1949.

Bennett, Gordon. Yukon Transportation: A History. Ottawa: Government of Canada, Occasional Papers in Archaeology and History, No. 19, 1978.

Berger, Thomas R. Northern Frontier Northern Homeland: The Report of the MacKenzie Valley Pipeline Inquiry, Revised Edition. Vancouver: Douglas & McIntyre, 1988.

Brown, Charles J. "Yukon Mining Survey - 1965." North. May/June 1966, Vol. 13, pp. 32-34.

Cameron, Kirk, and Graham Gomme. The Yukon's Constitutional Foundations, Volume II: A Compendium of Documents Relating to the Development of the Yukon Territory. Whitehorse: Northern Directories Ltd., 1991.

Cameron, Sharon. Writing Nature: Henry Thoreau's Journal. New York: Oxford University Press, 1985.

Coates, Ken. Best Left as Indians: Native-White Relations in the Yukon Territory, 1840-1973. Montreal: McGill-Queen's University Press, 1991.

_____. "'Betwixt and Between": The Anglican Church and the Children of the Carcross (Chootla) Residential School, 1911-1954." Ken Coates and William Morrison, eds., Interpreting Canada's North: Selected Readings. Toronto: Copp Clark Pitmann Ltd., 1989, pp. 150-168.

_____. Canada's Colonies: A History of the Yukon and Northwest Territories. Toronto: James Lorimer & Company, 1985.

_____. "Furs Along the Yukon: Hudson's Bay Company -- Native Trade in the Yukon River Basin, 1830-1893." B.C. Studies 55 (Autumn, 1982), pp. 50-78.

_____. ed., The Alaska Highway: Papers of the 40th Anniversary Symposium. Vancouver: University of British Columbia Press, 1985.

_____, and Judith Powell. "Whitehorse and the Building of the Alaska Highway, 1942-1946." Paper presented to the Symposium on Boom and Bust Cycles in Communities of the Canadian and American West, University of Victoria, Victoria, B.C., August 27-29, 1987.

_____, and William R. Morrison. Land of the Midnight Sun: A History of the Yukon. Edmonton: Hurtig Publishers, 1988.

_____, and William Morrison. eds., Interpreting Canada's North: Selected Readings. Toronto: Copp Clark Pitman Ltd., 1989.

_____, and William Morrison. The Sinking of the Princess Sophia: Taking the North Down With Her. Fairbanks: The University of Alaska Press, 1991.

Cronon, William. Changes in the Land: Indians, Colonists, and the Ecology of New England. New York: Hill and Wang, 1983.

Crosby, Alfred W. Ecological Imperialism: The Biological Expansion of Europe, 900-1900. New York: Cambridge University Press, 1986.

Cruikshank, Julie. "Images of Society in Klondike Gold Rush Narratives: Skookum Jim and the Discovery of Gold." Ethnohistory 39, 1 (Winter, 1992): pp. 20-41.

_____. "Legend and Landscape: Convergence of Oral and Scientific Traditions in the Yukon Territory." Arctic Anthropology 18, 2 (1981): pp. 67-92.

_____. Their Own Yukon: A Photographic History By Yukon Indian People. Whitehorse: Yukon Press Limited, 1975.

_____. "Through the Eyes of Strangers: A Preliminary Survey of Land Use History In The Yukon During the Late Nineteenth Century." Report to the Yukon Territorial Government and the Yukon Archives, February, 1974.

Dacks, Gurston. A Choice of Futures: Politics in the Canadian North. Toronto: Methuen Publications, 1981.

Dobyns, Henry R. Their Number Become Thinned: Native American Population Dynamic in Eastern North America. Knoxville: The University of Tennessee Press, 1983.

Duerden, Frank. The Evolution and Nature of the Contemporary Settlement Patterns in a Selected Area of the Yukon Territory. Winnipeg: Center for Settlement Studies, University of Manitoba, 1971, pp. 135-152.

_____. The Development and Structure of the Settlement System in the Yukon. Whitehorse: Department of Library and Information Resources, Government of Yukon, 1981.

Fisher, Robin. "T. D. Pattullo and the British Columbia to Alaska Highway," in Kenneth Coates, ed., The Alaska Highway: Papers of the 40th Anniversary Symposium. Vancouver: University of British Columbia Press, 1985, pp. 1-24.

_____. Contact and Conflict: Indian-European Relations in British Columbia, 1774-1890. Vancouver: University of British Columbia Press, 1977.

Foothills Pipe Lines (Yukon) Ltd. Fall (1977) Water fowl Concentrations: Proposed Alaska Highway Gas Pipeline Route, Southern Yukon. Calgary: Prepared by Beak Consultants Ltd., 1977.

_____. Spring (1977) Water fowl Concentrations: Proposed Alaska Highway Gas Pipeline Route, Southern Yukon. Calgary: Prepared by Beak Consultants Ltd., 1977.

_____. Summer -Fall (1977) Mammal Studies Proposed Alaska Highway Gas Pipeline Route, Southern Yukon. Calgary: Prepared by Beak Consultants Ltd., 1978.

_____. Inventory Studies of Birds Along the Proposed Alaska Highway Gas Pipeline Route, Southern Yukon, Summer 1977. Calgary: Prepared by Beak Consultants Ltd., 1978.

Freisen, Richard J. The Chilkoot Pass and the Great Gold Rush of 1898. Ottawa: National Historic Parks and Sites Branch, Parks Canada, Environment Canada, 1981.

Gage, S. R. A Walk of the CANOL Road: Exploring the First Major Northern Pipeline. Oakville, Ontario: Mosaic Press, 1990.

Garfield, V. E. "Possibilities of Genetic Relationship in Northern Pacific Moiety Structure," Society for American Archaeology 9 (1953): pp. 58-61.

Greer, Sheila C. Site Locations and Archaeologically Significant Areas in the Southern Lakes District, Yukon territory. Final Report. Ottawa: National Museums of Canada, Archaeological Survey of Canada, 1983.

_____. "Field Report of the 1982 Southern Lakes (Yukon) Archaeology Project." Edmonton: Unpublished Report Prepared for the Archaeological Survey of Canada, 1982.

_____. "Prehistoric Land-Use Patterns: Recent Research in the Southern Lakes Region, Yukon." Victoria: Unpublished paper presented at the Canadian Archaeological Association Annual Meeting, April 1984.

_____. "Traditional Land-Use Patterns of the Carcross-Tagish Band." Interim Report, Unpublished paper prepared for the Carcross Tlingit Society, The Carcross-Tagish Indian Band, November 1984.

_____. Wheaton-Watson Resource Study: Culture History and Heritage Resources Watson and Wheaton Valleys. Whitehorse: Department of Renewable Resources, Yukon Government, October 1987.

_____. and R. J. LeBlanc, "A 1983 Update on Yukon Culture History." Halifax: Unpublished paper presented at the Canadian Archaeological Association Annual Meeting, April 1983.

Guédon, Marie-Francoise. People of Tetlin Why Are You Singing? Ottawa: National Museum of Man, Mercury Series, Ethnology Division Paper No. 9, 1974.

Hall, David. Clifford Sifton: The Young Napoleon. Vancouver: University of British Columbia Press, 1981.

Hamelin., L. E. Canadian Nordicity: It's Your North Too. Montreal: Harvest House, 1979.

Hays, Samuel P. Beauty, Health and Permanence: Environmental Politics in the United States, 1955-1985. New York: Cambridge University Press, 1987.

Hinton, Cherry A., and Philip H. Godspell. The Yukon. Toronto: Ryerson Press, 1954.

Hodgins, Bruce W. and Jamie Benidickson. The Temagami Experience: Recreation, Resources, and Aboriginal Rights in the Northern Ontario Wilderness. Toronto: University of Toronto Press, 1989.

Innis, Harold. The Fur Trade In Canada: An Introduction to Canadian Economic History. Revised Edition. Toronto: University of Toronto Press, 1956.

Krutch, Joseph Wood. Henry David Thoreau. London: Methuen & Co., Ltd., no date.

Leiss, William. Under Technologies Thumb. Kingston: McGill-Queen's University Press, 1990.

Mabey, Richard. Gilbert White: A Biography of the author of The Natural History of Selbourne. London: Century Hutchinson Ltd., 1986.

Martin, Calvin, ed. The American Indian and the Problem of History. New York: Oxford University Press, 1987.

McCandless, Robert. Yukon Wildlife: A Social History. Edmonton: The University of Alberta Press, 1985.

McClellan, Catherine. "Intercultural Relations and Cultural Change in the Cordillera," June Helm, ed., Handbook of North American Indians: Sub Arctic, Volume 6. Washington: Smithsonian Institution, 1981, pp. 387-401.

_____, and Glenda Denniston. "Environment and Culture in the Cordillera," June Helm, ed., Handbook of North American Indians: Sub Arctic, Volume 6. Washington: Smithsonian Institution, 1981, pp. 372-386.

_____, Lucie Birkel, Robert Bringhurst, James A. Fall, Carol McCarthy, and Janice R. Sheppard. Part of the Land, Part of the Water: A History of the Yukon Indians. Vancouver: Douglas & McIntyre, 1987.

_____. My Old People Say: An Ethnographic Survey of Southern Yukon Territory, Volume I and II. Ottawa: National Museums of Canada, Publications in Ethnology, #6, 1975.

_____. "Tagish." June Helm, ed., Handbook of North American Indians: Sub Arctic, Volume 6. Washington: Smithsonian Institution, 1981, pp. 481-492.

_____. "The Inland Tlingit," American Antiquity 8, 3 (January 1953): pp. 47-52.

MacIntosh, Robert P. The Background of Ecology: Concept and Theory. London: Cambridge Press, 1985.

McMillan, Alan D. Native Peoples and Cultures of Canada: An Anthropological Overview. Vancouver: Douglas and McIntyre, 1988.

Miller, J. R., ed. Sweet Promises: A Reader on Indian-White Relations in Canada. Toronto: University of Toronto Press, 1991.

Minter, Roy. White Pass: Gateway to the Klondike. Toronto: McClellan and Stewart, 1987.

Mitchell, Lee Clark. Witnesses To A Vanishing America: The Nineteenth-Century Response. Princeton: Princeton University Press, 1981.

Morrison, David. The Politics of the Yukon Territory, 1898-1906. Toronto: University of Toronto Press, 1968.

Nash, Roderick. Wilderness and the American Mind. New Haven: Yale University Press, 1967.

Ogilvie, William. Early Days on the Yukon & the Story of It's Gold Finds. Toronto: Bell & Cockburn, 1908.

Page, Robert. Northern Development: The Canadian Dilemma. Vancouver: McClellan & Stewart, 1986.

Rea, Kenneth. The Political Economy of Northern Development. Ottawa: Science Council of Canada, study No. 36, 1976.

Remley, David. "The Latent Fear: Canadian-American Relations and Early Proposals for a Highway to Alaska," in Kenneth Coates, ed., The Alaska Highway: Papers of the 40th Anniversary Symposium. Vancouver: University of British Columbia Press, 1985, pp. 1-24.

Sherwood, Morgan, "The Wilderness and Alaska." Environmental Review 9, 3 (Fall 1985): pp. 197-209.

Sherwood, Morgan. "The Wilderness and Alaska," in Mary Childers Mangusso and Stephen W. Haycox, eds., Interpreting Alaska's History: An Anthology. Anchorage: Alaska Pacific University Press, 1989, pp. 435-450.

Smyth, Stephen. The Yukon's Constitutional Foundation, Volume I: The Yukon Chronology. Whitehorse: Northern Directories Ltd., 1991.

Tanner, Adrian. Trappers, Hunters and Fishermen: Wildlife Utilization in the Yukon Territory. Ottawa: Department of Northern Affairs and National Resources, No. 5 in Yukon Research Project Series, 1966.

The Yukon Native Brotherhood. Economic Development for Indians in the Yukon Territory: A Position Paper. Whitehorse: The Yukon Native Brotherhood, 1972.

Timmer, F. Mortimer. Ed., and Introduction. The Yukon Territory: The Narrative of W. H. Dall, Leader of the Expedition to Alaska in 1866-1868; The Narrative of An Exploration Made in 1887 in the Yukon District By George M. Dawson; Extracts form the Report of An Exploration Made in 1896-1897 by Wm. Ogilvie. London: Downey & Co. Limited, 1898.

Tollemache, Stratford. Reminiscences of the Yukon. Toronto: William Briggs, 1912.

Turner, Frederick Jackson. The Frontier in American History. New York: 1920.

Udall, Stewart L. The Quiet Crisis and the Next Generation. Salt Lake City: Peregrine Smith Books, 1988.

_____, Patricia Nelson Limerick, Charles F. Wilkinson, John M. Volkman and William Kittredge, Beyond the Mythic West. Salt Lake City: Peregrine Smith Books, 1991.

Usher, Peter J., and Lindsay Stapes, "Subsistence in the Yukon." Whitehorse: A Report Prepared for the Economic Development Department, Council for Yukon Indians, 1988.

Van Stone, James, ed. Russian Exploration in Southwest Alaska: The Travel Journals of Petr Korsakovskiy (1818) and Ivan Ya. Vasilev (1829). Fairbanks: The University of Alaska Press, 1988.

Weeden, Robert B. Messages From Earth: Nature and the Human Prospect in Alaska. Fairbanks: University of Alaska Press, 1992.

Wells, E. Hazard. Magnificence and Misery: A Firsthand Account of the 1897 Klondike Gold Rush. Randall M. Dodd, ed. Garden City: Doubleday & Company, Inc., 1984.

Withler, I. L. A Limnological Survey of Atlin and Southern Tagish Lakes: With Special Reference to Their Proposed Use as Hydro-electric Storage Reservoirs. Vancouver: Management Publication No. 5 of the British Columbia Game Commission, 1956.

Workman, William B. Prehistory of the Aishihik-Kluane Area, Southwest Yukon Territory. Ottawa: National Museum of Canada, Mercury Series, Archaeological Survey of Canada, Paper no. 74, 1978.

Worster, Donald. Dust Bowl: The Southern Plains in the 1930s. New York: Oxford University Press, 1972

_____. Nature's Economy: The Roots of Ecology. San Francisco: Sierra Club Books, 1977.

_____. Rivers of Empire: Water, Aridity, and the Growth of the American West. New York: Pantheon Books, 1985.

_____, ed. The Ends of the Earth: Perspectives on Modern Environmental History. New York: Cambridge University Press, 1988.

_____. Under Western Skies: Nature and History in the American West. New York: Oxford University Press, 1992.

Write, Allen A. Prelude to Bonanza: The Discovery and Exploration of the Yukon. Whitehorse: Arctic Star Printing Inc., 1980.

Theses and Unpublished Papers

Abbott, J. W. Officer-in -Charge. Report of a Developmental Survey into the Tagish-Carcross districts of the Yukon. November 16, 1946.

Arctic Gold and Silver Mines Limited. "The Story of a New Producing Gold and Silver Mine in the Yukon." Promotion Pamphlet. Yukon Archives, Pam. 1967-125

Bastedo, Jamie. "A Resource Survey Method for Environmentally Significant Areas (ESA) in the Yukon With Results from the Bennett Lake/Carcross Dunes/Tagish Lake ESA." Waterloo: University of Waterloo, unpublished Masters thesis, Regional Planning and Resource Development, 1982.

Council For Yukon Indians, "Feasibility and Impacts of Fur Farming in the Yukon." Unpublished report, no date.

Cruikshank, Julie. "Myths and Futures in the Yukon Territory: The Inquiry as a Social Dragnet." Paper Presented to the Association for Canadian Studies, University of Manitoba, May 16, 1978. Yukon Archives, Pam. 1978-182,

Hellaby, H., or M. Gibbs, "History of the Chootla [sic] School." Unpublished paper. Yukon Archives, Cor. 301, folder 6.

Introspect Inc. Research Consultants, "Carcross/Southern Lakes Area Tourism Development Strategy," Date ???.

McClellan, Catherine. "Culture Change and Native Trade in Southern Yukon Territory." Unpublished Ph.D. Thesis, University of California, Berkeley, 1950.

MacKenzie Valley Pipeline Inquiry: Summary of Proceedings No. 19 (Transcript Volumes 22, 23), Whitehorse Community Hearings, August 11, 12, 13, 14, 1975. Volume 23, 2302-2303.

Northern Canada Produce Limited, Proposal for Yukon Territories, 1976.

Tanner, Adrian. "The Structure of Fur Trade Relations." University of British Columbia, Unpublished Masters Thesis, Department of Anthropology, 1965.

"The Mid-Yukon Project," unpublished position paper for future studies. RG 85, vol. N2865-3/5, file 31.

Wood, Z. T. "Annual Report of Superintendent Z. T. Wood, 1898," Annual Report of the North-West Mounted Police 1899. Publisher unknown: 1899, pp. 31-55.

VITA

Surname: Shelvey

Given Names: Ernest Bruce Halhad

Place of Birth: Prince Albert, SK

Date of Birth: November 10, 1966

Educational Institutions Attended:

University of Victoria	1988 to 1992
University of Western Ontario	1986 to 1987
University of Saskatchewan	1984 to 1986

Degrees Awarded:

BA. (Honours)	University of Victoria	1990
---------------	------------------------	------

Honours and Awards:

Graduate Teaching Fellowship, Department
of Graduate Studies, University of Victoria 1991

Excellence in Teaching Award, Department
of Graduate Studies, University of Victoria 1990

Publications:

Editor, Archival Directory of Religious Organizations on Southern
Vancouver Island. Victoria: Public History Group, 1992, forthcoming.

"Book Review of Ethnoarchaeology and Cultural Frontiers: Athapaskan,
Algonkian and European Adaptations in the Central Sub Arctic." The
Northern Review, forthcoming.

PARTIAL COPYRIGHT LICENSE

I hereby grant the right to lend my thesis to users of the University of Victoria Library, and to make single copies only for such users or in response to a request from the Library of any other university, or similar institution, on its behalf or for one of its users. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by me or a member of the University designated by me. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Title of Thesis: "Wild Wedge": The Loss of Wilderness in the Southern Lakes Region, Yukon Territory.

Author



(signature)

E. B. H. SHELVEY

(Name in Block Letters)

09.17.92

(Date)