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Aboriginal Forestry Training and Employment Review

FINAL REPORT

Phase I

February 1993

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ABORIGINAL FORESTRY TRAINING

and

EMPLOYMENT REVIEW

(AFTER)

FINAL REPORT

Phase 1

February 1993

Prepared for the
AFTER Committee

and the

National Aboriginal Forestry Association

by
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List Of Acronyms

AFTER	Aboriginal Forestry Training and Employment Review (Sometimes referred to in this report as the Aboriginal Forestry Human Resource Planning and Development Process)
AFN	Assembly of First Nations
APS	Aboriginal Peoples Survey
BLNDC	Burns Lake Native Development Corporation
CJS	Canadian Jobs Strategy
EIC	Employment and Immigration Canada
FRDA	Forest Resource Development Agreement
IFABC	Intertribal Forestry Association of B.C.
INAC	Indian and Northern Affairs Canada
LRT	Lands, Revenues and Trusts
NAFA	National Aboriginal Forestry Association
UBC	University of British Columbia
AAC	Allowable Annual Cut

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Preface

What is Aboriginal Forestry?

Aboriginal forestry is not necessarily different in practise than other forms of forestry, but one generalization that can be made is that it will usually be different than an industrial timber company's version of forestry. The fundamental differences lie in different land ethics and value systems.

A land ethic can be defined as an individual's or group's understanding of and value placed upon their relationship to the land. Everyone has a land ethic, whether it be indifferent, dependent, superior, humble and/or spiritual.

In most Aboriginal communities, the land ethic is very spiritual and rooted in traditional cultural beliefs. This ethic is an integral part of every aspect of society and the fundamental essence of the people's understanding of who they are as life forms, individuals, families and/or communities. The people see themselves as a small and very dependent piece of a larger web. With this perspective, one quickly develops a direct understanding of action and consequences with respect to land use and a strong respect and reverence for life and the land. From this understanding and respect comes an overriding social responsibility to care for the land and life as it cares for you; thus the land is commonly referred to as "Mother Earth."

Other practices, beliefs and values that stem from this understanding, which help to shape the nature of a land management regime, include:

- respect for wisdom (elders);
- consensus decision-making;
- respect for individual freedom of choice;
- humility in the face of natural processes;
- commitment to fit within your natural place and to achieve a balance with the world around you; and
- respect for relationships with family, society and other life in general.

The ideal Aboriginal forestry situation would see Aboriginal communities living in an environment where all life lived in balance and harmony. People would carry out their social responsibility to care for all life on the land, including each other. However, the ability to achieve this balance and meet this social responsibility is tempered by a variety of factors, including:

- degree of assimilation into non-Aboriginal culture;
- proximity to population centres;
- amount of traditional culture retained in knowledge, customs and social structures;
- overall health of the community;
- extent and impact of outside resource interests; and
- organizational, financial and technical capacity.

In other words, Aboriginal forestry is an evolving concept which varies in practice from group to group. However, there are a number of common elements which could be incorporated into a definition: Aboriginal communities caring for the forest; evolving concept and practice; holistic; sustainable; balanced; part of the natural order; supports us only if we support it; carries our history and our future; respect; reverence; humility....

Regardless of the final definition, it is important for us, a community of Aboriginal and non-Aboriginal individuals and organizations, to understand that we need each other to grow and define the ideal we seek to achieve with Aboriginal forestry. Public information materials, Aboriginal natural resource education systems, computerized networks, conferences, workshops and Aboriginal natural resource and education organizations are all means which we must promote to assist our quest.

By achieving our goal of defining and implementing Aboriginal forestry, we can be instrumental in assisting indigenous communities and all communities throughout the world in their quest to achieve a more balanced and sustainable standard of land care. This is a goal and a responsibility not to be taken lightly.

1 Executive Summary

There can be no doubt since recent negotiations on the constitution and on land claims that Aboriginal people are going to become more involved in forestry and natural resource management. Where agreements have been reached, such as in the James Bay area of Quebec, in the western Arctic where land claim settlement negotiations are well advanced, and in the Yukon, the Northwest Territories and elsewhere where new arrangements are being discussed, Aboriginal groups are exercising control over natural resources on large areas and will have a strong voice in resource management on other lands in their traditional use areas.

This means more trained Aboriginal foresters, wildlife managers, range managers and other professionals, technicians and workers are required. The training and education of Aboriginal resource managers and workers will be a major challenge for Aboriginal people, governments, training institutions and forest companies.

The population of Aboriginal people is growing more rapidly than that of other Canadians. About 37% of the Aboriginal population is under 15 years of age, compared to about 22% for all Canadians. The future of these children is a great concern. For the adult Aboriginal population, 1986 Census statistics indicate that 65% of a total enumerated Aboriginal population of 451,000 over 15 years old worked for income during some portion of 1985 or 1986. Of this 65%, 8,850 found work in the logging and forest industries. Only half this number were employed at the time of the census, making up 7% of the total forestry and logging work force, 5% at the foreman/woman level. The highest concentration of Aboriginal workers in 1986 was in the forestry conservation category, primarily fire control, making up 13% of that work force.

The Indian Lands Program of the Forest Resource Development Agreements (FRDA) has served to introduce a large number of Aboriginal people to the possibilities of careers in renewable resources.

INAC reports that the proportion of on-reserve students that complete secondary school has increased from 3% in 1960/61 to 47% in 1990/91. Less than 1% of status Indians receiving support for post-secondary school from INAC have been studying natural resources.

Several observations were made about the future of the forest industry in Canada:

> *Canada's forest industry is going through a difficult period as a result of the recession, increasing competition from foreign sources of pulp, pressures to convert to new pulp bleaching methods, the demands for newsprint containing recycled paper and U.S. import duties on Canadian lumber.*
>
> *The combination of factors listed above and continuing industrial efforts to reduce labour forces through mechanization suggest a gradually reducing forest operations work force, at least in the near term, except in Manitoba and Alberta, where new pulping facilities may offer new opportunities in forest management.*

Opportunities in other sectors, particularly silviculture and activities related to integrated resource management, including wildlife and recreation management, may experience small increases over the next decade.

In addition to poor outlook for employment in the forest industry, Aboriginal people face other barriers in employment and training, including:

- A highly competitive, mechanized and cost-driven timber harvesting sector creates employment barriers including high costs of entry for contractors, the need for entrepreneurial and business management skills, training and experience with sophisticated machinery and relatively high education levels.

- Several Aboriginal representatives who were consulted believe that a fundamental barrier to employment in the forest sector is a lack of commitment by industry to employ Aboriginal people.

- Forest management plans emphasizing timber production are seen as diminishing opportunities in traditional pursuits of fishing, hunting and trapping.

- Although there are exceptions, most Aboriginal communities do not have access to sufficient forest land to maintain even a small forestry employment base.

- The short-term nature of many reforestation and stand improvement projects makes it difficult to attract workers, in competition with either the social welfare system or full time employment in other fields.

- With few role models in their communities, some young Aboriginal people perceive woods work as menial employment.

- A low level of self esteem exhibited by many young Aboriginal workers tends to be self-fulfilling, with low achievement levels in training programs and poor productivity on the job which reduces job opportunities.

- Some training courses fail to attract enthusiastic response because they are not seen as part of an integrated training package required for a multifaceted career in the forestry sector.

- Many Aboriginal students have difficulties adjusting to the environment of urban colleges and universities.

- Secondary school career counsellors and governmental bodies involved with training and education do not seem to have highlighted the possibilities in natural resource management.

- The relevance of course content and communication between instructor and student are enhanced when training courses are developed and offered by Aboriginal instructors.

Many educational institutions recognize the need to incorporate Aboriginal values and culture in course content but it remains to be seen how well this has been accomplished.

Past studies and consultations with Aboriginal representatives show a chronic need for human resource development in all aspects of forest related education and training. The Proposal for a First Nations Natural Resource Sciences Program at the University of British Columbia defined the need very well:

> *First Nations have direct management responsibility for a significant share of B.C.'s natural resources and through emerging co-management approaches, will have indirect control over a much larger fraction. Yet very few Aboriginal people have formal training in natural resource management. The creation of a pool of Aboriginal experts in resource management has the potential to offset problems of communications, respect, trust and knowledge between Aboriginal groups and B.C.'s government ministries charged with resource management. Formal education in natural resource management, combined with traditional knowledge, would instill in Aboriginal people the kind of expertise needed to manage their lands effectively and to increase their participation in the resource management sector in general.*

What is true in B.C. has parallels across the country. Initial findings suggest that there may be fewer opportunities in the timber harvesting sector in most provinces other than Manitoba and Alberta. On the other hand, activities are expected to continue at existing levels or increase in forest renewal and silviculture. Pressures for more integrated forest management are expected to increase demand for professional and technical personnel with education in holistic resource management. Opportunities for Aboriginal communities to acquire access to larger forest land bases appear to be increasing in several provinces.

A professional resource manager is only as good as the technicians and workers who are applying natural resource management techniques in the field. The few graduates of the Nicola Valley Institute of Technology, the National Indian Forestry Institute at Meadow Lake and the Native Resources Technician Program at Sault College are working in their communities and in the forest industry to implement Aboriginal natural resource management objectives.

More effective training for natural resource workers is needed in all fields. While ad hoc training has assisted some Aboriginal people to become involved in forestry, the training has often lacked focus and has not been structured for progression to higher levels of training. The need for training in the business end of silviculture and contracting has been identified. Aboriginal businesses are operating in a very difficult and competitive business environment.

Conclusion

The purpose of Phase 1, and therefore of this study, was to review information available on the human resource development needs of Aboriginal people in the forestry sector. This study provides the background information with a discussion of the issues and needs of the emerging Aboriginal forestry sector. The report is focused primarily on opportunities within the existing

forest industry with its focus on timber harvesting. This is simply a reflection of current sources of information and activities. More and more, other values of the forest are being given equal weight in integrated resource management programs. Aboriginal people are well suited to lead the movement toward integrated resource management.

Phase 2 will provide a framework and a plan of action to meet the human resource development needs of Aboriginal people over the next ten years. The purpose of Phase 2 should be to:

> *Define training, education programs and hiring practices that will encourage and ensure full access to jobs and economic development opportunities for Aboriginal people in the current forestry sector and encourage the enhancement of traditional Aboriginal forest values.*

The title for Phase 2 should be, "An Education and Training Strategy for Aboriginal People in the Forest Sector."

Objectives of Phase 2

1. Define programs for universities and technical colleges that will include Aboriginal forest values;

2. Identify universities and technical colleges where these programs could be taught;

3. Develop instructional and learning systems guidelines and manuals for the above programs;

4. Review recruitment processes, entrance requirements and course content of university forestry programs and make recommendations to improve access to these programs for aboriginal students;

5. Examine ways to encourage graduate forest technicians to pursue further education in forestry degree programs;

6. Define the educational culture in which Aboriginal students are most likely to succeed (eg. University of British Columbia First Nations House of Learning; Aboriginal outreach programs at Nicola Valley Institute of Technology and New Brunswick Community College; the Native Resources Technician Program, a distance education program at Sault College; Gabriel Dumont Institute);

7. Define a program that could be taught and information that could be distributed in high schools and vocational schools that will encourage Aboriginal students to go into forest related fields at the professional, technical and worker level;

8. Outline course elements of a forest worker training program that could be taught through various ad hoc training programs;

9. Develop an outline of curricula for the above program;

10. Examine retraining requirements for aboriginal people already working in forest sector;

11. Make recommendations to Aboriginal organizations, government and industry to improve Aboriginal human resource development in the forest sector;

12. Continue to build database on aboriginal participation in forest sector;

13. Prepare material for public distribution on results of research findings;

14. Promote networking between organizations with an interest in aboriginal forestry;

15. Develop a communication strategy that describes the opportunities available in aboriginal forest management, the special skills required to implement management plans, the aboriginal land ethic, and the importance of forest management to aboriginal people.

16. Define ways of using existing government programs to focus on training and employment in Aboriginal forestry, including partnerships with other organizations to help finance Phases II and III.

17. Recommend members and Terms of Reference for a "First Nations Human Resource Development Committee" that will coordinate this program. This Committee should have members from First Nations training institutions, the forest industry and elders who relate to traditional values. This ongoing committee could be an extension of the present Aboriginal Forestry Training and Employment Review Committee.

2 Introduction

2.1 The Industrial Adjustment Service Committee

The Industrial Adjustment Service (IAS) of Employment and Immigration Canada (EIC) established a consultative committee to address the unique needs of the Aboriginal forest sector. The committee is called the "Aboriginal Forestry Training and Employment Review" (AFTER). The broad objectives of the committee are to:

- study the supply of and demand for Aboriginal labour in the context of projected growth and change in the forest sector;
- promote the availability of quality education and training opportunities consistent with the Aboriginal approach to management of the forest resource;
- develop equal employment opportunity strategies to maximize Aboriginal participation, including Aboriginal women, in direct employment in non-Aboriginal corporations and through contracting arrangements between those corporations and Aboriginal enterprises;
- review the role and programs of Aboriginal and other training institutions and Aboriginal employment services and promote the Committee's views to these bodies;
- examine existing and future approaches to the management of federal and provincial forest lands and develop strategies to maximize Aboriginal employment participation, and
- examine the arrangements for continuing Aboriginal participation in human resource planning for the forest sector.

Figure 2-1 shows an outline of a three-phase process to accomplish the broad objectives of the AFTER committee.

2.2 National Aboriginal Forestry Association

The National Aboriginal Forestry Association (NAFA) is an association of Aboriginal people drawn from all provinces in Canada. The overall goal of NAFA is to promote Aboriginal forestry with the following philosophy:

- The Association is a non-political and voluntary association of representatives from Aboriginal communities who, on behalf of their respective areas, have a commitment to forestry and who wish to see integrated and holistic development of forests;
- The Association seeks to promote the wise use of forests and all forest resources with respect for Aboriginal traditions and customs;
- The Association, by playing an advocacy role, seeks to assist and strengthen Aboriginal governments, businesses, organizations and individuals as they strive to pursue socio-economic opportunities in forestry.
- The objectives of the Association will not prejudice Aboriginal title, treaty rights land claims or other inherent rights.

NAFA fully supports the goals of Aboriginal people as expressed by the Assembly of First Nations (AFN), specifically those calling for self-determination and self-reliance. NAFA

supports the initiatives of AFTER because it sees the development of Aboriginal people through education and training as an important element of its mandate.

2.3 Methodology

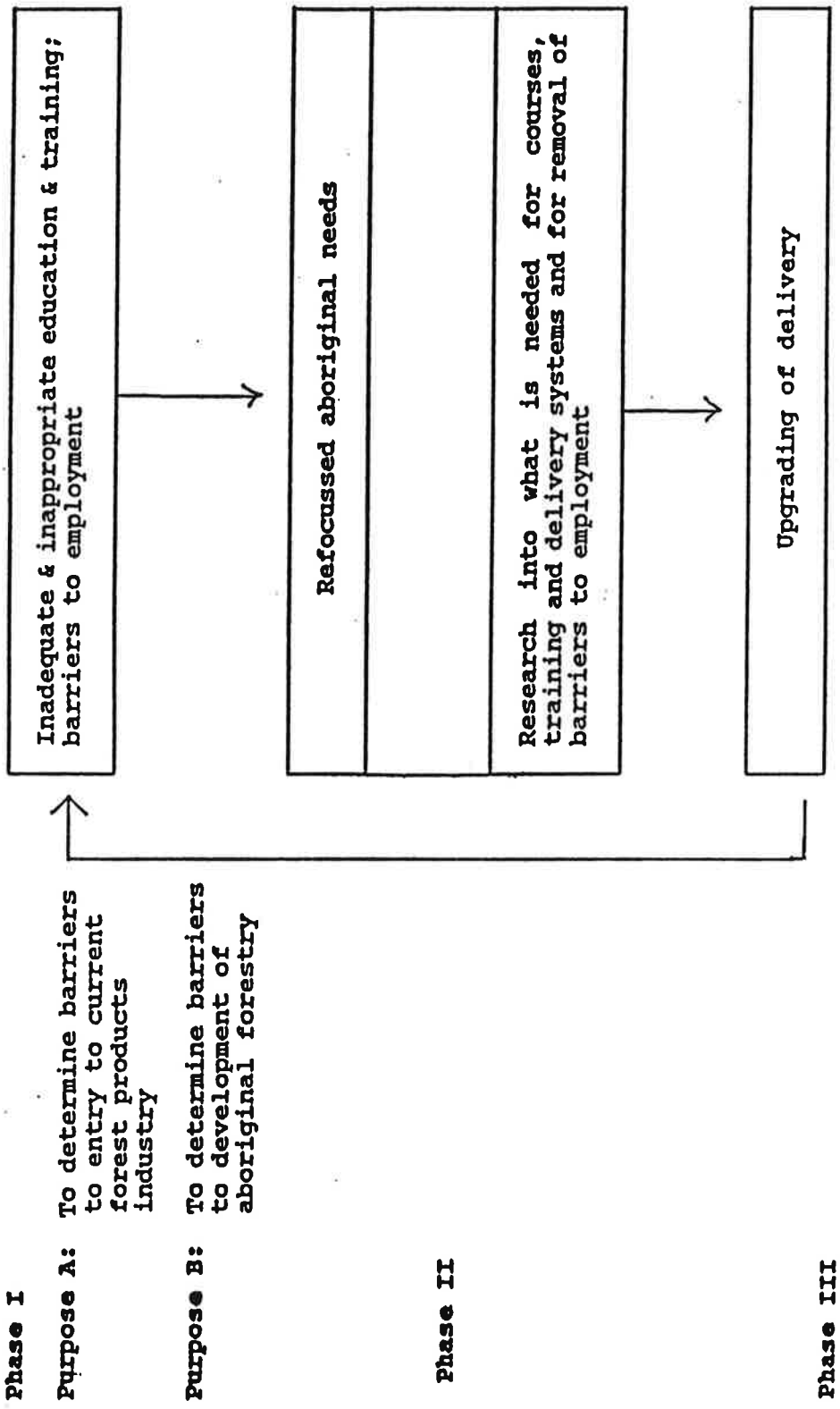
The AFTER Committee developed terms of reference to carry out this study. Requests for proposals were sent to five forestry and human resource development specialists from across Canada. The selected consultants were Peggy Smith (Ontario), Andrew Moar (Quebec), John Mactavish (Ottawa) and Allen Hopwood and Grant Scott (B.C.). The consultants agreed to work through SOFOR Consultants Ltd. of Victoria, B.C.

Considerable research was done in Phase 1 to:

- gather data on the present employment and education of Aboriginal people in the forestry sector;
- identify the demand for further education and training for Aboriginal people in the forestry sector;
- identify employment and education barriers faced by Aboriginal people in the forestry sector;
- examine ways in which values based on traditional ecological knowledge were being incorporated into resource management education and forest management.

To further define the issues the consultants met with Aboriginal people, government groups and educational institutions.

Figure 2-1
Objectives of Aboriginal Forestry Training & Employment Review



3 Background

The following studies and recommendations have been made concerning the development of education and training for Aboriginal people in natural resource management.

3.1 Proposal for an Aboriginal Forest Resource Development Agreement

In 1984 the AFN, Indian and Northern Affairs Canada (INAC) and Forestry Canada collaborated in defining the following comprehensive program for Aboriginal forestry:

1. *The program will emphasize and provide for an increasing number of Indians educated and trained in forestry.*

2. *There will be emphasis on innovation, and training will take advantage of the most modern techniques developed in Canada and elsewhere in the world.*

3. *Training will be defined by and address the needs of Indian First Nation governments with respect to community-based development.*

4. *Training will be delivered under the jurisdiction of Indian First Nation governments.*

5. *A wide range of delivery modes including, but not necessarily limited to, university and college programs, technical and vocational school programs, night classes, extension training, seminars, workshops, on-the-job training, field trips and programs for school children will be utilized.*

6. *While existing educational and training programs will be used where appropriate, a range of specially tailored approaches are also required to overcome inappropriate structural arrangements within current education and training services. Such structural deficiencies, from an Indian perspective, relate to subject matter, values, culture, delivery methods, timing and location.*

7. *The education and training strategy will be designed to meet the needs identified by Indian First Nation governments; encourage and facilitate the acquisition of necessary skills, by Indians, to enable participation at all levels and categories of forestry sector employment; and meet training standards and criteria that will aim to be even higher than current forestry sector standards.*

8. *Components will include, but not necessarily be limited to:*
   - *forestry studies as part of elementary and secondary school curricula;*
   - *accredited, specially-tailored technical and vocational programs offered locally;*
   - *local, on-the-job training with experienced Indian and non-Indian contractors;*
   - *scholarships for advanced forestry studies at established universities;*

- *local seminars, workshops and night classes;*
- *financial support for Indian First Nation governments engaged in developing and operating Indian-controlled and managed forestry education institutions, programs and curricula;*
- *financial incentives to encourage existing forestry education institutions to develop and operate, under Indian First Nations control, Indian forestry education programs and services.*

Technical Forestry Advisory Services and Development Support

Technical forestry expertise which is largely lacking in the Indian forestry sector is critical for the inventorying of Indian forests, the development of viable integrated forest management plans, and the implementation and maintenance of intensive forest management practices on Indian forest lands ... will need the pooling of resources and can be achieved through collective regional and local Indian institutions. Such a collective approach will likely include a broad range of activities, such as marketing, distribution, product development, business development, capital financing and training services.

The agreement was not implemented by government.

3.2 Intertribal Forestry Association of B.C. Lands, Revenues and Trusts Forestry Review, 1990

In October, 1989 the IFABC recommended to the Lands, Revenues and Trusts (LRT) Steering Committee that specific reference be made to forests and the practice of forestry on reserves in the LRT review process. The fiduciary responsibility of the federal government for Aboriginal forest lands was stressed and a strategy for change was outlined. This led to the LRT Section of INAC awarding a contract to the IFABC in April, 1990 to carry out an *independent* review of INAC's LRT functions and responsibilities as they relate to forest and forest land management on B.C. reserves. *Independent* was emphasized because the process was controlled and implemented by Aboriginal people, and recommendations came from B.C. Aboriginal people. As an integral part of the process, the review obtained direct and comprehensive input from B.C.'s Aboriginal people through a thorough consultation process designed and conducted by the IFABC.

The LRT Forestry Review was clearly different and distinct from INAC's overall LRT Review in three ways:

- The concept and idea for having a separate forestry review came from an Aboriginal organization, the IFABC, not from INAC;
- The LRT Forestry Review was designed and carried out by the IFABC, completely independent of INAC;
- The IFABC used a province-wide consultation process to involve and inform the widest possible range of Aboriginal people in B.C.

The LRT review made the following comments regarding education and training:

> *If Native forestry is to be successful, emphasis must be placed on increasing the number of Native people educated and trained in forestry. Forestry provides a focus and vehicle for employment training. There is a need for training in "life skills," as well as entrepreneurial and small business management training to provide for the establishment of a Native controlled forestry sector.*
>
> *There is a need for university, technical and vocational level schools to be established in different regions of the province to match cultural and ecological differences. The two existing Native-run technical forestry schools are not sufficient. Interim linkages will probably have to be formed with existing forestry training and education institutions but ultimately the goal should be to have independent Native controlled and operated schools.*
>
> *Training in Native forestry must be done from the Native point of view. Forestry training for Native people will look at the forest holistically with respect for traditional cultural, heritage and spiritual values. This approach calls for the definition of the principles of Native forestry which in turn will be used as the foundation for appropriate curricula.*
>
> *For Native forestry programs to be successful over the long-term, the bands, tribal councils, Native controlled companies and involved schools and institutions must ultimately be staffed largely by Native forestry specialists rather than outsiders who often lack the understanding of Native values and the trust of the Native people.*

3.3 B.C. Task Force on Native Forestry, 1991

The British Columbia government commissioned the Task Force on Native Forestry in September of 1990. The mandate was to recommend ways to increase Aboriginal participation in the forestry sector.

The following recommendations were made regarding education and training:

1. *The University of B.C.'s (UBC) Forestry Faculty and the new University of Northern B.C. include Native forestry courses in their curricula. The two universities should hire a Native forestry coordinator in each faculty to set up a support program in natural resources so as to develop a learning environment that will encourage Native students to seek professional degrees in forestry.*

2. *A first priority in funding be given to the Nicola Valley Institute of Technology, to upgrade their facilities and increase staffing to the same standard as B.C. Institute of Technology, and a second Native technical school of the same calibre be developed on the coast.*

3. *Native primary and secondary schools include forestry and natural sciences in their curricula to prepare and encourage Native students to become foresters and forest technicians.*

4. *The province and a First Nations forestry organization, such as the Intertribal Forestry Association of B.C., coordinate forestry training and job creation programs for Native people with the forest industry and the federal government, to provide community based training and long-term jobs in all aspects of forestry.*

5. *The province and forest industry cooperate with the Native forestry community to set up an apprenticeship forestry training program so Native individuals interested in forestry can gain practical managerial experience.*

3.4 NAFA, Aboriginal Forest Strategy Draft Discussion Paper, 1992

The education and training component of the Aboriginal Forest Strategy will include initiatives under existing government programs as well as independent activities.

- *An EIC Industrial Adjustment Service Committee, chaired by an Aboriginal professional forester, with membership drawn from Aboriginal organizations and businesses, forest industry, government, training institutions and labour unions, will develop a comprehensive analysis of the current situation with respect to Aboriginal participation in the forest industries and in forest management, and to develop strategies for raising the skill levels.*

- *To help prepare us for taking on the responsibilities of landowners that are coming, the Forest Strategy will include research to develop forest management planning models tailored to our interests and needs.*

- *Following the initiative of the IFABC, the strategy will include consultations with provincial and territorial governments to establish task forces on Aboriginal employment to recommend increased employment opportunities for Aboriginal people in provincial and territorial governments.*

- *In consultation with national Aboriginal groups, EIC has developed a new "Pathways to Success: Aboriginal Employment and Training Strategy." It highlights control at the local level with Aboriginal delivery of employment and training services. The Aboriginal Forest Strategy includes close coordination with the Pathways for Success program to ensure that forestry training and employment receive high priority in response to the strategies to be developed by the new Industrial Adjustment Service Consultative Committee.*

3.5 Forest Sector Task Force, Ontario Round Table on Environment and Economy, 1992

Aboriginal students should be encouraged to undertake post-secondary school forestry education by establishing one-year science access transition programs, including cultural support services, at the university level. Such programs would be designed to help prepare Aboriginal students for admission into forestry or related science fields.

3.6 Canadian Council of Forest Ministers, Sustainable Forests: A Canadian Commitment

The Council met in Ottawa in early 1992 and made the following comments concerning Aboriginal forestry:

1. *In 1992, Aboriginal forestry organizations and the federal government will complete a strategy to address the training and employment needs of Aboriginal people, in accordance with their forest values.*

2. *Post-secondary and professional forestry educational institutions will broaden their programs to reflect the Aboriginal land ethic as well as the constitutional status and positions of the Aboriginal people of Canada.*

3.7 IFABC Strategic Study of the Potential for Increased Native Participation in the Forest Sector

In December 1990, IFABC commissioned Price Waterhouse to assist in the development of this study to:

- document the overall forest industry outlook over the next five to ten years by sector, and
- identify strategies to increase Aboriginal participation in industry ownership and management over this period.

The report is organized by industry sector (Resource Management, Forest Harvesting, Wood Products, Pulp and Paper) followed by sections on issues affecting all sectors, including financing, timber resources and training. The final section deals with the role of IFABC in representing Aboriginal interests in the forest sector.

4 Current Aboriginal Employment in Forestry

4.1 Labour Statistics

There are few statistics available on Aboriginal participation in the forest sector labour market. Data from the 1990 Census of Canada were not yet available when this project was undertaken. As a consequence, the only national data available are from the 1986 Census. Statistics from that Census are flawed in that the population of some 450,000 people on 136 Indian Reserves and settlements in various parts of Canada were not completely enumerated. Ninety Indian bands declined to participate in the 1986 Census and numerous other reserves were incompletely enumerated (Hirvonen, 1992). In addition, groups such as the Metis National Council have criticized Statistics Canada on the design of their questionnaires because they do not identify adequately people of Aboriginal ancestry.

INAC maintains a register of Indian populations in Canada which also shows some differences with Census data. For example, the 1986 Census shows 263,000 registered Indians in Canada, approximately 164,000 of whom reside on reserves while the INAC Indian register shows 388,000 registered Indians in 1986, 250,000 of them living on reserves (Hirvonen, 1992). It is worth noting that approximately 30% of registered Indians are residing off-reserve.

Queries made to individual provinces determined that they do not maintain statistics on the Aboriginal work force, nor do industrial associations such as the Canadian Pulp and Paper Association or the Ontario Forest Industries Association.

4.1.1 National Census Statistics, 1986

Figures 4-1 to 4-4 and Table 4-1 describe the general employment characteristics of Canada's Aboriginal population at the time of the 1986 Census. Of a total enumerated Aboriginal population of 451,950 aged 15 and over, 294,415, or 65%, worked during some period of 1985 or 1986. Of this number, 8,850, or 3% of the working Aboriginal population, were employed in the logging and forestry industries. Work in logging and forestry was most significant in British Columbia where just over 7% of the working Aboriginal population were employed in this sector. In other provinces and territories, logging and forestry provided generally less than 3% of Aboriginal people's employment.

The 1986 Census also provides for a breakdown of Aboriginal employment by various work categories as defined by the Canadian Classification and Dictionary of Occupations. Appendix 1 shows the Aboriginal labour force by detailed occupation and lists employment levels for the major categories of the forest sector for all of Canada. Tables for individual provinces are shown in Appendix 2. (The figures in Table 4-1 and Appendix 1 are not directly comparable. Appendix 1 is based on the employed labour force at the time of the 1986 Census, while Table 4-1 is based on those people who were employed sometime during 1985 or 1986 and therefore shows significantly higher participation.)

As shown in Appendix 1, some 4,255 Aboriginal people were employed in forestry and logging occupations at the time of the 1986 Census, 7% of the total forestry and logging work force, 5% at the foreman/woman level. At the same time, 1,755 were employed in wood processing occupations exclusive of pulp and paper making, 4% of that work force. Only 660 Aboriginal people, or about 2% of the total for the category, were working in pulp and paper making and related occupations. While these percentages may appear low, Aboriginal people made up less than 2% of the total Canadian population 15 years of age and over in 1986.

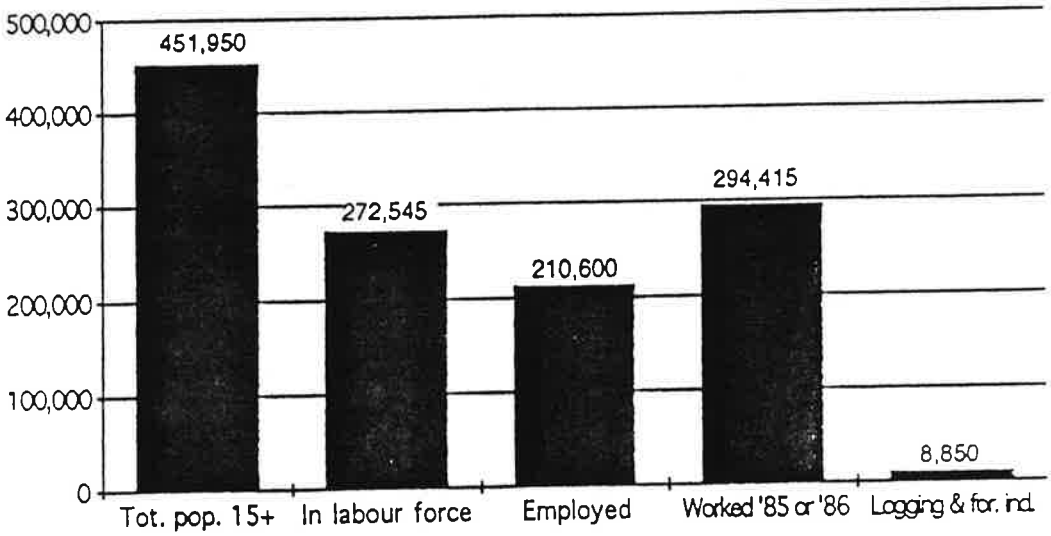
At the national level, the highest relative concentration of Aboriginal people, 13%, is found in the "forestry conservation" category, primarily fire control. Aboriginal people accounted for just over 5% of the "labouring and other elementary work" category which includes seed-cone collection and tree planting.

As shown in Appendix 2, the highest proportion of Aboriginal people in the forestry and logging occupation group was reported for the Alberta-NWT region where about 15% of the total forest sector workforce were Aboriginal. For B.C.-Yukon and Ontario, the proportions were 9% and approximately 8% respectively. The figures were much lower in all other provinces.

Aboriginal Women

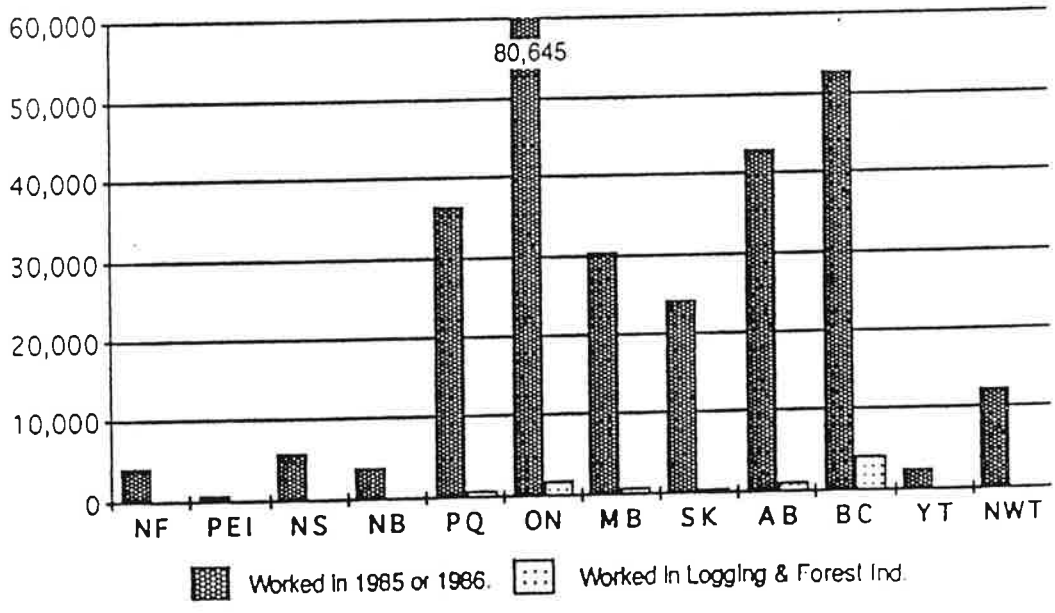
Appendix 1 also shows the breakdown of employment in "male" and "female" categories. In the Pulp and Paper Making category, Aboriginal women make up 11% of the total Aboriginal workforce and only 0.1% of the total workforce. In that category, the highest level of employment for Aboriginal women is in the Inspecting, Testing field, where they make up 38% of the Aboriginal workforce and 7% of the entire workforce. In the Forestry and Logging category, Aboriginal women make up 6% of the Aboriginal workforce and less than 1% of the total workforce with the highest participation rates in the Labouring and Log Inspection fields. In the Wood Processing category, Aboriginal women making up 8% of the Aboriginal workforce and 3% of the total workforce. The highest participation is in the Plywood Making and Wood Treating fields where Aboriginal women make up 60% and 25% of the Aboriginal workforce in these two fields respectively and less than 2% of the total workforce. It is worth noting that there are no Aboriginal women in the Foremen/Women fields in either Wood Processing or Pulp and Paper Making categories and less than ½% in the Forestry and Logging category.

Figure 4-1
Aboriginal Employment Levels - Canada



Source: 1986 Census of Canada, Statistics Canada
Total Pop. 15+ refers to those persons who reported at least one Aboriginal origin on the Census. Pop. 15+ who worked in 1985 or 1986 refers to a extended reference period so that the information includes, along with those for the experienced labour force, those who worked sometime in 1985 or 1986 but were no longer in the labour force during the reference week of May/June 1986.

Figure 4-2
Aboriginal Employment Levels - by Province



Source: 1986 Census of Canada, Statistics Canada

Figure 4-3
Aboriginal Employment Levels - Forestry Sector

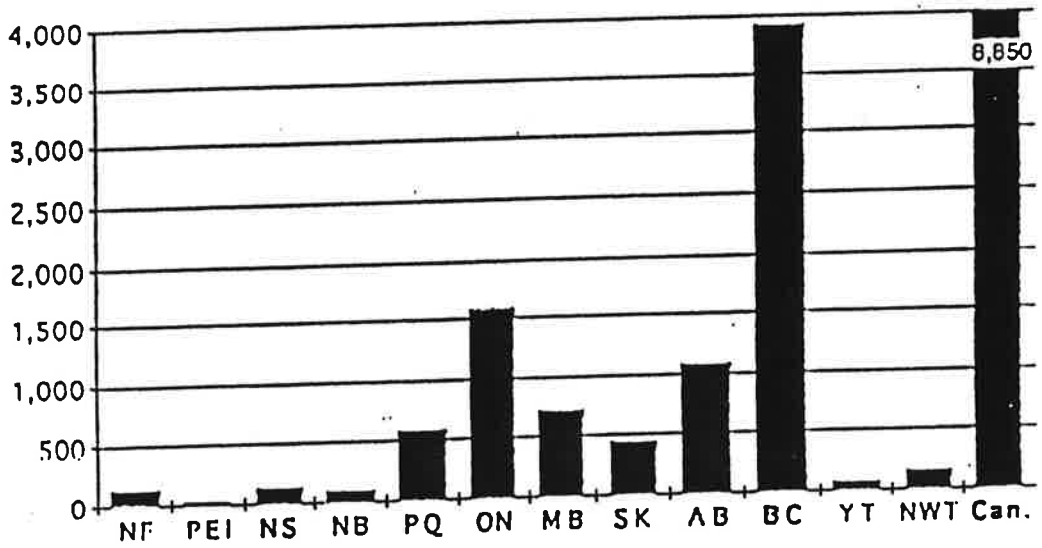
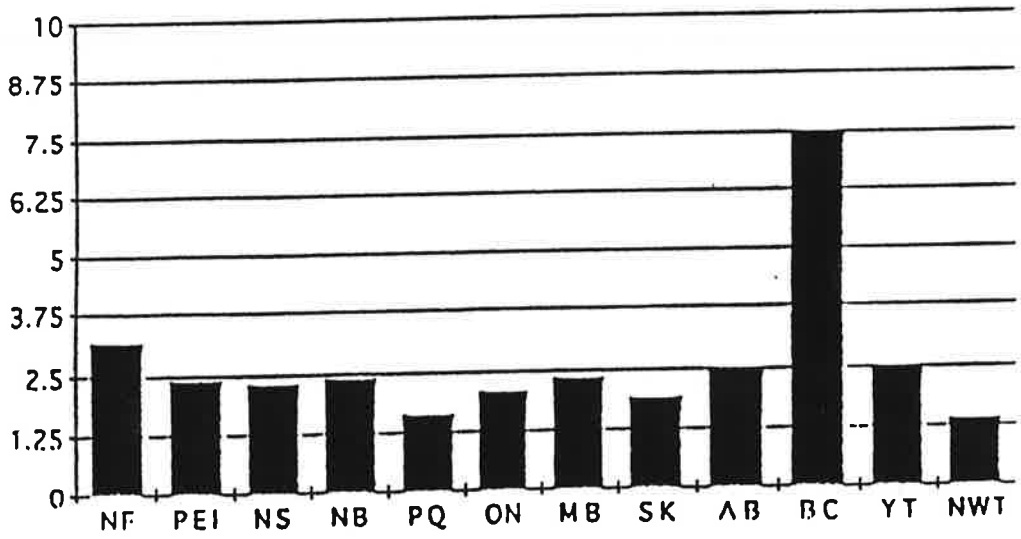


Figure 4-4
Percentage Employment Provided by Logging and Forest Industry



Source: 1986 Census of Canada, Statistics Canada

Table 4-1
Total Canadian and Aboriginal Labour Force

Total Aboriginal Population	Canada	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.
Both sexes - 15 years and over	451,950	6,155	840	9,260	5,995	56,165	109,540	52,050	44,645	63,055	82,160	3,400	18,675
In the labour force	272,545	3,485	610	5,445	3,375	33,615	74,955	27,610	22,210	38,305	50,505	2,225	10,200
Employed	210,600	2,245	380	4,375	2,260	26,790	64,350	20,355	15,690	29,555	35,585	1,520	7,500
Unemployed	61,945	1,245	230	1,075	1,115	6,825	10,605	7,250	6,515	8,750	14,925	705	2,700
Not in labour force	179,405	2,670	235	3,815	2,620	22,545	34,585	24,440	22,440	24,750	31,670	1,170	8,475
Participation rate	60	55	70	55	55	60	65	50	50	60	60	65	55
Unemployment rate	20	35	35	20	30	20	10	25	25	20	30	30	25
Experienced labour force	253,985	3,265	550	5,170	3,010	31,115	72,560	25,120	19,770	36,310	45,560	2,095	9,480
Worked in 1985 or 1986	294,415	4,155	630	5,860	3,575	35,300	80,645	30,285	23,965	42,795	52,575	2,475	12,150
Did not work in 1985 or 1986	157,530	2,005	215	3,395	2,415	20,860	28,895	21,755	20,685	20,260	29,600	915	6,525
Percentage who worked in 1985 or 1986	65	65	75	60	60	60	70	55	50	65	60	70	65
All Industries-Pop. 15+ who worked in 1985 or 1986	294,415	4,155	630	5,865	3,575	35,300	80,640	30,290	23,965	42,795	52,570	2,480	12,180
Agriculture and related service industr	8,210	0	25	125	95	455	1,645	890	1,755	1,550	1,605	20	25
Fishing and trapping industries	4,255	385	55	75	30	230	160	695	265	100	1,680	40	355
Logging and forestry industries	8,850	130	15	130	65	570	1,540	705	450	1,065	3,920	60	165
Mining (including milling), quarrying and oil well	6,905	55	0	35	25	285	1,065	405	710	2,575	705	100	935

Total Population	Canada	Nfld	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alb.	B.C.	Yukon	N.W.T.
Both sexes - 15 years and over	19,634,100	417,205	95,740	676,865	540,330	5,114,990	7,132,810	813,935	751,090	1,779,375	2,258,315	17,490	34,930
In the labour force	13,049,860	247,095	63,265	418,525	328,095	3,213,890	4,922,240	542,220	501,750	1,292,360	1,484,180	13,865	24,370
Employed	11,702,220	183,795	53,395	360,160	272,630	2,795,960	4,585,150	500,740	461,515	1,166,480	1,289,430	12,015	20,950
Unemployed	1,347,645	63,305	9,875	58,365	55,460	417,930	337,095	41,480	40,235	125,880	194,750	1,850	3,420
Not in labour force	6,584,240	170,110	32,475	260,360	212,235	1,901,100	2,210,570	271,710	249,345	487,015	775,130	3,625	10,560
Participation rate	65	55	65	60	60	60	65	65	65	70	65	75	70
Unemployment rate	10	25	15	10	15	10	5	5	5	10	10	10	10
Experienced labour force	12,740,230	236,670	62,190	408,205	317,335	3,083,250	4,860,380	533,130	493,230	1,274,700	1,435,980	13,805	23,665
Worked in 1985 or 1986	13,867,780	264,965	67,805	443,105	348,745	3,343,575	5,262,535	585,445	544,875	1,394,520	1,560,130	14,905	27,180
Did not work in 1985 or 1986	5,776,325	152,240	27,940	233,785	191,585	1,771,420	1,870,275	228,495	206,210	384,855	698,185	2,585	7,750
Percentage who worked in 1985 or 1986	70	60	70	65	65	65	70	70	70	75	65	85	75
All Industries-Pop. 15+ who worked in 1985 or 1986	13,857,780	264,960	67,800	443,105	348,745	3,343,575	5,262,535	585,440	544,880	1,394,520	1,560,130	14,900	27,180
Agriculture and related service industr	568,790	1,725	6,330	11,075	9,575	86,860	158,835	49,065	101,460	98,330	45,320	150	70
Fishing and trapping industries	54,060	13,835	4,060	10,065	5,220	4,575	3,155	1,460	490	500	10,270	65	375
Logging and forestry industries	124,895	4,510	455	6,395	10,370	30,625	19,480	1,995	1,870	4,840	44,165	170	215
Mining (including milling), quarrying and oil well	204,810	4,645	170	7,100	4,360	25,945	34,620	5,195	13,275	85,600	20,395	985	2,510

Source : 1986 Census of Canada, Statistics Canada

Total Aboriginal Population
Refers to those persons who reported on the Census at least one Aboriginal origin (i.e. North American Indian, Métis, or Inuit ancestry).

Pop 15+ who worked in 1985 or 1986 :
Refers to an extended reference period so that information is not only shown for the experienced labour force but also for those people who worked sometime in 1985 or 1986 but were no longer in the labour force during the reference week of May/June 1986. For these reasons, the total employment figure shown may differ from those published in Statistics Canada publication which usually refer to the 'experienced labour force'.

The proportions of Aboriginal people at the supervisory "foreman/woman" level was disproportionately high in each of the prairie provinces. In Manitoba, where Aboriginal workers made up only 3% of the forestry and logging occupation group, they accounted for 16% of the foremen/women. With 2% of the forestry and logging group in Saskatchewan, Aboriginal people contributed 12% of the foremen/women. In the Alberta-NWT Region, 19% of the foremen/women were Aboriginal people. In all other provinces, the proportion of Aboriginal people at the foreman/woman level was somewhat lower than their proportion in the overall occupation group.

4.1.2 Aboriginal Peoples Survey

Because much of the Statistics Canada and INAC data on Aboriginal demographics and socioeconomic situations are out of date, unreliable or inappropriate, Statistics Canada, with the support and direction of the AFN, has conducted an Aboriginal Peoples Survey (APS). The content of the APS was determined through several rounds of consultation with regional and national Aboriginal, Metis and Inuit organizations, and provincial, territorial and federal government departments. As a result of these consultations, data were collected on language, health, lifestyle and social issues, disability, mobility, education and employment. The APS is to provide information required to develop programs and services for Aboriginal people. Approximately 110,000 persons living on reserves and 50,000 persons living off reserves were interviewed in the Fall of 1991. Those interviewed had indicated Aboriginal ancestry or status Indian on their 1991 Census of Population long form questionnaire.

In addition to general data on Aboriginal people in various regions across Canada, statistical portraits will be developed for the following geographic areas:

- individual reserves and settlements, other Aboriginal communities such as Metis settlements, and Inuit communities (those with populations of 100 or more);
- selected metropolitan areas;
- all other metropolitan areas at a provincial level;
- all other urban areas at provincial level;
- all other non-reserve areas.

With respect to schooling, the survey gathered data on the:

- type of schooling obtained;
- reasons for interrupting or not completing school;
- educational aspirations; use and need for financial assistance; and
- training courses or programs taken during a recent period.

With respect to work and related activities, the survey has covered:

- work history over the 1990-91 period, including nature of work, employer type, and other (not for money) self or family-support activities;
- employment barriers; and
- self-employment or business ownership.

Consultations are being held with national and regional Aboriginal organizations (including urban-based groups, First Nations and tribal councils) to determine the format that the statistical profiles should take. Results will be available in late 1992 or early 1993. Statistics Canada needs to carry out ongoing research on Aboriginal demographics in consultation with Aboriginal organizations.

4.2 Aboriginal Participation in Forest Sector

4.2.1 Aboriginal Forestry Organizations

The Intertribal Forestry Association of British Columbia, formed in 1987, was the first aboriginal forestry organization in Canada. The IFABC was instrumental in organizing a National Native Forestry Symposium in 1989 in Vancouver out of which grew the National Aboriginal Forestry Association. Since NAFA's establishment, provincial aboriginal forestry associations are in the formative stage, including the Maritimes and Quebec. In 1991 the Saskatchewan Indian Forestry Association was formed.

National Aboriginal Forestry Association (NAFA)

The overall goal of NAFA is to promote and support increased Aboriginal involvement in forest management and related commercial opportunities. In working toward this goal, NAFA is committed to holistic or multiple-use forestry which implies the rebuilding and sustainable development of the forest resource to serve a multitude of community needs. These needs include the protection of wildlife and traditional foodstuff habitat, protection of fur bearers, protection of water supplies, establishment of forested areas for recreation and tourism and traditional cultural and spiritual use, as well as for the production of fibre for timber, pulp and paper and other wood byproducts.

Since 1989 NAFA has been involved at the national policy level, providing input to the National Forest Strategy, developing consensus among Aboriginal communities about an Aboriginal Forest Strategy, developing alternative legislation to the Timber Regulations under the Indian Act and drafting a code of practice to establish minimum guidelines for the practice of Aboriginal forestry. NAFA has also been encouraging the establishment of provincial Aboriginal forestry organizations.

Intertribal Forestry Association of B.C. (IFABC)

IFABC is a non-political, voluntary association dedicated to improving the management of Aboriginal forest resources. IFABC promotes multiple use of forest resources, integrated forest management and respect for Aboriginal traditions and customs relating to the forest resource and environment. Membership includes Aboriginal businesses, First Nations and organizations and individuals involved in the forest industry. The association is staffed, operated and administered by Aboriginal people.

Mitigonaabe Forestry Resources Management Inc. (formerly Indian Forestry Development Program)

Mitigonaabe is a forest management advisory organization (incorporated in 1992) which operates in the Treaty 3 area of Northwestern Ontario, an area of 55,000 square miles including 25 First Nations with over 230,000 acres of productive forest land on 62 reserves. Mitigonaabe's objectives include:

- assisting First Nations in improving the quality of their forest resource;
- co-ordinating on-reserve silvicultural operations;
- compiling and maintaining an inventory of the forest resource for Treaty 3 communities;
- providing a forest management liaison and advisory service to Treaty Three First Nations; and
- assisting First Nation members in upgrading their forest management techniques.

4.2.2 On-Reserve

The following table presents the best estimates of roundwood timber harvests from Canada's Indian Reserves in the fiscal years 1988-89 and 1989-90. This represents 50-60% of the annual production from all "federal lands"--less than 1/2% of the total timber harvested annually in Canada. The potential from reserve lands has been estimated to be four times the present output. The lack of estimates for the Northwest Territories and Yukon does not indicate a lack of production. Figures are not available for these areas because there are no "reserves" as defined under the Indian Act.

The average federal stumpage rates for timber harvested from Indian Reserves was roughly $\$5.67/m^3$ in 1988-89 and $\$5.14/m^3$ in 1989-90^E (compared to provincial Crown lands' average stumpage rates of $\$6.10/m^3$ and $\$6.15/m^3$ respectively).

An indication of Aboriginal interest in forestry employment is shown in the participation of First Nations in the federal Indian Forest Lands Program funded under Forest Resource Development Agreements (FRDAs) and their successor programs since 1984. Appendix 3 lists all the First Nations in Canada that have participated in this program to at least some degree, and indicates the proportion of First Nations forest lands involved. It should be noted that the Indian Lands Program applies to "reserves" as defined under the Indian Act and thus excludes Metis lands and communities. Several of the latest agreements for forestry development include an expanded Indian forest land component as an objective or major feature, including Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta and B.C. Table 4-3 gives a summary of the Forestry Canada Indian Lands Program expenditures between 1984-1991.

Table 4-2

Indian Reserves Roundwood Production Estimates

	Fiscal Year 1988-89	1989-90
	(1,000s m^3)	
Newfoundland	-	-
Price Edward Island	0.2	0.1
Nova Scotia	2.6	2.6
New Brunswick	29.9	22.3
Quebec	149.1	161.5
Ontario	152.2	152.2
Manitoba	10.7	10.7
Saskatchewan	27.8	18.4
Alberta	4.5	3.1
British Columbia	313.7	278.7
Northwest Territories	-	-
Yukon	-	-
Totals	**690.7**	**649.6**

Stumpage for Indian Reserves was not reported in several provinces and was estimated by Forestry Canada from previous years' returns and provincial rates.

Source: Forestry Canada from extrapolations of earlier data.

Table 4-3
Forestry Canada Indian Lands Forestry Programs
Expenditures and Area Treated, 1984-1992

	Surveys, Planning	Site Prep.	Regen.	Tend, Thin.	Other, Admin. Support	Total
Nfld.						
$1000	4	-	-	-	-	4
ha	200	-	-	-		
N.S.						
$1000	55	7	18	119	191	391
ha	7,000	30	25	200		
N.B.						
$1000	17	-	1	40	130	188
ha	10,000	-	5	145		
Que.						
$1000	332	740	1,020	1,031	3,620	6,743
ha	160,000	3,620	3,535	2,150		
Ont.						
$1000	1,315	743	1,187	1,606	220	5,071
ha	160,000	2,410	2,115	5,435		
Man.						
$1000	129	57	8	-	522	716
ha	20,000	185	40	-		
Sask.						
$1000	155	138	116	136	91	636
ha	45,000	625	275	495		
Alberta						
$1000	720	77	72	490	66	1,425
ha	100,000	205	150	1,535		
B.C.*						
$1000	3,260	675	760	2,775	1,190	8,660
ha	130,000	1,825	1,150	5,705		
Totals						
$1000	**5,987**	**2,437**	**3,182**	**6,197**	**6,030**	**23,834**
ha	**632,200**	**8,900**	**7,295**	**15,665**		

* Includes preliminary figures for 1991/92.

The above includes all Forestry Canada administered Indian lands forestry programs funded under federal-provincial resources development agreement, through bridging funding during years when there was a gap between the first and second rounds of these agreements, and under the current "Programme d'aménagement forestier des terres indiennes" in Quebec.

Of the total estimated forested area of Indian Reserves and Category 1A and 1B lands in the James Bay Agreement Area of Quebec, 64% has received some treatment under the FRDA programs. The percentage is above 90% in Newfoundland, Nova Scotia and Quebec, while it is lowest in Manitoba and Saskatchewan where less than a third of the forested area of reserves is under FRDA agreements.

In terms of employment generated, Forestry Canada estimates that the FRDA Indian Lands Forestry Program has generated some 21,480 work weeks of employment for Aboriginal people since the Program began in 1984. While not a significant amount of employment, the Indian Lands Program has served to introduce a large number of Aboriginal people to the possibilities of career development in renewable resources and has provided practical experience to supplement training programs. The following table gives an indication of the skilled workforce on Indian Reserves by forest industry sector.

Table 4-4

Experienced Labour Force on Selected Indian Reserves by Forest Industry Sector

Province	On-Reserve Residents (INAC)	On-Reserve Residents (86 Census)	Exp.Labour Force in Logging	Exp.Labour Force in Forest Services	Exp.Labour Force in Wood Prod.	Exp.Labour Force in Paper & Allied
Alberta	14,183	13,591	0	40	40	0
B.C.	11,369	12,291	170	70	230	25
Manitoba	23,759	21,313	15	45	20	0
New Brunswick	2,766	2,304	0	0	0	0
Nova Scotia	3,126	2,904	0	0	0	0
NWT	171	180	0	0	0	0
Ontario	28,836	23,847	135	95	70	10
PEI	234	212	0	0	0	0
Quebec	14,001	15,238	45	25	0	15
Saskatchewan	29,755	23,198	10	15	0	0
Total	128,200	115,078	375	290	360	50

Source: 1986 Census of Canada

4.2.3 By Province

In 1991, Forestry Canada conducted a survey of Aboriginal forestry companies involved in various aspects of the forest industry. The survey identified 117 Aboriginal forestry companies in Canada (see Appendix 4).

The following gives a brief summary of Aboriginal forestry activities in each province and territory. This summary is not meant to be comprehensive. It is an arbitrary sampling, but it will give some indication of the types and range of forestry activities being carried out regionally.

YUKON

INAC reports that there are 7 or 8 small-scale, seasonal or sporadically operating sawmill-logging operations in Yukon which employ Aboriginal workers on a temporary or seasonal basis. One or two of these operations are Aboriginal controlled. Each operation harvests and saws 7,000 to 10,000 cubic metres per year or less. Combined, these operations employ a total of 16-28 Aboriginal workers at any one time.

Besides these small-scale operations, Kaska Forest Products Ltd. of Watson Lake is in the process of acquiring a Timber Harvesting Agreement and sawmill through the receivership of the failed Yukon Forest Products Ltd. (see Appendix 5).

In its forestry programs (mainly forest fire control), INAC employs about 29 Aboriginal people--8 clerical, 16 firefighters, 2 fire crew bosses, 1 fire retardant "mixmaster" and 2 stores workers --out of a total of approximately 20 to 25 permanent plus 80 temporary ("recall") staff. (In April 1991, certified fire crew bosses earned a wage of $13.15 per hour, certified initial attack firefighters, $11.35 per hour, and certified unit firefighters, $8.75 per hour.)

The federal government and the Champagne and Aishihik First Nations have reached tentative agreement on a land claim settlement involving over half a million acres in southwestern Yukon. The settlement involves land title over a portion of the area and comanagement over the rest. Agreement was reached by the negotiators in October, 1991 but the settlement is yet to be ratified.

The proposed establishment of Renewable Resource Councils gives an indication of future resource management trends in the Yukon. Renewable Resources Councils will be established in each First Nation's Traditional Territory as the primary instruments for local renewable resources management. Each Council will be comprised of six members consisting of three nominees of Yukon First Nations and three nominees of Government. Each Council will determine its own procedures for selecting its chairperson and making provisions for public involvement in the development of its decisions and recommendations.

The Councils make recommendations to the Yukon Government on any matter related to conservation of fish and wildlife (including management plans, harvesting plans, management

of furbearers, assignment of traplines, enforcement legislation and alternatives to penal sanctions, research activities and permits, basic needs provisions, etc.). The Councils are also providing training for tourist guides.

A Fish and Wildlife Management Board will be established as the primary instrument of fish and wildlife management in the Yukon. The Board will be comprised of six nominees of Yukon First Nations and six nominees of Government.

Each Yukon First Nation will own, manage, allocate and protect the forest resources on its "Settlement Land." The Government's responsible Minister will consult with the affected Renewable Resources Councils prior to establishing any new policy likely to significantly affect forest resources management, allocation or forestry practices and prior to recommending to the federal or territorial governments any legislation concerning forest resources in Yukon.

The Renewable Resources Councils may make recommendations to Government regarding coordination of forest management, forest inventories, management plans, forest policies, programs, legislation, research, forest fire suppression plans, tenures, cutting rights, employment and training requirements, forest protection, etc. Consultation with First Nations is required before finalization and implementation of forest resources management plans on nonsettlement lands and must consider sustainable use, integrated resource management and protection, traditional customs of Yukon Aboriginal people, fish and wildlife management plans, etc. There must also be full and free exchange of forest inventory and other information possessed by the Yukon Government.

Holders of commercial timber permits on Settlement Lands which were in existence prior to an agreement on land claims settlement will have certain access rights maintained.

In order to provide economic opportunities to Yukon First Nations, Government will provide written notice of tenders invited for forest resources management and protection within each Yukon First Nation's traditional territory. Economic activities for a Yukon First Nation in the management, protection and harvesting of forest resources will be addressed during the negotiation of each Yukon First Nation Land Claim Settlement Agreement.

NORTHWEST TERRITORIES

Forests of potential commercial value in the Northwest Territories are found in scattered locations, primarily in river valleys. The largest untapped forests of major potential are in the Liard Valley in southwestern NWT. Other small areas of sawtimber are found near the rather isolated communities scattered through the Mackenzie basin. These forests are particulary important to individual communities because of their relative isolation and the high costs of importing lumber products.

The proposed Dene/Metis land claim agreement would see 70,000 square miles of land transferred to the Dene/Metis. There will be review boards with full jurisdiction over all lands

in the land claims settlement area (Dene/Metis, private and Crown lands). Half the members of these boards will be nominated by the Dene/Metis.

The trend in land use planning in the Territories is towards decentralization with each municipality doing its own community and land use planning.

The Government of the Northwest Territories, as part of its economic development strategy, has set targets for development of renewable resources. Forestry targets include:

- through the mid 1990s, harvest and sell 100,000 cubic metres (20 million board feet) of lumber per year, valued at $6.4 million at 1989 prices through the development of the Liard Valley and other forestry resources;
- increasing production of fuelwood by 10%.

In order to meet these targets, the following initiatives are planned:

- conduct a comprehensive inventory of forest stocks in the Liard Valley, Fort Simpson and Mackenzie Valley regions to identify mature timber volumes and site productivity (subject to availability of funds);
- develop and implement a reforestation program (identify areas requiring reforestation, develop appropriate silvicultural techniques, application of forest genetics, develop a source for seedlings, design a program for cost recovery/payment (again subject to availability of funds);
- establish forest management units and clear operating guidelines, quotas and other restrictions;
- identify opportunities for increasing the use of domestic lumber;
- develop, through consensus, a forest industry plan including determination of infrastructural needs;
- strengthen and broaden the NWT Forestry Industry Association;
- develop and implement an information campaign for potential operators and contractors;
- develop the potential for using fuelwood resources;
- assess potential uses, markets and economics of utilizing sawmill by-products.

The Department of Renewable Resources in the Government of the Northwest Territories has a mandate to manage, regulate and encourage the sustainable development of wildlife and forest resources, and to provide environmental protection measures and planning for land and water use. The Department has a range of activities and objectives in the areas of policy/planning, pollution control, regional land use planning, wildlife management, conservation education and resource development, forest fire management and forest management. The Department is an affirmative action employer, drawing many of its fire control and wildlife conservation officers from the graduates of Arctic College in Fort Smith. Forty percent of the permanent regional staff of the department are Aboriginal people, while 75% (about 170) of the seasonal fire control staff are from Aboriginal communities.

Within the forest management activity area, objectives include:

- completion of a timber inventory and determination of sustainable timber harvest levels for the Fort MacPherson area (within 50 km of the community);

- preparation of detailed maps of spruce budworm infestation in the Fort Liard area;
- reforestation of 55 ha of harvested land in the Cameron Hills and south of Jean Marie River.

The communities in the lower Liard River valley, Fort Liard and Nahanni Butte, and the territorial and federal government departments responsible for land and resource management, are working towards an agreement which directly involves the community in all aspects of land and resource management. This model of community/territorial land management will be the first of its kind in Canada.

The Fire Management Division, the responsibility of the Territorial government since the mid 1980's, began experimenting with contracting out for seasonal initial attack fire crews in 1979. It now hires 14 crews of 5 people annually for contract periods of 75-80 days. The crews, primarily Aboriginal people, are employed by entrepreneurs within the widely scattered communities of the Mackenzie valley. Contracting companies are encouraged to provide the necessary fire control training for crew members. Six fire lookout towers are also staffed by contracted personnel, again mainly Aboriginal people.

In 1990 Territorial Forest Group Inc. was started to bring together communities with Aboriginal firefighting crews to form an Aboriginal controlled organization which would have more say in fire protection. A new organization, the Territorial Forestry Organization (TFO), is in the formative stages. TFO is a non-profit society with lobbying as its main purpose, while the Territorial Forest Group is more interested in business opportunities.

BRITISH COLUMBIA

Although First Nations in British Columbia control less than 0.3% of the productive forest land base and less than 1% of the Allowable Annual Cut (AAC), a number of companies successfully compete in the forest industry. The following is a sample of companies operating in logging, milling and silviculture. Many First Nations and Tribal Councils in B.C. (eg. Nisga'a, Gitksan Wetsue'wetan, Ulkatcho, Kluskus, Oweekano Kitasoo Nuxalk) are developing and practising new land and resource planning frameworks that incorporate an Aboriginal world view of forest land use.

The Siwash Silviculture Company operates in Boston Bar, Lytton and Lillooet areas. Siwash employs roughly 15 Aboriginal and non-Aboriginal people on spacing and planting projects. Their main clients at present are Fletcher Challenge in Boston Bar, and the Ministry of Forests District office in Lillooet. The company has been operating for about four years.

Regen. Silviculture operates in the Fort St. James area, and was formed in 1990 in response to opportunities available under the Ministry of Forests Unit Crew program. The company is comprised of 20 to 30 people who work for the Ministry as a Unit Crew during fire season, and on planting and spacing contracts in the off season.

The Shuswap Nation Tribal Council, through the Shuswap Native Economic Development Association, established a silviculture contracting business in 1991, in cooperation with an

established silviculture contractor (Dirk Brinkman). Brinkman staff provide bidding assistance and contract supervision for a Aboriginal crew of 10 to 12 people. The Tribal Council has also developed a relationship with a log broker (Westwood Fiber) which arranges the harvest and sale of logs from band lands and woodlots. Band members provide equipment and receive training and logging experience by working with the logging contractors.

The Takla Band has joined with two other First Nations in forming one-ninth of the Takla Track and Timber partnership. The other eight partners are Prince George area sawmilling companies. The partnership has obtained a Forest Licence of 200,000 m^3 per year AAC. The Takla Development Corp. has a contract to log half the harvest volume as well as run the sort yard. They also log about 100,000 m^3 per year for Rustad in the same area. Logging operations started in 1990.

The Takla Band also has a 36,000 m^3 Small Business Sale with a one year term. This is used as a training ground for logging and silviculture employees. Training has been conducted through EIC programs.

The Little Shuswap Band currently harvests about 3,000 m^3 per year from its reserve lands and Woodlot licence, which keeps about 6-8 people employed. The logs are sold to local mills as the band does not operate a sawmill. Stumpage revenue is paid into the Band's capital account. Logging profits are paid into a special bank account for use in future silviculture projects. The logging business is managed separately from other band activities.

Aboriginal people in Fort Ware established Tsay Tay Logging to harvest timber in the northern part of the MacKenzie Timber Supply Area for Fletcher Challenge Canada and Finlay Forest Industries, due to their close proximity to logging areas.

Tolko Industries Ltd. assists the North Thompson Band with forest management activities on reserve land and a Woodlot. Tolko's forestry staff help prepare Management and Working Plans, Five Year Plans, Pre-Harvest Silviculture Prescriptions and Annual Reports. Two band members are graduates of the Nicola Valley Institute of Technology forest technician program and also provide assistance, although neither is employed directly by the band. One individual works for Tolko and the other works for the Shuswap Tribal Council. Documents requiring the signature of a registered professional forester are signed by Tolko staff. Tolko also supplies seedlings for planting projects and consults with band members on forestry issues. In exchange for this support, Tolko has priority access to timber harvested by the band.

The North Thompson Indian Band operates a small sawmill as well as being engaged in logging and silviculture activities. The sawmill started up in the Fall of 1990, employs six people and produces about 5,000 board feet per day. It operates on a reasonably steady basis doing mainly custom cut work for Tolko.

Burns Lake Native Development Corporation (BLNDC) is based in Burns Lake and is responsible for economic development activities on behalf of member bands. It has had a significant involvement in the forest products sector for several years as a shareholder in the

Babine Forest Products sawmill in Burns Lake in partnership with Weldwood and Eurocan. This has proved to be a very successful investment and the mill employs a significant number of Aboriginal workers.

The BLNDC is building a new value added wood products manufacturing plant, called Burns Lake Specialty Wood Products Ltd. Total project cost is in the order of $10 million. The mill will be a joint venture between BLNDC, Weldwood and two other parties. Timber for the new plant will come from a 900,000 m^3 Timber Sale Licence, which the BLNDC obtained through the Ministry of Forests Value Added component of the Small Business Program. Further employment will be generated throughout the harvesting activities of Burns Lake Native Logging Limited, another BLNDC company.

Tanizul Timber Ltd. is a logging company operated by the Tl'azt'en Nation, which has the only Aboriginal controlled Tree Farm Licence in the province. In order to capture greater value from its forestry operations, the company set up Teeslee Forest Products Ltd. to construct and operate a sawmill near Fort St. James. The mill was completed in 1990, but has not yet started operations due to poor market conditions.

First Nations Forestry Council

As recommended in the Task Force on Native Forestry (1991), the Province of B.C. and Aboriginal representatives are in the process of establishing a First Nations Forestry Council to facilitate the implementation of the recommendations of the Task Force. The recommended mandate of the Forestry Council is to:

- assist government to outline policies to create Native forest tenures;
- facilitate a process by which First Nations, government and industry can set targets for Native tenures in each forest district;
- assist in the development of a Native silviculture program;
- assist in the development of joint ventures and cooperative management agreements between First Nations, government, and industry;
- define ways for Native economic development interests to become more involved in the forest industry;
- hold conferences around the province to involve the public and continue the dialogue between First Nations, government, and the forest industry; and,
- assist in the development of a Native forestry education program.

B.C.-Canada Forest Resources Development Agreement

A second FRDA for Indian lands, totalling $7.2 million from 1991-1994, is now in place under the umbrella of the B.C. - Canada Forest Resources Development Agreement. Unique features of this agreement include the fact that it has been signed directly with the federal government rather than joint federal-provincial as was the previous agreement. This new First Nations Woodlands Program of B.C. is under the direction of an Aboriginal/Forestry Canada steering committee and includes an all-Aboriginal Native Management Committee which reviews all

proposals for technical merit and ratifies the membership of the Steering Committee. This new arrangement will allow more community participation and integrated resource management.

Ministry of Forests Unit Crew Program

The Ministry of Forests recently implemented the Category 3 Unit Crew Program. This program is designed to provide more stable employment and training opportunities to Aboriginal people during the summer months. The program involves the formation of 20 person teams to fight wildfires. Roughly 90% of the crew members are Aboriginal people. These teams are formed of local people operating out of Forest District offices. They are mobile teams and can be deployed wherever needed on fires.

When not fighting fires, the Unit Crews work on silviculture projects such as brushing and trail clearing. Activities such as planting are not generally included, as crews may be pulled off the projects for fire duty at any time. The main qualifications to join the Unit Crews are a reasonable level of physical fitness and a positive attitude towards team work; some powersaw experience is also of value.

Unit Crews are currently operating in 11 Forest Districts and ministry officials indicate that the program has been a success and is being expanded in 1992.

ALBERTA

In the last five years, the Province of Alberta has leased large areas of northern forest lands to a number of pulp and paper multinationals. This boom in timber development has brought both protests from communities and interest groups and participation in the industry in the form of spin-offs to smaller companies, including some Aboriginal companies. Protests about forest development have included demands for and submissions to environmental assessment hearings and court challenges. The Little Red River Cree Nation was one of two groups to take the federal government to court to force a full environmental review of a proposed mill to be built on the Peace River by Daishowa Paper Manufacturing Co. of Japan.

The Canada-Alberta FRDA which expired in 1990 provided $674,000 to nine First Nations to do a comprehensive computer-based forest inventory, 20-year forest management plans and to do silvicultural activities on nine reserves. The new federal-provincial partnership agreement for 1991-95 provides for inventory, planning and reforestation on Indian lands.

The Metis Association of Alberta & Metis Involvement in Alberta's Forestry Sector

There are about 64,000 Metis People in Alberta, with about 4,000 residing on official Metis Settlements. Possibly 65% of the remaining 60,000 reside in urban locations. The remainder (about 21,000) live in rural, often remote areas of Alberta with fishing, hunting and trapping being a major part of their life and livelihood.

In 1989 the Metis Nation of Alberta negotiated the Metis Settlements Transition Agreement and the Metis/Alberta Framework Agreement which granted Metis people a large collective land base in northern Alberta, constitutional protection, and a veto over mineral and resource development on their lands. The Agreement grants a form of local self-government consisting of governments for six zones covering the province and municipal-like Metis Settlements.

Examples of operating partnerships which are partially or wholly owned by, and employ, Metis People in either primary or secondary forest-based industries include Bison Contracting Ltd., Rot-A-Core Ltd. and A-1 Shakes and Shingles Ltd.

Bison Contracting Ltd., a joint venture between a Metis economic development company and a non-Metis company located in the Peace River area, is contracted by Daishowa to provide a labour pool for "everyday labour requirements." The workers help Daishowa to prepare for shutdown for maintenance with spin-offs including the promotion of Metis workers into full-time plant positions, some participating in the Daishowa apprenticeship program (i.e., Career Paths).

Rot-A-Core Ltd. is a small, high tech logging company contracted by Weldwood in the Grande Cache area and has ten workers utilizing computerized tree processing machines.

A-1 Shakes & Shingles Ltd. is a joint venture between Aboriginal people and Metis employing eight people manufacturing pine shingles and shakes.

Little Red River Cree Nation

There have been forestry operations in the Little Red River Cree Nation territory between Wood Buffalo National Park and Fort Vermilion since the 1950's. Over time Aboriginal employment in these operations has declined because of mechanization and centralization. The Little Red River Cree are now focusing on silvicultural and co-management projects, with the goal of greater Aboriginal control of natural resources and integrated resource management.

SASKATCHEWAN

There are two main areas of forestry activity in Saskatchewan, one at Meadow Lake where there is an important sawmill and a new pulp mill and the other centred on the Prince Albert pulp mill.

Meadow Lake Tribal Council

The Meadow Lake Tribal Council has been actively involved in the forest industry for some years. When the Meadow Lake Sawmill went into receivership some years ago, the Tribal Council and employees of the mill joined forces to form Norsask Forest Products in order to purchase the sawmill and assume the mill's Forest Management Licence Agreement. When prospects for a pulp mill were raised a few years ago, the Tribal Council became an active partner in negotiations. In June, 1990, Norsask Forest Products entered a partnership with Millar Western Pulp Mill Limited. The agreements provided for Millar Western to become a

minority shareholder in NorSask Forest Products, with the Meadow Lake District Chiefs Investment Company and employees of the sawmill as equal majority shareholders.

At the same time, Norsask assigned its Forest Management Licence Agreement to a new firm, Mistik Management Ltd., jointly owned by Norsask and Millar Western. Mistik's role is to manage the Forest Management Licence Agreement combining the plans and philosophies of the two owners in meeting the wood requirements of the sawmill for softwood sawlogs and of Millar Western for hardwood for the pulp mill. Mistik has a small forestry and technical staff, none of whom are Aboriginal people.

During the 1990-91 operating year, Aboriginal contractors supplied only 12,000 m^3 of 325,000 m^3 required for the sawmill. In the 1991-92 operating year the Aboriginal contribution to the harvest increased to 50,000 m^3. During the last fiscal year, Aboriginal people supplied about 35 person-years of employment in logging, road construction, loading, trucking and reforestation in the Meadow Lake area.

With the Millar Western pulp mill having come on stream in February, 1992, the demand for wood supplies has risen dramatically, totalling about 1 million m^3. The Meadow Lake Tribal Council Logging Company will contract for a fifth of that in 1992 and expand its operations to 300,000 m^3 in 1992, providing considerable additional employment for Aboriginal people. Increased logging has also drawn protests from members of the Canoe Lake First Nation near Meadow Lake. Protestors blocked logging roads, preventing removal of cut timber. The protestors called for an end to clearcutting, an environmental assessment on cutting needs for the Millar-Western pulp mill in Meadow Lake, a legal mandate or manage forestry operations in the area according to traditional practices, a change in mechanized logging to provide more local employment and compensation for damage already done.

The Meadow Lake Tribal Council has been able to provide for the greater part of the training requirement for its labour force through the National Indian Forestry Institute which it operates. The curriculum at the institute was changed from a forest technician diploma course to a 62-week program designed to reflect the manpower needs for timber harvesting, reforestation and road construction.

Prince Albert Tribal Council

Prince Albert Tribal Council forestry initiatives are coordinated through the office of Vice-Chief Alphonse Bird and the Prince Albert Tribal Council Forestry Development Committee chaired by Councillor Henry Morin of the Peter Ballantyne Cree Nation. Six forestry bands are active members of the committee, which also maintains a liaison with the National Aboriginal Forestry Association and the Saskatchewan First Nations Forestry Association (SFNFA).

Currently, Prince Albert Tribal Council is pioneering the "First Nations Forestry Fire Protection Agreement" in association with Meadow Lake and Agency Chiefs Tribal Councils, through SFNFA. The first years's interim contract is now complete. The next step is to negotiate a three year renewable agreement with the province and INAC. This will mean a capital

equipment requirement for the 22 bands, or more, of $30,000 for the supply of a truck and associated equipment. The gross amount could approximate $750,000.

Next, through the three Woodland Cree bands of Montreal Lake, Peter Ballantyne, and La Ronge, Prince Albert Tribal Council is coordinating the development of a fencepost/lumber treatment plant. The gross feasibility study/business development plan will approach $40,000. The turnkey facility itself could be $700,000 or more, including wood supply infrastucture. A further option costing up to $1.3 million may be considered.

Lastly, the same group is beginning to research the co-management of the Wapawekka hills region with Weyerhaeuser and the province for the establishment of a mini pulpmill (zero effluent) and associated sawmill. Alternatively, this could lead to the establishment of a canting mill and pulp chip facility. The gross capital for option one could approach $145 million; for the latter, $12 million. The former would supply more northern jobs.

Individual First Nations are also involved in a variety of forestry projects, including:

- Montreal Lake Cree Nation operates Montreal Lake Band Enterprises Ltd. which is responsible for all forestry initiatives. The First Nation is within the Weyerhaeuser core Forest Management License Area and is partners in the federal Green Plan generated Prince Albert Model Forest. Montreal Lake also contacts with Prince Albert National Park for fire suppression, as well as contracts in tree thinning, plantation management and tree planting.
- Peter Ballantyne Cree Nation has been involved in a logging/sawmill training course at Pelican Narrows, the Nikotawsik Development Corporation, the First Nations economic development corporation owns a mill and skidder and the First Nation has entered a joint venture in a sawmill operation with the hamlet of Deschambault. In addition, access roads have been constructed at Birch Portage and sawlogs and pulp in the area have been sold to Repap through another joint venture with Jacobsen Logging of Creighton, Saskatchewan.
- Significant forestry potential exists in several other Prince Albert Tribal Council First Nations, including La Ronge Cree Nation, Red Earth, Shoal Lake and Cumberland House. Current developments in these communities include hiring technical support staff and negotiating co-management agreements with the province.

Education needs that were identified during consultations include basic capacity building in terms of adapting to work schedules and productivity expectations. There is also a shortage of individuals with entrepreneurial business management skills.

MANITOBA

Manitoba has also seen a dramatic increase in logging activity in the north, resulting in similar increases in industrial activity as that seen in Saskatchewan and Alberta. This increase in logging has required greater Aboriginal participation in resource management which has ranged from nursery and logging contracts by the Swampy Cree to integrated resource management plans by the Natural Resources Secretariat of Manitoba Keewatinowi Okimakanak Inc. to various co-management agreements signed between First Nations and the Province of Manitoba (13 such agreement are in place and 11 more are being negotiated). Joint ventures between private

industry and First Nations are also being tried. For example the Fort Alexander First Nation has a 5% interest equity share in Abitibi's Pine Falls operation.

The Natural Resources Secretariat (NRS) of Manitoba Keewatinowi Okimakanak Inc., representing about 25,000 members of the 23 First Nations in northern Manitoba, is developing traditional land use maps on a computerized geographic information system. A primary role of the secretariat is to ensure that tribal councils and First Nations have well informed and effective representation concerning resource development proposals in the region. NRS is also assisting other First Nations to establish similar resource secretariats.

Repap Enterprises acquired Manfor Ltd. in 1989, and with it a Forest Management Licence covering some 10 million hectares. There are 14 First Nations reserves in the licence area with a population of some 11,500 together with about 7,400 non-status or Metis people living in other communities. With its pulp mill located at The Pas, Repap Manitoba has major expansion plans which, although currently under review, will result in a trebling of wood requirements when implemented, yielding a substantial increase in work force.

Approximately 375 people, or 45% of the company's current work force, are of Aboriginal origin. Expansion plans could add up to 800 jobs, with the majority in harvesting and transportation activities. Job requirements would include heavy equipment operators, chipper operators, truck drivers, mechanics, reforestation workers and contractors, as well as professional and technical personnel. There will be significant training and education requirements in all these categories.

In 1990, Repap Manitoba began a $1 million Professional and Technical Training Program to assist the firm in meeting its needs for qualified personnel drawn from residents of its licence area. The program offers financial support for post-secondary students and related summer employment. The financial support is forgivable in exchange for employment with the company following graduation. Of the seven students in the program, three are Aboriginal. Many young Aboriginal people have found difficulty meeting the entrance requirements of Lakehead University, particularly in mathematics and science, and some find the adjustment to the urban/university atmosphere difficult.

Moose Lake Loggers Inc.

Moose Lake Loggers Inc. provides an example of a strong Aboriginal role in Manitoba's forest industry. The Crown corporation was set up in 1970 to provide alternative employment for Aboriginal people to replace trapping and hunting opportunities lost by construction of a hydroelectric dam. Moose Lake Loggers currently provides 49 jobs, the majority of which are held by Aboriginal people. Although it has had several profitable years, profitability has declined in recent years. Productivity of the work force is low relative to industry norms. Operating equipment and technology are old.

A new plan for the firm calls for the Moose Lake Band and the community of Moose Lake to buy the firm and move from being a direct employer of loggers to a holding company using

contractors drawn from the local Aboriginal population. Mechanization would begin with only one feller buncher to allow more cut and skid crews to work during the first year or two. Later mechanization would include purchase of a portable wood chipper which would reduce the costs of fibre delivered to the Repap pulp mill. Haulage would be by independent local Aboriginal contractors.

The proposal has a number of obstacles to overcome including establishment of an efficient organization, reducing the present work force, finding alternative employment for existing non-Aboriginal employees who have considerable seniority, acquisition of new equipment and training of workers. Training requirements include business management, feller buncher operation, trucking, chip mill operation and mechanics.

As a consequence of planned expansion in the forest industry, the future may offer more new opportunities for forestry employment of Aboriginal people in Manitoba than elsewhere, except perhaps Alberta, however there is considerable mistrust of both government and industry among Manitoba's Aboriginal people. This has arisen from the serious impacts of previous hydroelectric developments, mining and forest industry developments on the economies and traditional pursuits of many Aboriginal communities. Concern exists that expansion in the forest industry will cause additional losses to traditional pursuits. Several First Nations have been hesitant, for example, to have forest inventories undertaken under Forestry Canada's Indian Forest Lands Program for fear that they would be required to have the merchantable timber harvested.

ONTARIO

Ontario has a diverse range of forestry activity from Forest Management Agreements (FMAs) with private industry (80% of Crown timber land is allocated in this way) to Crown Management Units (CMUs). Draws are made on some of these CMUs for District Cutting Licenses and Third Party Licenses may be granted with company approval on FMAs. Tree planting operations are increasing in Ontario, although competition among tree planting firms can be fierce. Site preparation contracts are available from both industry and the province, but these normally go to firms having heavy equipment. The Province has charted a new policy direction for the 90's, that of "sustainable development" with "partnerships in resource management" part of this process. To improve Ministry relationships with Aboriginal communities, the MNR established four "Native Liaison" positions.

The Canada-Ontario Subsidiary Agreement on Northern Ontario Development (NODA), signed in 1991, shifts the emphasis of previous agreements from a focus on securing timber to sustainable development of multiple forest values. The agreement states that: "Both levels of government will be working cooperatively with Aboriginal people to improve the quality of forest management on reserves, access to off-reserve resources and to reinforce their capabilities to become stewards of their forests." The Agreement provides for $12 million for Aboriginal forestry that will encompass:

- *a program of forest management, training and communications ... expanding the federal Indian Land Program first established in 1985;*

- *Aboriginal access to and participation in provincial Crown land forestry activities...; and*
- *initiatives to enhance forestry training for Aboriginal people at the post-secondary school level in partnership with degree and diploma granting institutions.*

The Ontario Ministry of Natural Resources is also proceeding with four pilot projects in community forestry that offer different approaches to local involvement in forest management (OMNR Fact Sheet, March 1992). Two of the projects involve First Nations. One project will be run entirely by the Wikwemikong First Nation on Manitoulin Island. Wiki has an active forest management program which includes harvesting and renewal, studies of traditional uses of forest plants and a value-added industry making log homes. Another pilot project in Elk Lake includes support from First Nations and will take place on the Elk Lake Crown Management Unit.

The most encouraging prospects for Aboriginal employment are the recent agreements in which the province has involved First Nations as partners in forest land management. Two Tribal Councils in the Nishnawbe-Aski Nation area in northwestern Ontario have recently entered an agreement with Ontario to plan land use and development on three large areas, more than 27,000 square kilometres, near their reserves. The agreements establish area planning boards that will advise the government on resource development in the designated areas. The Province of Ontario is negotiating a self-government agreement with Nishnawbe-Aski Nation which is to include Lands and Resources. As pulp and paper companies move into the NAN area, north of the 50th parallel, more First Nations within the territory are exploring forestry opportunities and demanding a voice in forest management in their traditional areas.

In the Temagami area of northeastern Ontario, the Teme-augama First Nation has come to agreement with the province over logging in a disputed area. The agreement establishes the Wendabin Stewardship Authority for joint management of an area covering four townships. The agreement provides for Aboriginal input to decisions and employment for Aboriginal people.

The Ontario Metis and Aboriginal Association (OMAA) recently submitted to the Ontario Ministry of Natural Resources a proposed co-management system for natural resources on approximately 3,400 square miles on the east side of Lake Nipigon around the community of Beardmore in northwestern Ontario. In 1991 the Province signed a Memorandum of Understanding which has led to ongoing negotiations on enhanced economic development for OMAA communities. It is expected that forestry will eventually be dealt with in these negotiations.

The MNR also signed an agreement in 1991 with Wabaseemoong First Nation (formerly Islington Band) to negotiate an agreement that would give the First Nation more control over a 3,600 square-kilometre piece of land along the Manitoba border north of Kenora. The agreement will give the First Nation a say in the economic development of their land, including the use of natural resources.

Kiashke River Native Development Inc. of the Gull Bay Band on Lake Nipigon has been engaged in logging and silviculture since 1978. Kiashke has an allocation of Crown timber on

part of a forest management agreement area once held by the Great Lakes Paper Co. Niigaani Enterprises Ltd., privately owned by a band member, has an agreement with Canadian Pacific Forest Products Ltd. to undertake logging, reforestation and other silvicultural requirements on a portion of the Black Sturgeon Forest Management Agreement area.

The operations of Kiashke have raised certain concerns in the Gull Bay community. While Kiashke formerly employed some 25 band members, there are now only 4 or 5. A second community concern is whether timber allocations to Kiashke should be in the name of the company or of the band. The issue seems to revolve around the distribution of revenues, but may also involve issues of timber management versus integrated resource management.

Employment of Aboriginal people in the forest sector of northwestern Ontario is very limited and is decreasing. Three Treaty #3 communities hold licences to cut on Crown land and a few Treaty #3 individuals work in woodlands operations for non-Aboriginal employers. The Grassy Narrows and Wabaseemoong (Islington) bands have moderate-sized logging operations off-reserve and three bands have small on-reserve operations. The Wabaseemoong Band operates a seedling nursery. The Rainy River Band operates its own sawmill. The Lac Seul Band has a few individuals working at the sawmill in Hudson and has a joint venture with one company to do some logging and to construct a ferry-crossing to transport logs and a few work at pulp mills in Fort Frances and International Falls.

Training in heavy equipment and cut-and-skid operations by the Northwestern Ontario Forestry Training Centre has led to a number of Aboriginal trainees being employed by timber operators in the region.

Employment in logging is declining as the forest industry becomes more mechanized and much less labour intensive. The changes from cut and skid operations to mechanical harvesters is leading to the elimination of many jobs in the logging industry. This is confirmed by an industrial spokesman who indicated that his firm has done no hiring for forest operations for seven or eight years, and that those who might be employed would be highly experienced personnel. The decreasing demand for woods workers, skill level requirements and the recession combine to place Aboriginal workers in a highly competitive job market. Furthermore, the capital costs of modern harvesting equipment inhibits entry of Aboriginal groups as contractors with the industry. Employment in regional pulp mills is inhibited by the difficulty of adjusting to the industrial shift-work lifestyle and commuting distances from reserves. Mitigonaabe Forestry Resources Management Inc. has established a joint planning committee with Boise Cascade and the Ministry of Natural Resources to discuss ways of increasing Aboriginal participation in the forest industry in the Treaty #3 area.

First Nations' representatives report a continuing decline in traditional resource-based activities directly or indirectly related to industrial forestry. Construction of access roads and logging has been followed by declines in wildlife and fish populations, the destruction of medicinal plant habitat and lower productivity of wild rice growing areas. These concerns mirror those presented in 1983 to the Special Committee of the House of Commons on Indian

Self-Government. In its submission to the Committee, the Rainy Lake Regional Tribal Chiefs stated:

> *(My) reserve ... is four by four square miles.... There are treaty rights of hunting, trapping, gathering and fishing, which are protected under that given geographical area.... Then you go outside of that reserve and then the Ontario fish regulations apply. The Boise Cascade Corporation receives a licence and a permit to cut and remove the timber surrounding our land. In reality, then, when there is no forest and the rivers are polluted and there is no way one can practise the traditional economy, in that sense, the economy has been destroyed, because the forest is cleared away and in the middle you have a four by four square mile tract of land, in which all the treaty guarantees are guaranteed to you but beyond that, outside of that, how many moose, how many deer can travel across that land from which your band members, say 500 people, can exist. It is just not possible.*

If the Aboriginal people of Ontario are to protect their cherished traditional forest values and have them incorporated in forest management plans of government and industry, they will require articulate spokespersons in senior positions. There is a serious lack of university graduates who have combined traditional ecological knowledge with the sciences of biology and forest management.

QUEBEC

In the 1940s, the Quebec government began setting aside large areas known as Beaver Reserves for the trapping, fishing and hunting use by Aboriginal people. Most First Nations south of the James Bay Agreement area and north of the St. Lawrence have exclusive trapping rights to these ten reserves and they manage their own affairs on these trapping grounds with very little help from the federal or provincial government.

There are 43 areas reserved for Aboriginal people in Quebec. Twenty-nine of these areas have a special status which is clearly defined under the Indian Act. Eight of these areas are designated under the James Bay and Northern Quebec Agreement for the exclusive use of the Crees of James Bay. The Naskapi of Kawawachikamach (Schefferville) also have areas reserved for their exclusive use. There are five other areas identified as "settlements" but they are not recognized as "reserves" under the Indian Act nor are they allocated special status under the laws of Quebec. These areas are situated where forestry is the major industry.

Quebec is the only province where 100% of the funding for the Indian Lands Forest Management Program under the Canada-Quebec Forest Development Agreement comes directly from the federal government to First Nations without provincial involvement. In the 1992-96 agreement $7.224 million is being transferred. The objectives of the new program include:

- *Encourage integrated management of Indian forests through silviculture.*
- *Increase the ability of Indian communities to plan and develop integrated forest resource management.*

- *Make the Indian population aware of integrated resource management.*
- *Promote human resource expertise for off reserve forest activities undertaken by Indians.*

Appendix 6 shows community profiles of all Aboriginal communities in Quebec that are active in forestry.

Co-management of natural resources has progressed in Quebec because of the James Bay and Northern Quebec Agreement which gave the Crees of Northern Quebec some security of land tenure. The Algonquin of Barriere Lake are also negotiating a trilateral agreement with the province and federal government to assume more control over their traditional lands.

The Association Mamo Atoskewin Atikamekw, among others, has expressed concern about the province's direction in forest management. In a brief presented to the Canadian Council of Forest Ministers (1991), the Association warned of the potential impact of Quebec's Loi sur les forets, adopted in 1987, which emphasizes timber production to the detriment of other forest values and gives tenure to wood harvesters. The Association asked:

> *Who will decide on the consequences to the wildlife, to recreation, to the preservation of the whole of the resources forming the forest? We believe that the CAAF [Contrat d'approvisionnement et d'amenagement forestier) beneficiaries are the new responsibles of the public forests of Quebec. By the privilege this law grants them, they can establish, for the other users, the management objectives of a given territory, without advance notice and without any form of consultation, and all this with regard to the sacrosanct sustained performance of the wood industry.*

The Association Mamo Atoskewin has developed an integrated resource management plan for its traditional area based on data gathering and mapping using a computerized geographic information system. The Crees of Northern Quebec are also working on a GIS system to map resource activities in their area.

A Memorandum of Understanding, signed in 1987 on Native Economic Development, has not progressed to a final agreement between Quebec and Canada, and little consultation was carried out with provincial aboriginal organizations. A final report was submitted to the provincial and federal governments in 1989. Although it is unlikely that an agreement will be reached, the report's outline of problems and recommendations should be noted:

Problems:
- insufficient human and financial resources,
- insufficient consultation between the two levels of government, overlapping of activities and inadequate consultation with Aboriginal people,
- lack of training of personnel, in particular local economic development officers,
- limited awareness of the numerous programs of the two levels of government,
- inaccessibility of programs of, and agreements between, the two levels of government,
- lack of venture capital, lack of support from financial institutions and insufficient local investment funds for starting up and consolidating Aboriginal businesses,

- existence of legal barriers to on-reserve economic development,
- limited awareness of markets and opportunities for marketing both on- and off-reserve,
- limited awareness of land use potential in resource sectors of agriculture, forestry and minerals.

Recommendations
- establish sectoral consultation committees responsible for analyzing and identifying project financing sources,
- increase financial and human resources,
- custom train development officers, agencies and business with their needs in mind,
- provide information on existing agreements, policies and programs in the areas of training and economic development,
- increase assistance to Aboriginal financial institutions and establish investment funds,
- provide access to off-reserve economic activities,
- provide financial assistance for market and feasibility studies and for the drafting of local and regional plans,
- relax criteria and expand programs and agreements of the two levels of government applicable to both training and economic development.

Sector reports made the following human resource development recommendations:
- organize general and specialized training to foster Aboriginal entrepreneurship, concentrating on economic development officers, and coordination of measures in this area,
- establish governmental consultation to cater to the different needs and objectives of on-reserve forestry projects,
- integrate existing forestry management planning for Aboriginal lands for the different forest ecosystems,
- create a data bank on forestry development,
- have the two levels of government define the extent of their participation in the forest management category B-1 lands under the James Bay and Northern Quebec Agreement,
- fund market studies in the primary and secondary processing sector and forestry equipment,
- increase human and financial resources through:
- creation of a liaison officer position to facilitate relations between private forestry firms and First Nations,
- funding by existing government programs of primary and secondary roads for access to the resource,
- organization of customized training in the areas of forestry supervision and silviculture,
- funding of technical teams working in the area of forestry development on- and off-reserve,
- establish a Standing Committee for the coordination of employment and training programs, comprising Aboriginal representatives, and representatives of the federal and provincial governments and of other organizations concerned.

ATLANTIC PROVINCES

In Newfoundland, the Conne River Reserve, belonging to the only registered band in the province, is distant from the current operating areas of the pulp and paper industry. For

practical purposes, this rules out most forestry employment possibilities. The band, nevertheless, has a very high employment rate of about 95%. It operates four hunting and fishing lodges and has operated its own sawmill for some 20 years, supplying lumber to nearby coastal villages. The future of the sawmill is now in jeopardy, however, as the supply of logs is running out.

The band has been seeking access to provincial Crown lands through a leasing arrangement but has been unsuccessful to date. Although the area in question has been logged, it offers opportunities for stand improvement work, particularly thinning of dense regeneration. These opportunities are seen as important, since forest management work on the reserve itself is expected to be completed in the next few years. The band has a crew of 10 trained in Christmas tree management and is training 10 more in silviculture.

With the expansion of forestry activities in Newfoundland into the Labrador-Quebec peninsula (Nitassinan to the Innu), the Innu Nation carried out an independent assessment of past forest operations in their traditional territory. This assessment is providing the basis for Innu input into the forest management planning process.

In both Nova Scotia and New Brunswick there is a strong perception that racial discrimination inhibits employment of Aboriginal people in the forest industry. While silviculture crews have been trained and have gained experience on reserves, firms apparently seek further demonstration of capabilities, sometimes suggesting that the Aboriginal crews act as subcontractors for other contractors. There appears to be a mutual lack of trust. Perhaps there is a need for the companies to accept production standards somewhat less than average during an initial period of training on the job. On the other hand, at least one pulp and paper company has expressed a willingness to hire experienced Aboriginal crews for silviculture and has expressed willingness to hire an experienced logging crew as well.

The absence of financial support for the acquisition of equipment, be it a computer for use in forest management planning, a log loader or a tractor trailer, is seen as a major stumbling block by those seeking to increase their productivity in forestry employment.

A number of First Nations hesitate to accept government sponsored training and work projects because of difficulties they experience in financing the initial phases of projects. With the exception of projects sponsored by INAC in recent years, individual First Nations are expected to implement projects without startup funding and carrying the costs for the first month or more from band resources. This has been the case with FRDA projects of Forestry Canada. Provision of an accountable funding advance to the band would overcome the difficulties and help to build mutual trust between government and First Nations.

Some First Nations are experiencing internal difficulties implementing forest management plans on their reserves. At times it has been difficult to convince all band members, or band councils, that it would be to everyone's advantage in the long run if forest management plans were carefully followed and timber harvested only according to the plans. Those attempting to implement management plans perceive a need to develop a permit system and to have a means

of enforcing it. At present, there is no provision under FRDA programs to cover costs of forest conservation officers.

The uncertainty surrounding the longevity of federal and provincial policies for forestry on Aboriginal and Crown lands affects the enthusiasm of some individuals to select forestry as a career and adds uncertainty to the issues faced by the forest land manager. Just as an industrial leaseholder prefers an evergreen lease, so to would First Nations prefer that the standard five-year forestry programs of government were renewable at the end of the third or fourth year for an additional five years, on demonstration of satisfactory performance.

There are apparently no Crown lands available for leasing by First Nations or for possible co-management arrangements in Nova Scotia or New Brunswick. On the other hand, it has been suggested that First Nations have not been very aggressive in demanding access to Crown lands.

Training needs identified by Aboriginal and provincial government officials included basic life skills ranging from knowing what clothing is required for woods work, to understanding the basics of the office environment, such as telephone answering and message taking. A continuing difficulty among some is adjusting to the normal work day of the business world. A fundamental need identified by both provincial and federal officials is to focus Aboriginal training and education on the development of self-confidence or self-esteem. Many of the courses offered by EIC are seen as attempts to make workers, while courses designed to support and build the individual's self-confidence would be more successful.

Training courses are more likely to be well attended and successful if the training is carried out in the Aboriginal community rather than at the community college, even though it might be nearby. Holding courses in unfamiliar surroundings simply creates one more hurdle for the students.

Under its equal employment opportunity program, the New Brunswick government provides for one-year term positions in various departments. The Department of Natural Resources has used the program but once, and that was in the fisheries area. Interest from Aboriginal people using the program to develop careers in the forestry sector has been weak, perhaps because of the educational requirements.

Both New Brunswick and Nova Scotia report interest by Aboriginal people in work as conservation officers. Fisheries and Oceans Canada, in cooperation with specific bands, has provided training and employment for fisheries conservation officers in New Brunswick. The Nova Scotia Department of Natural Resources has employed Aboriginal conservation officers during the hunting season.

The Eel Ground First Nation, a reserve of 6,976 acres near the town of Newcastle, New Brunswick, commissioned a study in 1990 to guide it in establishing a forest management

business to conduct both silviculture and timber harvesting activities. The Band Council describes its commitment to:

> *rehabilitating their forest resources and to developing the available workforce within the Band so they can take advantage of employment opportunities offered by the forest sector. Council is also determined that this venture be conducted at an economically viable scale and as a business venture.*

5 Education and Training

Various post-secondary institutions have developed natural resource management programs at the college level. Only recently have forestry faculties at various universities across Canada begun to explore the need to establish courses or programs addressing Aboriginal forestry. In addition, there have been many short-term technical courses offered by the EIC and on an ad hoc basis by consultants.

There are two recently completed studies which have evaluated the existing Aboriginal natural resource management programs across Canada and one which examined programs in B.C. An INAC study (1991) gives an overview of Aboriginal resource management issues, a review of Aboriginal enrolment levels in post-secondary institutions, a review of Aboriginal resource management programs and curriculum, and a review of post-secondary institutions which offer programs and curriculum in renewable resource management. An undergraduate thesis by a forestry degree student at Lakehead University (Smith, 1992) surveys and analyzes post-secondary renewable resources education for Aboriginal people in Canada. A portion of an IFABC study (1991) on Aboriginal participation in the forest sector examines forestry training institutions in B.C. The three studies include different criteria for evaluating programs which will be examined further.

A workshop of various individuals and institutions involved in curriculum development for Aboriginal natural resource education programs across Canada was held at the College of New Caledonia in Prince George, B.C. in November 1990. Proceedings of this "Native Natural Resource Management Education Workshop: Ethic in Education" is available from the Intertribal Forestry Association of B.C.

A 1990 INAC study on University Education and Economic Well-Being highlighted the following points:

- *Based on the 1986 Census of Canada, non-Indians are three times more likely than Indians to attend university and seven times more likely to earn a degree.*
- *Only 23% of Indians who complete high school go on to university, compared to 33% of non-Indians.*
- *The differences in labour force activity between Indians and non-Indians decreases as the level of education increases. This means that the relative gain in economic well-being is greater for Indian people than non-Indians.*

In 1990, 21,300 status Indian students were enrolled in post-secondary programs in Canada (INAC, 1991). Of this total, only 182 or less than 1% were enrolled in natural resource management programs as shown in the following table.

As the INAC study points out:

Table 5-1

Status Indian Enrolment in Post-Secondary Education by Discipline in Canada, 1990

Discipline	Percentage of Total Enrolment
Arts and Science	18.8
Business and Administration	12.6
Preparatory Studies	10.4
Social Services	10.3
Education	9.4
General Studies	8.0
Clerical and Computing	5.2
Nursing and Health Care	4.4
Other or Not Stated	4.2
Engineering and Technology	3.4
Fine and Other Arts	2.9
Native Studies	2.9
Law Enforcement	2.0
Service Industry	1.3
Trades	1.3
Natural Resources	0.9
Theology	0.9
Sports and Recreation	0.7
Medicine and Law	0.4

Source: INAC Educational Management Services Database, 1990

To date, the number of natives acquiring educational skills in natural resource management has been low. Enrolment in most programs has increased considerably over the last ten years, but proportionately, native students still rank considerably lower than the national average. Universities, colleges and technical schools, both native and non-native, have begun to offer a diverse range of programs which emphasize a more in-depth knowledge of resource use, but the need for native scientists, technicians and administrators to be in the community where the resource is being extracted appears more imperative than ever. Growing populations in native communities will also increase the demand to manage these resources on a sustainable basis if the economies of these communities are to be self-sufficient. Therefore, the need to broaden Aboriginal participation in natural resource management disciplines is of significant concern to native communities.

Appendix 7 shows the institutions offering forestry programs and the number of status Indian students enrolled from the INAC inventory of natural resource programs (1991). Other programs, including agriculture and horticulture, aquaculture and fishery, conservation and ecology, environmental studies, tourism, and recreation and fish and wildlife management are listed in Appendix 8. Appendix 9 shows the course list in various Aboriginal natural resource management programs.

Although the INAC database identifies Aboriginal students, the students registered with INAC are status Indians as defined under the Indian Act. This means that non-status and Metis people are excluded. There are also puzzles in the data. For example, Confederation College is listed as having a forestry program, but there is no such program listed in the college's calendar. Also, programs like the Renewable Resources program at Arctic College in NWT are missing and there are no figures for Quebec. In spite of shortcomings, this is the most comprehensive data available to date, giving some indication of trends that apply to all Aboriginal people.

The following table shows the breakdown of status Indian students enrolled in the various disciplines of natural resource management programs.

Table 5-2

Status Indian Enrolment in Post-Secondary Natural Resource Management Programs, 1990

Program	University	College/Tech Inst	TOTAL
Forestry	3	65	68
Agriculture	21	35	56
Recreation/Fish and Wildlife Management	0	24	24
Environmental Studies	8	12	20
Biology	10	4	14
TOTAL	42	140	182

Source: INAC Educational Management Database, 1990

Conclusions that can be drawn from an examination of this figure and Appendix 7:

- most students enrolled in natural resource management programs are enrolled in forestry
- the majority of students enrolled in forestry are enrolled in diploma programs; only 3 of 68 students are enrolled in university. This is also the case with Recreation and Fish and

Wildlife Management. In that case, all students are enrolled in diploma programs, none in university.

- the majority of status Indian students in forestry programs are being educated at two institutions: Nicola Valley Institute of Technology in B.C. had 19 students enrolled in 1990, Sault College of Applied Arts and Technology in Ontario had 23. The enrolment at these two schools comprises 62% of the total enrolment of status Indian students in forestry programs across Canada.

The fact that there are fewer than 6 registered professional foresters of Aboriginal ancestry in Canada is another indication of the need for further education in this field. Only 2 of approximately 2,100 professional foresters working in B.C. are Aboriginal (Task Force on Native Forestry, 1991).

5.1 Colleges and Technical Institutes

Several institutions have targeted and tailored their natural resource management programs for Aboriginal students. These are:

- College of New Caledonia, Prince George, British Columbia
- Malaspina College, Nanaimo, BC
- Nicola Valley Institute of Technology, Merritt, BC
- Northwest Community College, Hazelton, BC
- Arctic College, Thabecha Campus, Fort Smith, NWT
- Yukon College, Whitehorse, Yukon
- Northern Alberta Institute of Technology, Edmonton, Alberta
- National Indian Forestry Institute, Meadow Lake, Saskatchewan
- Gabriel Dumont Institute, Regina, Saskatchewan
- Sault College of Applied Arts and Technology, Sault Ste Marie, Ontario
- Baie Comeau College, Quebec
- University of New Brunswick, Fredericton, New Brunswick
- Western Regional Community College, Stephenville, Newfoundland

Appendix 10 compares a number of these institutions on the basis of the following criteria:

- location
- program name
- program length
- funding
- Aboriginal instructors
- Aboriginal participation in course development
- involvement of elders
- incorporation of traditional ecological knowledge
- cultural/counselling support
- mature student/bridging programs
- transfer agreements

There are a number of other criteria that might also be examined, depending on need. The 1992 IFABC study examined forestry training institutions in B.C. on the basis of rate of employment on program completion, total enrolment, tuition fee, entrance requirements, demand for the program, emphasis on field work or practical instruction. The Smith study (1992) examined "renewable resource management education programs designed for Aboriginal people" on the basis of program objectives, program development, program content, program delivery, involvement of elders, distance education, admissions criteria and assistance, cultural support and recruitment. Smith also noted other considerations such as sensitivity of the institution to Aboriginal culture and issues, credits for field training, particularly in traditional knowledge, availability of upgrading and continuing education programs and access to government funding programs. Rather than repeat the conclusions drawn in these two reports, readers are encouraged to refer directly to these sources.

Funding arrangements vary from 100% federal, provincial or territorial to 100% Aboriginal and various combinations. Only four institutions receive the bulk of their funding from the federal government. This means that the federal government is no longer solely responsible for Aboriginal education. The diminishing role of the federal government may be attributed to "devolution" and an increase in Aboriginal self-government.

Most of the programs offer a two or three year technical diploma. Transfer agreements which encourage students to pursue a higher level of education are varied. Some of the programs do not include preparation for further studies, while others are directly linked with other colleges and universities (Northern Alberta Institute of Technology, Nicola Valley Institute of Technology, Sault College, Yukon College, Arctic College).

Most institutions are providing cultural and counselling support. Because Sault College offers a distance education program allowing students to remain close to home, the need for such a unit was not seen as crucial. However, the program's advisory committee recently recommended that a Support Services Officer be hired to help students overcome problems inherent in distance education delivery. Arctic College does not have such a unit because the majority of its students are Aboriginal and they are being educated close to their home communities.

Bridging programs are also varied, although most programs do make allowances for mature students. Some institutions offer bridging programs while others encourage students to upgrade at local high schools.

There are other programs that are not covered in Appendix 10. The CEGEP program at Baie Comeau in Quebec offers an Integrated Resource Management program for aboriginal students. The program has been in existence since 1990. The Gabriel Dumont Institute offers forestry and resource programs including a pre-forestry training program, forestry technician program and integrated resource management program. The Gabriel Dumont Institute is affiliated with the Saskatchewan Institute of Applied Science and Technology which offers an integrated resource management program in various northern locations, including Meadow Lake, Buffalo Narrows and Prince Albert. The Meadow Lake program is being offered in conjunction with the National Indian Forestry Institute.

5.2 Universities

Appendix 7 shows universities offering forestry courses in Canada. Several universities are in the process of developing programs or courses which address Aboriginal issues or reflect Aboriginal values. The University of Toronto is in the very early stages of developing a Aboriginal Forestry program. Lakehead University's new diploma program in Integrated Forest Resource Management incorporates Aboriginal content into its courses and similar consideration is being given to the degree program.

The University of British Columbia, through the First Nations House of Learning and the Faculties of Agricultural Sciences and Forestry, has developed a proposal for a "First Nations Natural Resource Sciences Program." The goals of the program are to:

- *reach potential students with accurate, interesting information on potential careers in natural resource management and the needed preparation*
- *facilitate the entry of First Nations people into the existing college and UBC program in natural resource management*
- *adapt these programs to the specific needs of First Nations people while retaining the core professional education*
- *assist graduates in career counselling and placement.*

The program has a three-part approach:

i) hire a full-time coordinator with appropriate administrative support,
ii) conduct a year-long project, culminating in a conference on Aboriginal perspectives on natural resources, to develop one course specifically targeted for First Nations to complement existing forestry, agricultural science, fisheries and natural science curricula, and
iii) conduct a formal, external evaluation of the program after the end of the initial three-year period.

5.3 Government Programs

Until 1989, Industry, Science and Technology Canada (ISTC) (previously the Department of Regional Industrial Expansion), with its mandate for regional development and small business, administered three types of programs for Aboriginal people: the Native Economic Development Program, which is national in scope; the Special Agricultural and Rural Development Agreement with Manitoba, Saskatchewan, British Columbia, Yukon and the Northwest Territories; and the Northern Development Agreements with Manitoba, Saskatchewan and Alberta. All programs expired in 1989, except for the Alberta Northern Development Agreement, which was in effect until 1991.

EIC, INAC and ISTC are engaged in human resource development. EIC is the most involved in the employment and training sector, with national programs to enhance job opportunities--the Canadian Jobs Strategy (CJS) and the Employment Services. EIC has also published national

and regional Skills Shortages profiles. This program was discontinued in March 1992. New programs are now being offered. Under the Workplace-Based Training component of the Labour Market Adjustment Program, local, regional and national occupations, for which priority is planned, will be identified through different mechanisms. Under the Mobility Assistance component, the National Job Bank or "occupations in local demand" will replace the Designated Skills Shortages list presently in use.

5.3.1 Canadian Jobs Strategy

Since its inception in 1984, CJS has been the government's primary tool to promote employment. More than 1 million Canadians have participated in CJS programs and participants have ranged from people who have been unemployed for a long time and who have no formal education to would-be entrepreneurs and highly skilled workers. The mix of CJS programs differs from one area to another depending on the strengths of the local economy and the priorities voiced by local groups.

CJS adheres to three principles, providing assistance for those most in need, doing what works best, and deciding locally how best to administer programs. The first principle means that all programs are directed toward four client groups, women, visible minorities, disabled individuals and Aboriginal people but can be accessed by others who are clearly disadvantaged. The second principle means that programs include some practical work experience and the third principle ensures that local needs are met.

Representatives of client groups, such as band councils, regional and local associations and other interested parties, influence the type and financial level of programs offered locally. They have a voice in training commissions, community colleges, Community Futures committees, Canada employment centres and regional and national offices.

EIC started its Labour Force Development Strategy in 1989. The strategy is aimed at bringing business, labour, social action groups and individuals together to increase the skills of Canadian workers and to "help all Canadians achieve their full potential in an increasingly sophisticated workplace." Part of the strategy is the Aboriginal Employment & Training Strategy ("Pathways to Success") "developed with Aboriginal groups to meet their specific training and labour market needs." Aboriginal Management Boards were established consisting of members selected by Aboriginal groups and by EIC so that Aboriginal representatives could work with government officials in determining their own labour force development priorities at local, regional and national levels.

5.3.2 Pathways to Success

"Pathways to Success" was developed through the Aboriginal Employment and Training Working Group, organized in 1989. The working group reviewed EIC's policy, program and service

relationship with Aboriginal people and made specific recommendations for improvements. Five principles form the basis for a new Aboriginal/EIC "partnership":

- that national, regional and local consultation/management boards be established to provide local control of decision making;
- that employment and training programs and services be managed, operated, conducted and arranged through Aboriginal infrastructures;
- that funding mechanisms be developed which recognize the planning and operational needs of Aboriginal "delivery machinery" and reflect the level of need in the various Aboriginal communities;
- that EIC aggressively undertake "proactive measures to improve recruitment, training and employment of Aboriginal people both internally and externally";
- that the "Aboriginal delivery machinery" be given the discretion to determine a person's eligibility for programs and services and that there be a reliance on counselling for determining eligibility rather than strict eligibility criteria as in the past.

The ultimate aim of "Pathways to Success" is to "establish an effective partnership to invest in and develop a trained Aboriginal labour force for participation in unique Aboriginal labour markets and the broader Canadian labour market." The objective and above noted principles have been endorsed by six national Aboriginal organizations, the AFN, Metis National Council, Inuit Tapirisat of Canada, Native Women's Association, Native Council of Canada and the National Association of Friendship Centres.

5.3.3 Canadian Aboriginal Economic Development Strategy

EIC in conjunction with INAC and provincial government bodies established the Canadian Aboriginal Economic Development Strategy in 1989. The program provides funding and advisory support for Aboriginal economic development initiatives through the Aboriginal Business Development Program.

5.3.4 Federal Employment Equity Programs

Through the Employment Equity Act and the Federal Contractors Program, EIC attempts to promote employment equity and create "a diverse workplace." EIC calls employment equity a means of ensuring that all job applicants and employees have a fair chance in the workplace (where federal jurisdiction applies). Four groups of people are designated for attention under this program, women, Aboriginal peoples, members of visible minority groups and persons with disabilities.

5.3.5 Indian Community Human Resource Strategy

INAC organizes its human resources programs under the Indian Community Human Resource Strategy, which, among other things, upgrades employability and enhances skills in entrepreneurship and business, particularly for unemployed Aboriginal people on reserves. The projects are mostly controlled by First Nations through annual contribution agreements.

5.3.6 Public Service Commission

The Public Service Commission of Canada publishes a brochure entitled "Employment Guide for Native People -- Your Career Prospects in the Public Service of Canada" (1985). This brochure outlines how Aboriginal people can find out about and apply for jobs with the federal government. The Public Service Commission has Aboriginal employment coordinators in its various regional offices.

The Public Service Commission also has a Northern Careers Program designed to increase the number of Aboriginal people at all levels in the federal public service north of the 60th parallel. Placements have also been identified for key positions within Aboriginal organizations. The Northern Careers Program offers on-the-job training combined with development courses, career planning, counselling, recruitment, applicant roster, and marketing and placement services. Training and development is encouraged in management, administration, renewable resources, finance, communications, personnel and airport operations. Candidates selected for training are offered a training and development position or formal training to develop the skills and qualifications needed for jobs in the federal public service.

5.4 Ad Hoc Training Programs

Both private companies and Aboriginal organizations have organized their own training programs. Many of them are funded through EIC, but funding sources are varied. Because of the variety of these programs and because many of them are developed on an as-need, short-term basis, it is difficult to monitor their effectiveness. Worth noting is the training program developed and delivered by the Atikamekw Native Tribal Council in Quebec for supervisory and forest worker training. The program is unique because it was developed by one Aboriginal organization and offered to other Aboriginal organizations.

Another noteworthy example is the Native Silviculture Contractor Training Project in B.C. The Intertribal Forestry Assoc. of B.C. and the Ministry of Forests co-operated to develop contractor training sessions, held in each B.C. forest region throughout 1991-92. Phase 1 included consultation among people representing First Nations, the forest industry and the Forest Service. Phase 2 was the provision of six training sessions for 109 Aboriginal participants. Further training and monitoring has been recommended. Manuals were prepared by the Westcoast Forestry Training Centre for the course on Firefighting and Slashburning, Contracting, Planting, Brushing and Spacing.

6.0 Traditional Ecological Knowledge

A movement is growing to integrate traditional Aboriginal knowledge about lands and resources with western scientific thinking and resource management systems. This traditional ecological knowledge has been described in various ways.

Georges Erasmus (1989), former President of the AFN, described what Aboriginal people have to offer to conservation:

> *... a profound and detailed knowledge of species and ecosystems, ways of sharing and managing resources that have stood the test of time, and ethics that reconcile subsistence and co-existence. We recognize that people are an integral part of nature, and express spiritual bonds with other species, including those we harvest.*

Knudtson and Suzuki (1992) describe the lessons of tales based on traditional indigenous knowledge about the natural world:

> *They reveal a profound understanding, often ingeniously encoded in symbolic systems, of the underlying interconnectedness of the universe.... They remind us ... of the shared origins of all forms of life, the ecological integrity of natural systems, and the ancient bonds of kinship between life and land. They underscore the fundamental relationship between life and land. They illuminate the cyclic temporal processes of nature, the role of ordinary human beings in maintaining its precarious balances, and the prospect of sinister, long-term consequences in the wake of human greed, hubris, and neglect.*

Reichert and Spigelman (1991) in their discussion paper for the international workshop on Indigenous Knowledge and Community-Based Resource Management described traditional knowledge in this way:

> *Built upon the belief that the earth functions as an interconnected whole.... Assumes that control of resources should be internal to the community and should be based on ecological understandings which have developed over centuries of observation, experience and practice.*

Mary Simon, President of the Inuit Circumpolar Conference, in a statement to the United Nations Conference on Environment and Development Prepcom III, in September 1991 in Geneva, Switzerland, raised important questions about the subject:

> *What exactly is traditional knowledge?*
>
> *How can it be made available outside of the oral tradition of indigenous peoples?*
>
> *How can indigenous peoples be assured of control of their knowledge?*
>
> *Is it itself a "sustainable" resource, or is it, like the environment around us, deteriorating under the assault from often overwhelming external social and cultural forces?*

Aboriginal communities involved in forest management often have to make choices about the direction that economic development will take. Is it possible to combine traditional management systems and knowledge with today's highly mechanized timber harvesting and silvicultural systems?

> *Conservation and development, policy-making and planning often seem to assume that we, the Aboriginal peoples, have only two options for the future: to return to our ancient way of life or to abandon subsistence altogether and become assimilated into the dominant society. Neither option is reasonable. We should have a third option: to modify our subsistence way of life, combining the old and new in ways that maintain and enhance our identity while allowing our society and economy to evolve.* (Erasmus, 1989)

Outside of the oral traditions of First Nations, traditional knowledge is being documented in a variety of forms. These include Native Studies and anthropology courses, Aboriginal cultural centres and land use and occupancy studies. Traditional knowledge is also often brought into co-management agreements and critiques of forest management practices undertaken by Aboriginal communities. These forms are elaborated below.

6.1 Institutions Studying or Promoting Traditional Ecological Knowledge

Traditional ecological knowledge has become a field of academic study carried out in Native studies and anthropology disciplines.

> *Native studies is an inter-disciplinary specialization which teaches the history and interaction of Aboriginal people in Canada.... As for native studies programs integrating concepts of natural resource management, few modules have been implemented which take a strictly native approach or traditional land ethic perspective to teach about the environment within any existing program.* (INAC, 1991)

Appendix 11 lists 104 academic institutions and educational and cultural centres offering course work in Native Studies. In addition, there are other organizations studying traditional ecological knowledge. These include the Worldwide Indigenous Science Network, United Nations Working Group on Indigenous Populations, Unesco Programme on Man and the Biosphere and the Canadian Environmental Assessment Research Council.

The Worldwide Indigenous Science Network was created in June 1989 at the first Indigenous Science Conference held in Alberta. Network members include tribal elders, scientists, artists, academics and other professionals from indigenous and non-indigenous cultures around the world. All share a common vision of rediscovering and applying ancient wisdom and teachings which members believe will play a central role in helping to create a life-sustaining future for the planet.

The United Nations Working Group on Indigenous Populations has prepared a Draft Declaration on the Rights of Indigenous Peoples (August 1991). The draft includes the following recognition:

- *Indigenous peoples have the right to maintain their distinctive and profound relationship with their lands, territories and resources, which include the total environment of the land, waters, air and sea, which have traditionally occupied or otherwise used.*
- *Indigenous peoples have the collective and individual right to own, control and use the lands and territories they have traditionally occupied or otherwise used. This includes the right to the full recognition of their own laws and customs, land-tenure systems and institutions for the management of resources, and the right to effective State measures to prevent any interference with or encroachment upon these rights.*

At the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in June 1992 proclaimed a number of principles in the *Rio Declaration*, including Principle 22 which states:

> *Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge of traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.*

The Unesco Programme on Man and the Biosphere and the Canadian Environmental Assessment Research Council sponsored an international workshop on Traditional Knowledge and Community-Based Resource Management held in September 1991 in Winnipeg. The Research Council has established a research program on traditional knowledge and its use in environmental assessment.

6.2 Land Use Studies

Since the 1970's there have been a number of land use and occupancy studies completed "whose primary objectives and interests were to document the maximum extent of lands used, the means of utilization, and the products of this utilization" (Kayahna, 1985). This work began in 1976 with the Inuit Land Use and Occupancy Project (Milton Freeman Research Ltd.). The Kayahna Region Land Utilization and Occupancy Study (1985) was completed in response to the Ontario Royal Commission on the Northern Environment. This study examined land use in a portion of the Nishnawbe-Aski territory and was designed to:

> *describe, both in map form and in text, the social reasons for land utilization patterns:*
> - *how lands of varied utility and value are distributed among different groups;*
> - *how stability in use and control is achieved and maintained through a lifetime;*
> - *how customary rights to use lands are transferred over generations.*

The main purpose of these land use studies was to provide evidence of continued use of traditional lands in areas where resource development was imminent and to provide the basis for land claims. The studies serve an important role in documenting traditional use and knowledge. The process of completing these studies also has the value of spreading this knowledge among community members and documenting knowledge which might otherwise be lost.

Numerous other land use studies have been completed across Canada. The Dene Brotherhood in the Northwest Territories (Nahanni, 1977), the Innu Nation in Labrador (Armitage, 1990) and the Gitksan-Wet'suwet'en in northern B.C. are among those First Nations who have completed studies. Many more studies are being undertaken and will continue to provide an invaluable source of information about traditional knowledge. More recent studies are making use of computerized Geographic Information Systems (GIS), which is designed to ease the gathering, storage and display of information needed in resource management.

6.3 Co-Management Agreements

With the settlement of land claims and with continued conflict over land use, provincial governments are more frequently turning to co-management agreements as a way of settling disputes and of sharing control over resources with Aboriginal communities (Cassidy and Dale, 1988; John S. Mactavish & Assoc., 1989; Smith, 1991). Many of these agreements have forestry as a main resource component while others include wildlife and fisheries and a variety of other resources. Although not guaranteed, many of these agreements will allow Aboriginal participants to bring traditional knowledge and values to resource management decisions.

The James Bay and Northern Quebec agreement recognized traditional pursuits and made provisions to protect these pursuits. The Agreement state: *...the Native peoples are offered a choice. They will be free, as individuals, to choose between their traditional occupations and new occupations.* In 1978 the Cree School Board established the Cree Culture Program to "transmit traditional Cree skills and knowledge within an accredited framework of elementary and secondary education" (Taiga Educational Assoc., 1991). The Cree School Board developed a pilot project for the membership of the Cree Trappers Association of the James Bay Territory of northern Quebec. With provincial financial support amounting to half the project costs, a curriculum was developed based on input from the actual experiences of four Crees from Waskaganish assisted by a young Cree woman. With feedback from the Cree Trapper Association members, a curriculum was adopted "on the condition that the elder-instructor's judgement on timing and pedagogical approach would prevail". The curriculum was put to the text in the spring of 1991 with positive evaluations from all participants. The Trappers Association is now working with the School Board to have the curriculum accepted as an accredited secondary vocational program.

6.4 Critiques of Forest Management Practices

Resource conflicts have also led Aboriginal communities to question timber harvesting practices on their traditional lands. Although many of these studies are not published, they also provide a valuable source of information on traditional values and knowledge. In the Foreword to the Report on Forest Management and Silvicultural Operations in Forest Management Unit #19 in Labrador (Marek, 1992), Daniel Ashini, Director of Environment for the Innu Nation summarizes the issues as the Innu see them:

1) the future of the Innu people is closely linked to the land;

2) *we see the forest as ours, and any development of the forest must have our approval and must not prejudice our rights;*
3) *it must be proven that the forest can support forestry operations, and what form these operations can take;*
4) *forest zoning must be prepared to ensure the protection of ecological and cultural values, and to determine how much wood can actually be harvested;*
5) *a management plan must be developed which details the forest management techniques to be used; and*
6) *forest operations must benefit the Innu people and not further social dislocation, and we see it as more important to benefit the people of the region than to export our resources far away.*

Critical examinations of forestry practices on traditional lands have also been carried out by the Nisga'a in B.C. and the Teme-Augama in Ontario.

To carry out critical examinations of forestry practices and to integrate traditional knowledge in resource management, Aboriginal communities must have access to information and technology which allows them to gather essential information about forest use and to document their own traditional use.

The Natural Resources Secretariat in Ontario is providing a model for the development Aboriginal-controlled environmental research agencies. The secretariat was established by Manitoba Keewatinowi Okimakanak Inc., a northern tribal council, in 1988 as a pilot project under the Federal-Provincial Northern Development Agreement. The secretariat's primary purpose is "to develop an overall integrated resource plan for sustainable, long-term economic development which can incorporate existing planning and be a guide for future planning activities." The secretariat provides research staff and technical services such as computer systems installation and mapping to member First Nations. Nishnawbe-Aski Nation in northern Ontario is developing a proposal for a similar research institute.

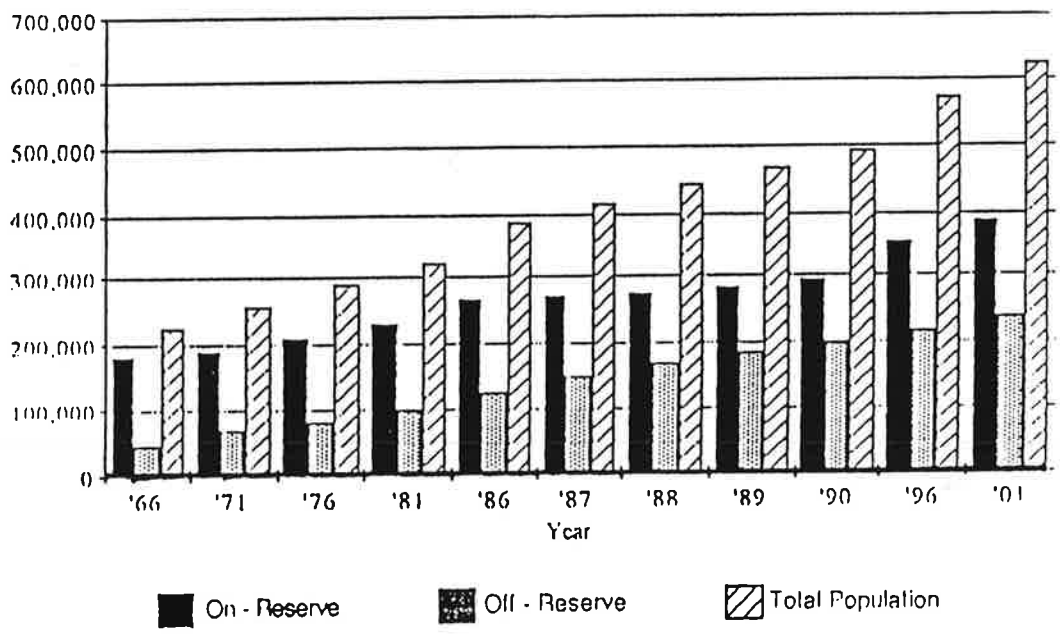
7 Issues in Human Resource Development

7.1 Aboriginal Demographics

As shown in Figure 7-1, the population of status Indians is rising rapidly relative to the rest of the Canadian population and is expected to continue to do so beyond the turn of the century. One consequence of the relatively high birth rate is a disproportionately high percentage of school-age Aboriginal people. Figure 7-2 shows the relatively high percentages of the overall Aboriginal population that were under 25 years of age at the time of the 1986 Census.

Figure 7-1

Status Indian Population On- and Off-Reserve

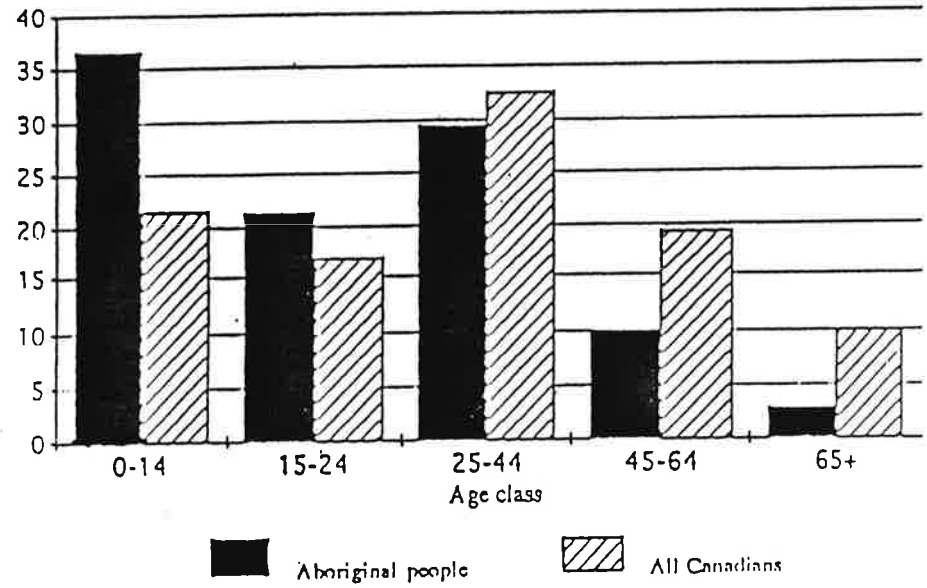


Source: INAC Basic Departmental Data, 1991

The proportion of Aboriginal school students completing secondary school has been rising. INAC reports that the percentage for on-reserve students that complete secondary school has increased from just over 3% in 1960/61 to an estimated 47% in 1990/91 (INAC Basis Departmental Data, 1991).

Figure 7-2

Percentage Age Distribution



Source: EIC Pathways Background Paper, 1991

With an increasing number of school-age Aboriginal people with an increasing proportion completing secondary school, a significant number of students or trainees will continue to be available for instruction and employment in natural resource management. Yet, as reported earlier, less than 1% of status Indians receiving INAC support for post-secondary education have been studying natural resources. Although this low rate may relate to the job market, it more likely results from a lack of awareness of the kinds of careers that are available in natural resource management. It may be, for example, that school teachers or government agencies have been promoting studies in social work or related subjects in the belief that First Nations would profit most if their young people were to study such subjects.

Another aspect of changing demographics worth noting is the increasing Aboriginal population residing in urban areas. Although estimates conflict, one source puts only 46% of Canadians of Aboriginal descent on reserves or in Aboriginal settlements (Gunter, 1992). This same source indicates that "even among 'status' Indians ... only 56% remain on rural reserves, down from 87% in 1960 and 98% in 1950." This shift in Aboriginal population to urban areas needs to be taken into account in examining access to educational institutions and forest industries that may be urban based, like pulp mills.

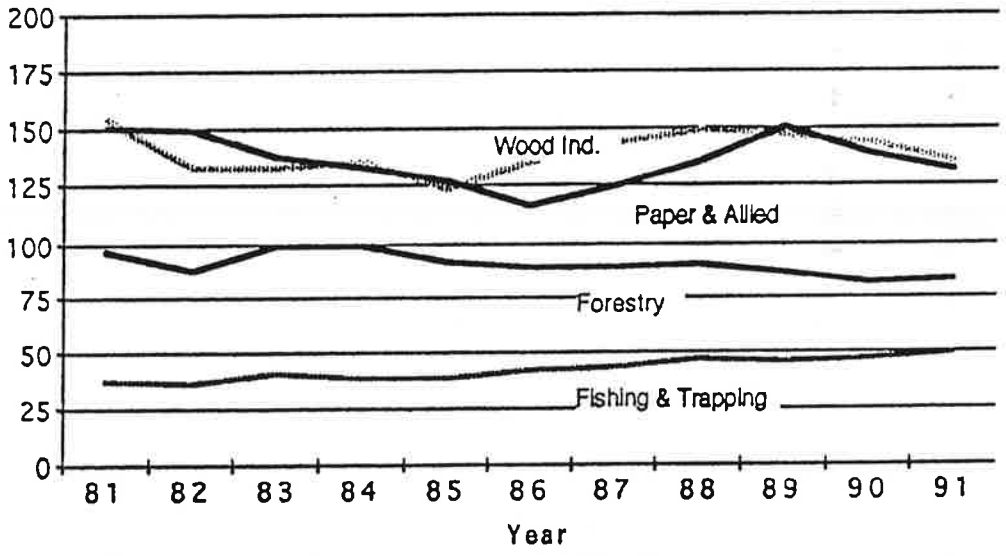
7.2 Outlook for the Forest Sector

Canada's forest industry is going through a difficult period. The combination of the recession, increasing competition from foreign sources of pulp, the obsolescence of many pulp and paper mills, pressures to convert bleaching processes to eliminate the use of chlorine, and demands from individual states of the United States for use of recycled paper in newsprint all suggest that recovery to pre-recessionary production levels will be slow. The lumber industry, normally a leader in recovery from recessions, is confronted by protectionist pressures in the United States which have yielded another round of import duties. Recovery will be slower than experienced following previous recent recessions and industry may be expected to concentrate its attentions on efforts to reduce labour costs in order regain profitability in a highly competitive world market.

As indicated earlier, the employment trend in the forestry sector has been generally downward over the last decade. This is expected to continue as mechanization of woods operations grows. One of the next significant steps is expected to be a general movement to use of portable chippers with a resulting reduction in the haulage of logs to pulp mills.

Figure 7-3

National Employment Levels



Source: Statistics Canada, Labour Force Survey Subdivision

While employment levels in industrial woods operations may be expected to continue to decrease, as more land settlements are made and as more First Nations are successful in developing co-management agreements with provinces and industrial holders of Crown lands, employment opportunities for Aboriginal natural resource managers, technicians and labour will increase.

Opportunities in other sectors, particularly silviculture and activities related to integrated resource management, including wildlife and recreation management, may increase over the next decade.

7.3 Potential for Aboriginal Forest Management

Historically, Aboriginal people played a significant role in the early development of the Canadian forest industries, mainly in manual, semi-skilled harvesting and processing occupations. Their participation in this sector of the labour market has contracted severely in the past thirty years with new technology and the promulgation of government policy which favoured large and diversified forest companies.

In Canada today there are a number of significant factors and developments taking place which are impacting on the forest sector and changing the way the forest resource is managed. These changes should be viewed as a window of opportunity to facilitate the re-entry of Aboriginal people into the forest sector. For example:

- Canada's commitment to sustainable development will mean continued growth in the silviculture industry.
- The public's concern for the environment and its increasing awareness of the multiple values of the forest resource will require more intensive public consultation in forest management decision making, especially among those whose lives are most directly affected by forestry decisions.
- The recognition within the forest products industry that new growth will be in value-added processing and specialty wood manufacturing for niche markets.

For Aboriginal people specifically, there is currently a willingness on the part of the federal and some provincial governments to develop policy and programs which would encourage Aboriginal participation in the forest sector.

At the federal level, Forestry Canada is expected to enlarge the Indian Forest Lands Programs and to develop policy which will result in the devolution of management, control and delivery of these programs to Aboriginal organizations. To compliment these initiatives, Indian and Northern Affairs supported an initiative of NAFA to undertake a legislative change process to facilitate contemporary forest management practices and Aboriginal control at the community level. From this process, NAFA has proposed a First Nations Forest Resources Management Act. If successful, this legislation will put those First Nations that choose to opt into the legislative package, into a position of direct management control over their federal jurisdiction lands, with accompanying program dollars to support their work. Similar legislation in the United States, where the U.S. Government discharges its fiduciary obligation for forest management on Indian lands by contracting with tribes to assume management responsibility for their forests, has substantially increased demand for qualified Indian natural resource managers.

At the provincial level, there is a willingness as well to offer opportunities for Aboriginal organizations to assume active resource management roles. For example, in British Columbia,

a First Nations Forestry Council (1993) has been established to implement the recommendations of a government commissioned task force (1992) which had identified specific strategies to increase Aboriginal participation in all aspects of the forest sector. The Council is comprised of 12 First Nation leaders, 8 representatives from industry, and ex-officio government officials, and will report directly to Ministers of Forestry and Native Affairs.

In Ontario, similar work is being carried out within the Ministry of Natural Resources following that Government's commitment to Aboriginal self-government and its promise to provide greater access to resources for Aboriginal people.

The changing attitudes of governments in Canada towards Aboriginal participation in forest management is due in part to recent court decisions which have helped clarify the fiduciary obligation of the Crown which arises from Aboriginal title and treaty rights.

The Sparrow case established that "the Government has the responsibility to act in a fiduciary capacity with respect to Aboriginal peoples. The relationship between the Government is trust-like, rather than adversarial, and contemporary recognition and affirmation of Aboriginal rights must be defined in light of this historic relationship". The recent case of Degamuukw v. Queen further established in the B.C. Supreme Court that the provincial Crown had a fiduciary obligation to protect Aboriginal and treaty rights where they are being practiced on unoccupied Crown land.

The B.C. provincial government has taken a more liberal interpretation of Aboriginal right to include, "the right to hunt, fish and gather for sustenance purposes". Sustenance generally including food, ceremonial, or societal, but not including sale at this time. They have also begun developing policies which ensure that their fiduciary obligation is discharged before any development occurs where Aboriginal rights may be practiced within individual First Nations traditional territories.

These policies range from simple consultation processes, to relatively involved Joint Stewardship Agreements between various First Nations and the provincial governments on a variety of resources under provincial jurisdiction. Increased participation in employment, management planning, and land use decision-making through consultation, advisory boards, joint administration, employment contracts, direct contracting and other means have started to materialize throughout the province. The demand for qualified Aboriginal resource managers has intensified beyond anyone's expectations.

No doubt brought on by impending land claims settlements, Aboriginal self-government arrangements, and the participation of Aboriginal people in co-management regimes, the private sector is beginning to re-evaluate its relationship with Aboriginal people. Increasingly, private sector forest companies are proposing joint ventures and new relationships with First Nations.

While these initiatives are generally concentrated in B.C., other provinces are also beginning to develop different forms of joint or cooperative type management regimes with Aboriginal groups. After the Degamuukw ruling goes through the Supreme Court of Canada, and other cases further

refine and expand the definition of Aboriginal right, we can expect the demand for qualified Aboriginal natural resource managers to take a similar leap across Canada.

Overall, the factors and developments causing change in the forest sector today should result in increased resource management employment and business opportunities for Aboriginal people. In summary, the opportunities within the Aboriginal forest sector are:

1) To assume control of forest management responsibilities for Indian forest lands;
2) To enter into contractual and co-management agreements with provincial governments for resource management of Crown lands;
3) To enter into contractual or joint venture arrangements with the non-Native private sector;
4) To develop, implement, and manage new resource management regimes through the settlement of land claims and the institutionalization of Aboriginal self-government;
5) To obtain employment with non-Native private sector firms; and
6) To develop new business enterprises in the forest sector reflecting market trends for forest products and services.

Over the next five years, forest policy, at both the federal and provincial levels and within forest companies, will be guided by Canada's new national forest strategy (Sustainable Forests: A Canadian Commitment) which calls for, among other broad objectives, increased involvement of Aboriginal people in forest management. The Canadian Council of Forest Ministers and representative members of the forest community have committed to the strategy by their signing of the Canada Forest Accord in March, 1992. The development of action plans to implement the strategy are currently underway.

7.4 Barriers to Employment

There are significant differences in needs among Aboriginal people between and within the various regions of the country. The differences arise from a variety of causes including the degree of isolation of Aboriginal communities, the regional importance of the forest industry and the provincial, social and political setting. The following sections summarize the human resource issues and needs that were identified in the consultations.

Changes in technology, mechanization and transportation have also created barriers to Aboriginal people in forestry. Where logging and milling was once labour intensive, it is now much more mechanized and capital intensive. Also, up to the 1970's logging and milling tended to be carried out by smaller locally based companies and operations. In B.C. the trend has been to larger mills based in urban centres which are often distant from Aboriginal communities. Also non-Aboriginal people are flown in to camps that once hired locally which often meant jobs for Aboriginal people. In B.C. many of the barriers to the silviculture industry are being eroded by aggressive and successful Aboriginal silviculture contracting companies, but there is still substantial room for increased opportunities in this growing sector of the forest industry.

The Eel Ground First Nation in New Brunswick summarized some of the issues facing them in their attempts to become more active in forestry operations. Their concerns mirror other Aboriginal organizations across the country:

- *A lack of Aboriginal input and influence in Federal-Provincial Forestry Development Agreements (FRDAs);*
- *The lack of financial assistance for obtaining items necessary for meaningful forestry initiatives and operations such as training, equipment, administration, supervision;*
- *The lack of an Aboriginal organization to deliver forestry development initiatives on behalf of First Nations;*
- *The need for a mechanism or organization to assist individual First Nations to gain access to Crown lands for possible co-management arrangements;*
- *The need for Aboriginal people to be hired as Conservation Officers to oversee proper forestry, environment and wildlife practices are in place and being followed;*
- *The need to identify and develop long-term employment opportunities in the forestry sector to promote greater interest among members of Aboriginal communities.*

7.4.1. Competitive Market

Manufacturing companies that purchase wood from contractors are cost-driven. Consequently, timber harvesting contractors must be lean and mean if they expect to survive. Part of the response is an accelerating mechanization of logging operations. This forces logging contractors to invest in expensive harvesting and hauling equipment and to minimize their work force, both factors that may cause difficulties for Aboriginal entrepreneurs and workers. The market setting may also cause difficulties for Aboriginal firms trying to practice integrated resource management on their lands. There may be a competitive disadvantage to the extent that logging costs are higher on these areas in comparison to areas managed primarily for timber production.

Barriers to employment of Aboriginal people in this setting include:

- the very high costs of entry to the contracting business;
- a need for entrepreneurial and business management skills;
- training and experience in machinery operation and maintenance;
- education levels providing ability to read and understand complex operation and maintenance manuals.

7.4.2 Discrimination by Industrial Employers

There are few Aboriginal people employed by the forest industry in many parts of Canada. In some areas, trained silviculture crews have been passed over, or at best accepted as subcontractors for other forestry firms contracting with the industry. Industry appears wary of employing Aboriginal people unless they can clearly demonstrate a proven record of productivity. The perception that there is industrial discrimination toward Aboriginal workers is strong.

Several representatives of Aboriginal people who were consulted believe that a fundamental barrier to employment in the forest sector is the lack of commitment by industry to employ Aboriginal people. They believe that if a forest management licence agreement between a province and a company does not include solid enforceable terms and conditions committing the firm to employ Aboriginal people, the firm is unlikely to do so, except perhaps for the most menial types of work. Even a written commitment by a firm to make "best efforts" to employ Aboriginal people is seen as unsatisfactory in that "best efforts" is open to broad interpretation and debate. Again, any employment that does result is likely to be for the most unskilled types of labour, offering little continuity of employment or career development opportunities into more interesting and meaningful jobs.

The view was expressed that forest management licences on Crown lands should contain commitments to hire Aboriginal people from the region in question. Such commitments should be those acceptable to the people already using the area. They should specify such things as training to be provided by the firm or by the firm in cooperation with the government to ensure that a certain proportion of the company's, or its contractor's, employees will be Aboriginal persons.

Tribal councils and provincial governments could profit by having Aboriginal people with the appropriate education on staff to liaison with industry to search out and help to create opportunities for Aboriginal workers.

7.4.3 Government Forest Management Plans

In those areas where Aboriginal people depend on traditional pursuits of hunting, trapping, fishing and gathering, the forest management plan requirements of provinces are seen as another major barrier to Aboriginal employment. The conventional management planning process is directed to the annual harvesting of specified volumes and to the development of road networks, identification of timber stands to be removed, and provision of forest renewal requirements to sustain a forest industry over the long term. The management planning process may contain requirements for plan modification to reflect the impact of logging on other values, such as Aboriginal uses, watershed protection and recreation but with the primary purpose of the licence being timber harvesting, the other uses of forest land are automatically treated as secondary. At best, attempts are made to mitigate the projected damages to those traditional forest uses. The result is diminished hunting, trapping and fishing opportunities and therefore lost employment opportunities in those pursuits for the Aboriginal people living in the area.

A more appropriate forest resource management process from the Aboriginal point of view would be to begin by identifying the employment that an area is already generating through existing uses, and then planning a timber management regime around those uses so that they would be maintained, or even enhanced. If a management plan results in loss of traditional employment opportunities or reduced harvest levels, a forest management license should provide for mitigation or compensation.

7.4.4 Rigidity of Federal Forestry Programs

First Nations find that many government programs require the band to carry the initial funding for up to several months before the government funds start to flow through. This is apparently the situation with forestry programs under the Indian Forest Lands Program. The bands simply do not have the surplus funds needed for these program start-up periods without detracting from other on-going programs.

Forestry Canada is perceived as slow in developing trust in the bands. Working capital advances are needed to bridge start-up periods. Perhaps the difficulties could be overcome if Forestry Canada were to enter agreements with regional Aboriginal organizations such as the National Aboriginal Forestry Association, the Confederacy of Mainland Micmacs or tribal councils to manage program funds and assume responsibility for program delivery.

Federal forestry programs traditionally span five years making longer-term forest management planning difficult. It was suggested that there should be program renewals during the third or fourth years of a program to ensure the continuity of planning and, equally important, to ensure the prospect of continuing employment. This concern parallels those of industry in seeking assured continuing timber supplies from provinces if they are to risk investing in equipment and to assist them in raising working capital from financial institutions.

7.4.5 Access to Forest Land

Although there are a few examples of First Nations having achieved access to Crown lands through co-management agreements and licenses, the major stumbling block to development of Aboriginal forest industries remains the lack of access to forest areas large enough to provide a continuing source of work and income. The forested areas of most Indian Reserves are simply too small to provide more than occasional periods of work in logging, reforestation, stand tending and fire control. If Aboriginal people are to see advantages to education and training in forestry, they must be able to see some degree of continuing employment.

Another problem may arise when Aboriginal people are given licenses for forestry operations on Crown lands. Forest management on Crown land must follow provincial regulations. In some cases, this may cause conflict among Aboriginal communities. For example, this may happen if one segment of the community is involved in a timber harvesting and another group is still following traditional harvesting practices. If all values of the forest are not protected, conflict will result.

7.4.6 Short Term Nature of Silvicultural Work

The nature of reforestation or stand improvement is seasonal, sometimes of necessity as with reforestation, and sometimes because of the "make work" nature of some government-sponsored stand improvement work. Consequently, it may be difficult to attract interest among Aboriginal workers.

Training packages that recognize the short-term nature of many forestry jobs and provide the skills that would allow graduates to qualify for several types of work during the year would help to overcome this difficulty.

7.4.7 Role Models

Some young people perceive woods work as employment engendering low respect among their peers. There are very few examples of successful Aboriginal people working in the forest sector. Without such role models, attracting the interest of young people in forestry trades is difficult. However, as forestry changes to incorporate a more integrated approach to resource management using new tools such as computerized mapping and new skills such as problem solving, a growing number of young people will be attracted to the profession. Giving young Aboriginal people the early education opportunities so that they can take advantage of post-secondary training is the key.

7.4.8 Worker Self Esteem and Productivity

A concern noted by dedicated officials who have assisted Aboriginal people with training and employment needs is the low level of self esteem demonstrated by many individuals. This tends to be self-fulfilling through a low achievement level in training programs and poor productivity on the job. Designers and presenters of training programs should help overcome these difficulties by directing their objectives more to the individual as opposed to the particular trade being taught. It must be appreciated that some individuals lack basic life skills including knowing what clothing is appropriate to a particular type of work, understanding the importance of worker productivity, knowing the basics of worker safety or the handling of tools. In their embarrassment, trainees may not ask questions that would identify their weaknesses.

7.4.9 Job Equipment and Transportation

With employment opportunities often only available on an occasional basis, potential workers often do not own the required clothing or equipment. Employment off-reserves is sometimes inhibited by the simple lack of transportation to take workers to the job or training site.

7.5 Barriers to Training

7.5.1 Absence of Career Objectives in Training Programs

Some training courses fail to attract enthusiastic response because they are not seen as part of an overall training package that would assist the individual to build a several-faceted career in the forestry sector. Packages to develop career objectives and connected training courses directed to each career objective are needed.

7.5.2 Locale of Training Courses

Particularly during initial periods of post-secondary school training, many Aboriginal people encounter difficulties adjusting to the foreign environment of an institution in an urban area. This will often inhibit enrolment or result in departures prior to course completion. To the extent possible, training courses should be offered in the comfortable surroundings of the home community. Another advantage to home-community training, or "distance education," is that at least a portion of training funding would remain within the community of the trainees.

Most of the programs are offered in western Canada, particularly B.C. Notable gaps in educational offerings for Aboriginal people in natural resource management are:

1) Manitoba, especially with recent development like joint ventures with Repap (eg. Moose Lake Loggers) and co-management agreements (eg. Waterhen First Nation);
2) Alberta, with expansion of logging and development of mills in the northern part of the province.

7.5.3 Lack of Awareness of Career Possibilities

Secondary school career counsellors and others who might advise young people on career possibilities are suspected to be generally unaware of the career choices in natural resources. A feeling was expressed by some of the Aboriginal people consulted that INAC tends to stress those career choices that it sees as most beneficial to alleviating the social difficulties in Aboriginal communities.

7.5.4 Aboriginal Instructors

Adjustment to the academic environment, relevance of course content, communication between instructor and student and the presence of role models would all be enhanced were training courses to be developed and offered by Aboriginal people.

As shown in Appendix 7, there are very few Aboriginal instructors teaching in the forestry programs in post-secondary institutions.

7.5.5 Entrance Requirements

The typical entrance requirements of colleges and universities inhibit many Aboriginal young people from considering careers requiring post-secondary education. If these institutions can apply special entrance requirements for "mature" students from urban areas, it should be possible to develop entrance requirements and preparatory courses unique to the needs of rural Aboriginal students. There should also be an emphasis on encouraging high school students to meet the requirements in maths, sciences and English.

A study was carried out by the Nicola Valley Institute of Technology in B.C. which showed much higher success rates among students at Nicola Valley Institute than other institutions offering similar programs. The students' success was attributed to the provision of cultural support.

7.5.6 Aboriginal Participation in Course Development

Many institutions have established joint advisory committees to ensure Aboriginal participation in both program development and delivery. This has become a requirement in many provinces under revised education guidelines. For example, the Ministry of Colleges and Universities (1990) in Ontario established a Native Advisory Committee with representatives from Aboriginal organizations, colleges, universities and the Ministry to develop a strategy with the following goals:

- *To increase Aboriginal participation and completion rates in university and college programs;*
- *To increase the sensitivity and awareness of post-secondary institutions to Aboriginal culture and issues; and*
- *To increase the extent and participation of Aboriginal people in decisions affecting Aboriginal post-secondary education.*

This recently adopted strategy stipulates that colleges and universities will be eligible for provincial funding for Aboriginal programs only if the institution has established "a committee with significant local Aboriginal community membership to oversee key Aboriginal programs and services."

7.5.7 Involvement of Community Members and Incorporation of Traditional Ecological Knowledge

The degree of incorporation of traditional ecological knowledge into educational curricula is difficult to judge. Most of these institutions recognize the value of and need for reflecting Aboriginal values and culture, but a closer examination needs to be made of how this is translated into school programs (see Traditional Ecological Knowledge section). The involvement of community members (eg. medicine people) is one way to ensuring incorporation of Aboriginal values and many of the programs have involved elders in program development and/or as guest lecturers.

8 Conclusion

The purpose of Phase 1, and therefore of this study, was to review information available on the human resource development needs of Aboriginal people in the forestry sector. This study provides the background information with a discussion of the issues and needs of the emerging Aboriginal forestry sector.

Phase 2 will provide the framework and a plan of action to meet the human resource development needs of Aboriginal people over the next ten years. It is recommended that the purpose of Phase 2 will be to:

> *Define training and education programs and hiring practices that will encourage and ensure full access to jobs and economic development opportunities for Aboriginal people in the current forestry sector and encourage the enhancement of traditional Aboriginal forest values.*

The title for Phase 2 should be: "An Education and Training Strategy for Aboriginal People in the Forest Sector."

Objectives of Phase 2

The objectives of Phase 2 should be to:

1. Define programs for universities and technical colleges that will include Aboriginal forest values;

2. Identify universities and technical colleges where these programs could be taught;

3. Develop instructional and learning systems guidelines and manuals for the above programs;

4. Review recruitment processes, entrance requirements and course content of university forestry programs and make recommendations to improve access to these programs for aboriginal students;

5. Examine ways to encourage graduate forest technicians to pursue further education in forestry degree programs;

6. Define the educational culture in which Aboriginal students are most likely to succeed (eg. University of British Columbia First Nations House of Learning; Aboriginal outreach programs at Nicola Valley Institute of Technology and New Brunswick Community College; the Native Resources Technician Program, a distance education program at Sault College; Gabriel Dumont Institute);

7. Define a program that could be taught and information that could be distributed in high schools and vocational schools that will encourage Aboriginal students to go into forest related fields at the professional, technical and worker level;

8. Outline course elements of a forest worker training program that could be taught through various ad hoc training programs;

9. Develop an outline of curricula for the above program;

10. Examine retraining requirements for aboriginal people already working in forest sector;

11. Make recommendations to Aboriginal organizations, government and industry to improve Aboriginal human resource development in the forest sector;

12. Continue to build database on aboriginal participation in forest sector;

13. Prepare material for public distribution on results of research findings;

14. Promote networking between organizations with an interest in aboriginal forestry;

15. Develop a communication strategy that describes the opportunities available in aboriginal forest management, the special skills required to implement management plans, the aboriginal land ethic, and the importance of forest management to aboriginal people.

16. Define ways of using existing government programs to focus on training and employment in Aboriginal forestry, including partnerships with other organizations to help finance Phases II and III.

17. Recommend members and Terms of Reference for a "First Nations Human Resource Development Committee" that will coordinate this program. This Committee should have members from First Nations training institutions, the forest industry and elders who relate to traditional values. This ongoing committee could be an extension of the present Aboriginal Forestry Human Resource Planning and Development Committee.

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Appendix 1
Employed Labour Force - Canada

CANADA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	CANADA		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	58,115	4,495	62,605
NATIVE	4,020	240	4,255
NON-NATIVE	54,095	4,255	58,345
751 FORESTRY & LOGGING			
TOTAL POPULATION	58,115	4,494	62,605
NATIVE	4,020	235	4,255
NON-NATIVE	54,095	4,255	58,350
7510 FOREMAN/WOMAN			
TOTAL POPULATION	6,680	315	6,995
NATIVE	310	20	335
NON-NATIVE	6,365	295	6,665
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	4,615	480	5,105
NATIVE	625	50	675
NON-NATIVE	3,995	440	4,435
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	21,095	440	21,535
NATIVE	1,250	40	1,290
NON-NATIVE	19,840	400	20,245
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	1,840	230	2,070
NATIVE	60	10	70
NON-NATIVE	1,780	220	2,000
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	9,440	130	9,570
NATIVE	670	5	670
NON-NATIVE	8,775	125	8,905
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	9,275	2,670	11,940
NATIVE	545	95	640
NON-NATIVE	8,725	2,575	11,300
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	2,865	70	2,935
NATIVE	250	5	260
NON-NATIVE	2,615	65	2,675

CANADA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

	CANADA		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	307,905	89,745	397,650
NATIVE	5,850	1,635	7,485
NON-NATIVE	302,055	88,115	390,165
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	39,890	2,560	42,450
NATIVE	1,615	145	1,755
NON-NATIVE	38,275	2,420	40,690
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	4,815	65	4,875
NATIVE	155	0	155
NON-NATIVE	4,655	65	4,725
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	8,190	295	8,485
NATIVE	440	10	450
NON-NATIVE	7,750	290	8,035
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	1,825	485	2,300
NATIVE	40	55	95
NON-NATIVE	1,785	430	2,210
8235 WOOD TREATING			
TOTAL POPULATION	950	140	1,080
NATIVE	40	10	45
NON-NATIVE	910	125	1,035
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	4,035	475	4,515
NATIVE	125	10	130
NON-NATIVE	3,910	470	4,380
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	12,955	740	13,695
NATIVE	490	15	510
NON-NATIVE	12,470	725	13,190
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	5,840	275	6,115
NATIVE	215	25	245
NON-NATIVE	5,625	245	5,870

continued

CANADA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

OCCUPATION	male	female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	39,145	2,370	41,510
NATIVE	595	70	660
NON-NATIVE	38,550	2,300	40,850
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	5,525	105	5,625
NATIVE	50	0	45
NON-NATIVE	5,475	105	5,580
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	2,800	115	2,915
NATIVE	60	10	70
NON-NATIVE	2,740	100	2,840
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	8,835	340	9,175
NATIVE	100	10	110
NON-NATIVE	8,735	325	9,060
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	2,800	555	3,365
NATIVE	40	25	65
NON-NATIVE	2,765	530	3,295
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	11,600	575	12,170
NATIVE	210	0	210
NON-NATIVE	11,385	575	11,965
8259 PULP & PAPERMAKING, NEC			
TOTAL	6,495	610	7,105
NATIVE	100	15	120
NON-NATIVE	6,390	590	6,980

Source: Table 19,1986 Custom Census Tables, Census of Canada, Statistics Canada, courtesy of Employment & Immigration Canada.

RESTRICTION: Data restricted to Industrial Adjustment Service Committee on Aboriginal Forestry Human Resource Planning and Development.

Appendix 2
Employed Labour Force - Provinces

BRITISH COLUMBIA - YUKON
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	B.C. - YUKON		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	20,880	1,275	22,155
NATIVE	1,835	120	1,955
NON-NATIVE	19,045	1,160	20,195
751 FORESTRY & LOGGING			
TOTAL POPULATION	20,880	1,275	22,150
NATIVE	1,835	120	1,955
NON-NATIVE	19,045	1,160	20,195
7510 FOREMAN/WOMAN			
TOTAL POPULATION	2,870	75	2,945
NATIVE	170	15	195
NON-NATIVE	2,700	60	2,765
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	1,455	190	1,645
NATIVE	185	40	225
NON-NATIVE	1,265	155	1,420
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	5,745	155	5,900
NATIVE	500	10	505
NON-NATIVE	5,250	140	5,390
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	900	110	1,005
NATIVE	20	5	35
NON-NATIVE	875	135	1,005
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	4,840	70	4,910
NATIVE	445	5	445
NON-NATIVE	4,390	70	4,460
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	2,365	575	2,940
NATIVE	185	35	220
NON-NATIVE	2,180	540	2,730
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	1,865	45	1,910
NATIVE	160	5	170
NON-NATIVE	1,700	40	1,745

continued

BRITISH COLUMBIA - YUKON
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	B.C. - YUKON		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	39,500	7,075	46,575
NATIVE	1,560	400	1,980
NON-NATIVE	37,970	6,670	44,640
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	18,275	960	19,250
NATIVE	895	50	945
NON-NATIVE	17,380	910	18,285
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	1,830	25	1,850
NATIVE	60		65
NON-NATIVE	1,760	20	1,790
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	3,710	160	3,870
NATIVE	290		290
NON-NATIVE	3,420	155	3,580
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	1,000	110	1,110
NATIVE	15	5	15
NON-NATIVE	985	110	1,095
8235 WOOD TREATING			
TOTAL POPULATION	355	30	380
NATIVE	15	5	15
NON-NATIVE	345	30	365
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	1,620	145	1,765
NATIVE	60		60
NON-NATIVE	1,560	145	1,705
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	5,295	295	5,590
NATIVE	255	15	270
NON-NATIVE	505	280	5,325
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	3,950	155	4,105
NATIVE	150	15	160
NON-NATIVE	3,810	145	3,945

continued

BRITISH COLUMBIA - YUKON
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	B.C. - YUKON		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	5,695	130	5,925
NATIVE	160	5	165
NON-NATIVE	5,535	230	5,760
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	910	5	920
NATIVE	15		15
NON-NATIVE	895	5	905
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	775	20	795
NATIVE	25		25
NON-NATIVE	750	20	770
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	980	15	1,000
NATIVE	35		35
NON-NATIVE	950	15	965
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	415	60	475
NATIVE	15	5	20
NON-NATIVE	400	55	455
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	1,135	50	1,180
NATIVE	30		30
NON-NATIVE	1,105	45	1,155
8259 PULP & PAPERMAKING, NEC			
TOTAL	1,335	80	1,415
NATIVE	30		30
NON-NATIVE	1,305	75	1,385

Source: 1986 Census of Canada, Statistics Canada

ALBERTA - NWT
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	ALBERTA - NWT		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	2,415	210	2,625
NATIVE	390	15	405
NON-NATIVE	2,020	195	2,215
751 FORESTRY & LOGGING			
TOTAL POPULATION	2,410	210	2,625
NATIVE	395	10	405
NON-NATIVE	2,020	200	2,220
7510 FOREMAN/WOMAN			
TOTAL POPULATION	220	15	235
NATIVE	45	0	45
NON-NATIVE	175	10	190
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	690	60	750
NATIVE	155	5	160
NON-NATIVE	530	55	595
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	600	20	620
NATIVE	90	5	90
NON-NATIVE	510	15	525
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	60	5	65
NATIVE	15	0	15
NON-NATIVE	45	0	50
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	285	5	290
NATIVE	10	0	15
NON-NATIVE	275	0	280
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	360	90	455
NATIVE	45	5	50
NON-NATIVE	310	90	400
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	95	10	100
NATIVE	20	0	15
NON-NATIVE	75	10	85

continued

ALBERTA - NWT
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	ALBERTA - NWT		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	17,285	4,210	21,490
NATIVE	635	165	800
NON-NATIVE	16,645	4,045	20,690
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	1,410	205	1,615
NATIVE	160	5	165
NON-NATIVE	1,245	200	1,445
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	320	5	325
NATIVE	40	0	35
NON-NATIVE	285	5	290
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	270	25	290
NATIVE	40	5	40
NON-NATIVE	225	20	250
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	40	35	75
NATIVE	0	0	5
NON-NATIVE	45	30	75
8235 WOOD TREATING			
TOTAL POPULATION	50	20	75
NATIVE	0	0	0
NON-NATIVE	50	20	75
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	115	60	175
NATIVE	15	0	20
NON-NATIVE	100	60	160
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	315	45	365
NATIVE	30	0	35
NON-NATIVE	285	45	335
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	240	10	255
NATIVE	35	0	30
NON-NATIVE	210	10	220

continued

ALBERTA - NWT
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	ALBERTA - NWT		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	460	35	495
NATIVE	20	15	40
NON-NATIVE	435	15	460
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	70	0	70
NATIVE	5	0	5
NON-NATIVE	65	0	65
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	90	10	100
NATIVE	5	5	15
NON-NATIVE	85	5	95
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	80	0	80
NATIVE	0	0	0
NON-NATIVE	85	0	80
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	35	15	40
NATIVE	0	5	5
NON-NATIVE	35	5	35
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	75	0	70
NATIVE	5	0	10
NON-NATIVE	65	0	65
8259 PULP & PAPERMAKING, NEC			
TOTAL	110	15	125
NATIVE	5	5	10
NON-NATIVE	105	5	110

Source: 1986 Census of Canada, Statistics Canada

SASKATCHEWAN
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	SASKATCHEWAN		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	975	80	1,060
NATIVE	240	0	240
NON-NATIVE	740	75	815
751 FORESTRY & LOGGING			
TOTAL POPULATION	980	80	1,060
NATIVE	240	0	240
NON-NATIVE	735	80	815
7510 FOREMAN/WOMAN			
TOTAL POPULATION	115	10	125
NATIVE	15	0	15
NON-NATIVE	105	5	115
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	160	10	170
NATIVE	100	0	100
NON-NATIVE	60	10	70
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	280	0	285
NATIVE	65	0	70
NON-NATIVE	215	0	215
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	15	5	20
NATIVE	0	0	0
NON-NATIVE	10	10	15
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	95	0	105
NATIVE	20	0	20
NON-NATIVE	80	0	80
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	220	45	260
NATIVE	10	0	10
NON-NATIVE	210	45	250
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	20	0	20
NATIVE	5	0	10
NON-NATIVE	15	0	15

continued

SASKATCHEWAN
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	SASKATCHEWAN		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	5,780	1,265	7,045
NATIVE	295	85	375
NON-NATIVE	5,490	1,175	6,665
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	590	55	650
NATIVE	95	5	95
NON-NATIVE	495	55	550
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	110	0	110
NATIVE	5	0	5
NON-NATIVE	100	0	100
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	110	0	115
NATIVE	40	5	35
NON-NATIVE	80	0	80
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	40	35	75
NATIVE	0	0	5
NON-NATIVE	40	35	70
8235 WOOD TREATING			
TOTAL POPULATION	65	0	60
NATIVE	25	0	20
NON-NATIVE	40	0	40
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	45	5	45
NATIVE	0	0	0
NON-NATIVE	45	5	45
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	135	5	140
NATIVE	30	0	30
NON-NATIVE	105	10	115
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	70	10	80
NATIVE	0	0	5
NON-NATIVE	70	10	80

continued

SASKATCHEWAN
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	SASKATCHEWAN		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	140	15	155
NATIVE	0	0	0
NON-NATIVE	135	15	155
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	20	0	25
NATIVE	0	0	0
NON-NATIVE	20	0	25
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	35	5	40
NATIVE	0	0	0
NON-NATIVE	35	5	40
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	35	0	30
NATIVE	0	0	0
NON-NATIVE	35	0	35
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	10	5	15
NATIVE	0	0	0
NON-NATIVE	10	5	15
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	20	0	20
NATIVE	0	0	0
NON-NATIVE	25	0	20
8259 PULP & PAPERMAKING, NEC			
TOTAL	20	5	25
NATIVE	0	0	0
NON-NATIVE	20	5	25

Source: 1986 Census of Canada, Statistics Canada

MANITOBA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	MANITOBA		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	960	65	1,020
NATIVE	335	5	335
NON-NATIVE	625	60	690
751 FORESTRY & LOGGING			
TOTAL POPULATION	960	65	1,020
NATIVE	330	0	335
NON-NATIVE	625	60	685
7510 FOREMAN/WOMAN			
TOTAL POPULATION	85	5	95
NATIVE	15	0	15
NON-NATIVE	70	10	80
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	275	20	290
NATIVE	115	0	110
NON-NATIVE	165	20	180
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	285	0	285
NATIVE	90	0	95
NON-NATIVE	195	0	190
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	10	0	10
NATIVE	0	0	0
NON-NATIVE	10	0	10
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	45	0	45
NATIVE	20	0	20
NON-NATIVE	25	5	25
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	145	35	185
NATIVE	50	0	50
NON-NATIVE	95	35	135
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	60	0	60
NATIVE	15	0	20
NON-NATIVE	45	0	45

continued

MANITOBA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	MANITOBA		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	8,775	2,360	11,135
NATIVE	485	105	585
NON-NATIVE	8,290	2,255	10,550
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	310	0	310
NATIVE	45	0	45
NON-NATIVE	265	0	265
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	105	0	105
NATIVE	5	0	0
NON-NATIVE	105	0	100
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	45	0	45
NATIVE	15	0	10
NON-NATIVE	35	0	30
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	5	0	5
NATIVE	0	0	0
NON-NATIVE	5	0	5
8235 WOOD TREATING			
TOTAL POPULATION	10	0	10
NATIVE	0	0	0
NON-NATIVE	10	0	10
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	20	0	20
NATIVE	0	0	0
NON-NATIVE	20	0	20
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	70	0	70
NATIVE	15	0	15
NON-NATIVE	55	0	55
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	40	0	40
NATIVE	15	0	15
NON-NATIVE	25	0	20

continued

MANITOBA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	MANITBA		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	560	45	600
NATIVE	65	0	65
NON-NATIVE	495	40	535
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	95	5	100
NATIVE	5	0	10
NON-NATIVE	90	5	95
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	35	0	35
NATIVE	0	0	0
NON-NATIVE	35	0	35
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	130	10	140
NATIVE	5	0	5
NON-NATIVE	125	10	135
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	35	10	40
NATIVE	5	0	5
NON-NATIVE	25	10	35
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	175	10	190
NATIVE	45	0	45
NON-NATIVE	135	10	145
8259 PULP & PAPERMAKING, NEC			
TOTAL	75	5	80
NATIVE	5	0	0
NON-NATIVE	75	5	80

Source: 1986 Census of Canada, Statistics Canada

ONTARIO
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	ONTARIO		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	9,525	905	10,430
NATIVE	715	85	795
NON-NATIVE	8,815	820	9,635
751 FORESTRY & LOGGING			
TOTAL POPULATION	9,530	900	10,430
NATIVE	710	80	795
NON-NATIVE	8,815	820	9,635
7510 FOREMAN/WOMAN			
TOTAL POPULATION	1,070	75	1,145
NATIVE	35	10	45
NON-NATIVE	1,035	65	1,100
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	545	105	650
NATIVE	20	5	20
NON-NATIVE	530	105	630
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	3,660	110	3,770
NATIVE	280	20	300
NON-NATIVE	3,380	85	3,465
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	285	45	330
NATIVE	10	0	10
NON-NATIVE	280	45	320
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	1,440	15	1,460
NATIVE	110	0	115
NON-NATIVE	1,330	15	1,345
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	1,690	520	2,205
NATIVE	155	45	200
NON-NATIVE	1,530	475	2,005
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	425	5	435
NATIVE	45	0	45
NON-NATIVE	380	5	385

continued

ONTARIO
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	ONTARIO		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	107,635	32,965	140,595
NATIVE	1,760	485	2,250
NON-NATIVE	105,870	32,470	138,345
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	5,295	730	6,025
NATIVE	230	80	315
NON-NATIVE	5,070	650	5,715
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	780	10	790
NATIVE	20	0	20
NON-NATIVE	755	10	765
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	1,000	60	1,060
NATIVE	45	0	40
NON-NATIVE	955	60	1,020
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	370	230	600
NATIVE	10	45	60
NON-NATIVE	355	180	540
8235 WOOD TREATING			
TOTAL POPULATION	235	45	290
NATIVE	5	5	10
NON-NATIVE	235	45	275
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	500	115	620
NATIVE	30	5	35
NON-NATIVE	470	110	585
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	1,605	190	1,795
NATIVE	95	0	95
NON-NATIVE	1,510	185	1,695
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	635	50	685
NATIVE	20	15	30
NON-NATIVE	615	35	650

continued

ONTARIO
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	ONTARIO		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	10,710	1,065	11,770
NATIVE	170	25	195
NON-NATIVE	10,535	1,040	11,575
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	1,535	45	1,585
NATIVE	10	0	10
NON-NATIVE	1,525	50	1,575
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	775	25	800
NATIVE	15	5	15
NON-NATIVE	760	20	785
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	2,485	195	2,685
NATIVE	35	5	45
NON-NATIVE	2,455	185	2,640
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	725	270	1,000
NATIVE	15	5	20
NON-NATIVE	715	270	975
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	2,925	190	3,115
NATIVE	60	0	60
NON-NATIVE	2,865	190	3,055
8259 PULP & PAPERMAKING, NEC			
TOTAL	1,975	290	2,260
NATIVE	30	10	35
NON-NATIVE	1,945	285	2,225

Source: 1986 Census of Canada, Statistics Canada

QUEBEC
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	QUEBEC		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	14,555	890	15,445
NATIVE	345	15	360
NON-NATIVE	14,210	875	15,085
751 FORESTRY & LOGGING			
TOTAL POPULATION	14,555	890	15,445
NATIVE	350	15	360
NON-NATIVE	14,210	875	15,085
7510 FOREMAN/WOMAN			
TOTAL POPULATION	1,490	65	1,555
NATIVE	20	0	20
NON-NATIVE	1,465	65	1,530
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	780	15	790
NATIVE	50	0	45
NON-NATIVE	735	10	745
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	5,895	75	5,970
NATIVE	120	5	120
NON-NATIVE	5,775	75	5,850
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	400	15	420
NATIVE	15	0	15
NON-NATIVE	390	20	405
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	1,965	30	1,995
NATIVE	35	0	35
NON-NATIVE	1,925	30	1,955
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	3,280	645	3,925
NATIVE	85	15	100
NON-NATIVE	3,190	635	3,825
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	155	15	165
NATIVE	0	0	0
NON-NATIVE	155	15	165

continued

QUEBEC
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	QUEBEC		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	99,910	22,745	122,655
NATIVE	855	220	1,080
NON-NATIVE	99,055	22,525	121,158
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	11,105	525	11,630
NATIVE	165	0	165
NON-NATIVE	10,940	525	11,465
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	1,150	30	1,185
NATIVE	20	0	20
NON-NATIVE	1,140	30	1,170
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	2,320	35	2,355
NATIVE	25	0	25
NON-NATIVE	2,300	35	2,330
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	325	70	395
NATIVE	15	0	15
NON-NATIVE	310	70	380
8235 WOOD TREATING			
TOTAL POPULATION	185	35	220
NATIVE	0	0	0
NON-NATIVE	185	35	225
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	1,495	150	1,640
NATIVE	20	0	20
NON-NATIVE	1,475	150	1,620
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	4,670	170	4,840
NATIVE	50	0	60
NON-NATIVE	4,605	170	4,775
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	560	20	575
NATIVE	0	0	0
NON-NATIVE	555	25	580

continued

QUEBEC
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	QUEBEC		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	17,290	865	18,155
NATIVE	120	20	135
NON-NATIVE	17,165	18,015	40,850
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	2,365	45	2,410
NATIVE	50	0	5
NON-NATIVE	2,360	45	2,410
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	640	35	675
NATIVE	10	0	10
NON-NATIVE	630	35	660
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	4,315	100	4,410
NATIVE	20	5	25
NON-NATIVE	4,290	95	4,385
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	1,190	160	1,350
NATIVE	5	5	10
NON-NATIVE	1,185	160	1,340
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	6,205	310	6,515
NATIVE	45	0	45
NON-NATIVE	6,160	310	6,470
8259 PULP & PAPERMAKING, NEC			
TOTAL	2,060	190	2,250
NATIVE	30	5	35
NON-NATIVE	2,025	185	2,215

Source: 1986 Census of Canada, Statistics Canada

NEW BRUNSWICK
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	NEW BRUNSWICK		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	3,565	705	4,265
NATIVE	40	0	40
NON-NATIVE	3,520	700	4,225
751 FORESTRY & LOGGING			
TOTAL POPULATION	3,560	700	4,265
NATIVE	40	5	45
NON-NATIVE	3,520	700	4,220
7510 FOREMAN/WOMAN			
TOTAL POPULATION	325	50	370
NATIVE	0	0	0
NON-NATIVE	325	50	370
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	355	50	415
NATIVE	0	0	0
NON-NATIVE	355	60	415
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	1,725	35	1,760
NATIVE	30	0	25
NON-NATIVE	1,695	40	1,730
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	110	10	115
NATIVE	0	0	0
NON-NATIVE	110	5	120
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	360	50,360	9,570
NATIVE	10	0	10
NON-NATIVE	345	5	350
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	530	505	1,035
NATIVE	0	0	0
NON-NATIVE	525	505	1,030
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	55	0	55
NATIVE	0	0	0
NON-NATIVE	55	0	55

continued

NEW BRUNSWICK
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	NEW BRUNSWICK		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	10,085	5,765	15,855
NATIVE	70	10	85
NON-NATIVE	10,015	5,760	15,775
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	1,710	45	1,760
NATIVE	25	0	25
NON-NATIVE	1,695	45	1,740
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	290	0	290
NATIVE	5	0	5
NON-NATIVE	285	0	285
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	370	10	385
NATIVE	0	0	0
NON-NATIVE	375	10	380
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	25	5	35
NATIVE	0	0	0
NON-NATIVE	25	5	30
8235 WOOD TREATING			
TOTAL POPULATION	20	0	20
NATIVE	0	0	0
NON-NATIVE	20	0	20
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	195	5	200
NATIVE	0	0	0
NON-NATIVE	195	5	200
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	550	20	570
NATIVE	10	0	5
NON-NATIVE	540	15	560
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	170	5	180
NATIVE	5	0	5
NON-NATIVE	165	5	170

continued

NEW BRUNSWICK
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	NEW BRUNSWICK		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	2,500	30	2,530
NATIVE	15	5	15
NON-NATIVE	2,485	25	2,515
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	290	0	285
NATIVE	5	0	5
NON-NATIVE	285	105	0
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	300	0	300
NATIVE	0	0	0
NON-NATIVE	300	0	300
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	485	5	490
NATIVE	0	0	0
NON-NATIVE	485	5	490
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	230	0	240
NATIVE	0	0	0
NON-NATIVE	230	10	245
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	590	0	590
NATIVE	5	0	5
NON-NATIVE	590	0	585
8259 PULP & PAPERMAKING, NEC			
TOTAL	510	10	525
NATIVE	5	5	5
NON-NATIVE	505	10	520

Source: 1986 Census of Canada, Statistics Canada

NOVA SCOTIA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	NOVA SCOTIA		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	3,775	240	4,020
NATIVE	65	0	75
NON-NATIVE	3,710	240	3,950
751 FORESTRY & LOGGING			
TOTAL POPULATION	3,780	240	4,015
NATIVE	70	0	70
NON-NATIVE	3,710	240	3,945
7510 FOREMAN/WOMAN			
TOTAL POPULATION	300	10	310
NATIVE	5	0	5
NON-NATIVE	295	10	310
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	195	25	215
NATIVE	0	0	0
NON-NATIVE	195	25	220
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	2,140	40	2,180
NATIVE	60	5	60
NON-NATIVE	2,085	40	2,125
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	40	5	50
NATIVE			
NON-NATIVE	40	5	45
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	325	0	325
NATIVE	5	0	5
NON-NATIVE	325	0	320
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	580	160	740
NATIVE	10	0	5
NON-NATIVE	575	160	735
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	115	0	120
NATIVE	0	0	0
NON-NATIVE	120	0	120

continued

NOVA SCOTIA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

OCCUPATION	NOVA SCOTIA		
	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	9,640	4,925	14,560
NATIVE	125	90	215
NON-NATIVE	9,525	4,840	14,345
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	770	10	785
NATIVE	0	0	0
NON-NATIVE	775	15	785
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	140	0	135
NATIVE	0	0	0
NON-NATIVE	140	0	135
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	250	0	250
NATIVE	0	0	0
NON-NATIVE	255	0	250
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	5	0	5
NATIVE	0	0	0
NON-NATIVE	5	0	5
8235 WOOD TREATING			
TOTAL POPULATION	25	0	25
NATIVE	0	0	0
NON-NATIVE	25	0	25
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	35	0	35
NATIVE	0	0	0
NON-NATIVE	35	0	35
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	200	0	200
NATIVE	0	0	0
NON-NATIVE	200	0	200
8239 WOOD PROCESSING EXC. PULP & PAPER			
TOTAL POPULATION	100	10	115
NATIVE	0	0	0
NON-NATIVE	105	15	120

continued

NOVA SCOTIA
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	NOVA SCOTIA		
OCCUPATION			
825 PULP & PAPER MAKING & REL	Male	Female	Total
TOTAL POPULATION	1,095	85	1,180
NATIVE	30	5	40
NON-NATIVE	1,060	80	1,140
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	125	0	125
NATIVE	0	0	0
NON-NATIVE	125	0	125
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	95	20	110
NATIVE	5	0	5
NON-NATIVE	90	15	105
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	130	10	140
NATIVE	0	0	0
NON-NATIVE	130	10	140
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	115	30	150
NATIVE	0	5	5
NON-NATIVE	120	130	145
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	290	15	305
NATIVE	20	0	15
NON-NATIVE	270	15	285
8259 PULP & PAPERMAKING			
TOTAL	310	15	320
NATIVE	0	0	0
NON-NATIVE	305	10	310

Source: 1986 Census of Canada, Statistics Canada

PRINCE EDWARD ISLAND
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	PRINCE EDWARD ISLE.		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	195	70	265
NATIVE	5	0	10
NON-NATIVE	190	70	255
751 FORESTRY & LOGGING			
TOTAL POPULATION	195	65	260
NATIVE	10	0	5
NON-NATIVE	190	65	255
7510 FOREMAN/WOMAN			
TOTAL POPULATION	35	15	50
NATIVE	0	0	0
NON-NATIVE	30	15	50
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	5	0	5
NATIVE	0	0	0
NON-NATIVE	5	0	5
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	75	5	80
NATIVE	0	0	0
NON-NATIVE	75	5	80
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	10	0	10
NATIVE	0	0	0
NON-NATIVE	10	0	10
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	60	50	105
NATIVE	5	0	5
NON-NATIVE	55	45	100
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	5	0	5
NATIVE	0	0	0
NON-NATIVE	5	0	5

continued

PRINCE EDWARD ISLAND
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	PRINCE EDWARD ISLE		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	1,405	1,885	3,285
NATIVE	5	20	25
NON-NATIVE	1,400	1,860	3,265
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	130	5	135
NATIVE	0	0	0
NON-NATIVE	130	5	135
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	25	0	25
NATIVE	0	0	0
NON-NATIVE	25	0	25
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	10	0	10
NATIVE	0	0	0
NON-NATIVE	10	0	10
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
8235 WOOD TREATING			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	5	0	5
NATIVE	0	0	0
NON-NATIVE	5	0	5
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	60	0	65
NATIVE	0	0	0
NON-NATIVE	60	5	65
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	20	0	25
NATIVE	0	0	0
NON-NATIVE	25	0	20

continued

PRINCE EDWARD ISLAND
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	PRINCE EDWARD ISLE.		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	0	0	0
NATIVE			
NON-NATIVE			
8259 PULP & PAPERMAKING, NEC			
TOTAL	0	0	0
NATIVE			
NON-NATIVE			

Source: 1986 Census of Canada, Statistics Canada

NEWFOUNDLAND
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION, NATIVE STATUS			
	NEWFOUNDLAND		
OCCUPATION	Male	Female	Total
MAJ GRP 75 FORESTRY & LOGGING			
TOTAL POPULATION	1,270	60	1,330
NATIVE	40	5	45
NON-NATIVE	1,225	55	1,280
751 FORESTRY & LOGGING			
TOTAL POPULATION	1,270	55	1,330
NATIVE	40	0	45
NON-NATIVE	1,225	60	1,285
7510 FOREMAN/WOMAN			
TOTAL POPULATION	170	0	170
NATIVE	5	0	5
NON-NATIVE	160	0	160
7511 FORESTRY CONSERVATION			
TOTAL POPULATION	165	5	170
NATIVE	5	0	0
NON-NATIVE	165	5	165
7513 TIMBER CUTTING AND REL			
TOTAL POPULATION	685	0	690
NATIVE	20	0	20
NON-NATIVE	665	0	570
7516 LOG INSPECTION, GRADING & REL			
TOTAL POPULATION	20	5	25
NATIVE	0	0	0
NON-NATIVE	20	5	25
7517 LOG HOISTING, SORTING, MOVING & REL			
TOTAL POPULATION	85	0	85
NATIVE	15	0	10
NON-NATIVE	70	0	70
7518 LABOURING & OTHER ELEMENTARY WORK, FORESTRY			
TOTAL POPULATION	55	45	100
NATIVE	0	0	0
NON-NATIVE	55	45	100
7519 OTHER FORESTRY & LOGGING			
TOTAL POPULATION	60	0	60
NATIVE	5	0	5
NON-NATIVE	60	0	60

continued

NEWFOUNDLAND
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	NEWFOUNDLAND		
OCCUPATION	Male	Female	Total
MAJ GRP 81/82 PROCESSING			
TOTAL POPULATION	7,895	6,555	14,450
NATIVE	90	50	140
NON-NATIVE	7,805	6,505	14,310
823 WOOD PROCESSING EXC PULP & PAPER MAKING			
TOTAL POPULATION	290	20	310
NATIVE	5	0	5
NON-NATIVE	280	20	305
8230 FOREMEN/WOMEN, WOOD PROCESSING			
TOTAL POPULATION	60	0	65
NATIVE	5	0	5
NON-NATIVE	55	0	55
8231 SAWMILL SAWYERS & REL			
TOTAL POPULATION	100	0	100
NATIVE	0	0	0
NON-NATIVE	100	5	100
8233 PLYWOOD MAKING & REL			
TOTAL POPULATION	10	0	10
NATIVE	0	0	0
NON-NATIVE	5	0	10
8235 WOOD TREATING			
TOTAL POPULATION	0	0	0
NATIVE	0	0	0
NON-NATIVE	0	0	0
8236 INSPECTING,TESTING, ETC.			
TOTAL POPULATION	5	0	5
NATIVE	0	0	0
NON-NATIVE	5	0	5
8238 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	55	10	70
NATIVE	0	0	0
NON-NATIVE	55	10	70
8239 WOOD PROCESSING EXC. PULP & PAPER, NEC			
TOTAL POPULATION	55	5	60
NATIVE	0	0	0
NON-NATIVE	55	5	60

continued

NEWFOUNDLAND
EMPLOYED LABOUR FORCE BY DETAILED OCCUPATION AND NATIVE STATUS

EMPLOYED LABOUR FORCE BY OCCUPATION	NEWFOUNDLAND		
OCCUPATION	Male	Female	Total
825 PULP & PAPER MAKING & REL			
TOTAL POPULATION	695	10	710
NATIVE	5	0	5
NON-NATIVE	690	5	700
8250 FOREMEN/WOMEN, PULP & PAPER MAKING			
TOTAL POPULATION	105	0	110
NATIVE	0	0	0
NON-NATIVE	110	0	110
8251 CELLULOSE PULP PREPARING			
TOTAL POPULATION	55	0	55
NATIVE	0	0	0
NON-NATIVE	55	0	55
8253 PAPERMAKING & FINISHING			
TOTAL POPULATION	185	0	185
NATIVE	0	0	0
NON-NATIVE	185	0	185
8256 INSPECTING, TESTING, ETC.			
TOTAL POPULATION	50	0	50
NATIVE	0	0	0
NON-NATIVE	50	0	50
8258 LABOURING & ELEMENTARY WORK			
TOTAL POPULATION	180	5	185
NATIVE	5	0	5
NON-NATIVE	175	5	175
8259 PULP & PAPERMAKING, NEC			
TOTAL	105	5	110
NATIVE	0	0	0
NON-NATIVE	105	0	110

Source: 1986 Census of Canada, Statistics Canada

Appendix 3
Bands Participating in FRDA

INDIAN BANDS PARTICIPATING IN FRDA PROGRAM

	FOREST AREA
BAND NAME	**Indian Lands ha**
Newfoundland	**240**
Miawpuket	240
Nova Scotia	**8131**
Pictou Landing	215
Annapolis Valley	97
Acadia	702
Shubenacadie	1832
Afton	82
Bear River	639
Membertou	178
Chapel Island	178
Millbrook	236
Eskasoni	2449
Horton	84
Wagmatcook	181
Whycocomagh	448
Total area under FRDA's	**7321**
New Brunswick	**13128**
Buctouche	41
Eeel River	394
Eel Ground	2335
Edmunston	138
Tobique	2083
Saint Mary's	83
Pabineau	350
Kingsclear	308
Red Bank	3304
Big Cove	1214
Woodstock	61

	FOREST AREA
BAND NAME	**Indian Lands ha**
Prince Edward Island	**522**
Lennox Island	405
Total Area Under FRDAs	**405**
Quebec (incl. 1A &1B lands)	**298199**
Micmacs of Gesgipegiag	139
Mistassini	105620
Lac Simon	238
Restigouche	3163
Montagnais de Vashai & Ma	353
River Desert	15140
Kanesatake	189
Odanak	451
Eastmain	9670
Manowan	723
Obedjiwan	802
Chisasibi	32780
Montagnais du Lac Saint Jean J	673
Kahnawake	298
Kipawa	11
Kahnawake/Kanesatake	7149
Betsiamites	19020
Nemaska	5844
Abitibiwinni	40
Viger	161
Timiskaming	1019
Wemindji	17528
Waswanipi	51786
Waskaganish	12235
Weymontachie	2889
Total area under FRDAs	**287921**

INDIAN BANDS PARTICIPATING IN FRDA PROGRAM

	FOREST AREA
BAND	**Indian Lands ha**
Ontario	**393777**
Islington	5873
Sucker Creek-O	477
Chapleau Ojibway	794
Batchewana	1916
Brunswick House	7276
Spanish River	6686
Dokis	11739
Grassy Narrows	3417
Eagle Lake	3201
Six Nations	5970
Fort William	5175
Caribou Lake	4678
Cat Lake	138
Aroland	0
Curve Lake	466
Long Lake 77	5750
Alderville	474
Lac Seul	20652
Constance Lake	3098
Mattagami	4236
Magnetawan	1768
Matachewan	2873
Couchiching	4087
Garden River	12441
Big Grassy	4818
Mississauga	1106
Chapleau Cree	51
Fort Hope	10425
Cockburn Island	794
Wabigoon	3378
Beausoleil	4709
Sheshegwaning	1760
Munceys of Thames	364
Shawanaga	3192
Naicatchewenin	1444
Wahgoshig	6202
New Post	1715
Ont. Cont, next Col	

	FOREST AREA
BAND	**Indian Lands ha**
Ont. Cont.	
Nicickousemenecaning	2640
Nipissing	18634
Oneidas of Thames	530
Pikangikum	1446
Northwest Angle 37	4012
Red Rock	170
Rat Portage	1986
Rainy River	2112
Serpent River	6745
Seine River	4520
Wikwemikong	23774
Whitefish Lake-0	14809
West Bay	2423
Whitefish River	2403
Washagamis Bay	1510
Total Area Under FRDAs	**240957**
Manitoba	**98492**
Chemawawin	3150
Moose Lake	1669
Mathias Colomb	7419
Shoal River	1067
The Pas - M	3181
Dakota Tipi	-1
Indian Birch	31
Dakota Plains	91
Fort Alexander	5032
Grand Rapids	828
Total Area Under FRDAs	**22467**
Saskatchewan	**243040**
Red Earth	993
Peter Ballantyne	8541
Mistawasis	5018
Lac La Ronge	22585
English River	6125
Thunderchild	3620
Canoe Lake	5815
Sask. Cont. next page	

INDIAN BANDS PARTICIPATING IN FRDA PROGRAM

	FOREST AREA
BAND	Indian Lands ha
Big River	7802
Big C	7621
William Charles	4275
Waterhen	4899
Total Area Under FRDAs	**77294**
Alberta	**177690**
O'Chiese	10982
Peigan	2646
Alexander	2066
Fort McMurray	2205
Bigstone Cree	12470
Stoney	22393
Sturgeon Lake - A	8389
Sunchild Cree	4285
Blood	1457
Little Red River	13908
Sarcee	15584
Driftpile	3492
Heart Lake	3481
Beaver Lake	4337
Swan River	1591
Total Area Under FRDAs	119209
British Columbia	**155917**
Lower Similkameen	6299
Kwakiutl	249
Kitasoo	366
Uchucklesaht	138
Gitsegukla	1052
Skumlasph 16	435
Kitsumkalum	276
Williams Lake	695
Klahoose	988
Tsawataineuk	192
Toquaht	189
Kwa-wa-aineuk	203
Tobacco Plains	2163
BC cont. next col.	

	FOREST AREA
BAND	**Indian Lands ha**
Tlowitsis-Mumtagila	160
Westbank	758
West Moberly Lake	1627
Upper Nicola	2887
Kwiakah	61
Takla Lake	440
Kwicksutaineuk	165
Kyoquot	192
Tl'azt'en Nations (Stu-Tr)	1661
Lakahahmen	109
Ahousaht	321
Lakalzap	907
Lake Babine	898
Alkali Lake	1937
Anderson Lake	681
Lillooet	428
Boothroyd	725
Stony Creek	631
Bridge River	1562
Lower Nicola	2931
Burns Lake	0
Ulkatcho	1619
Campbell River	57
Lyackson	658
Canoe Creek	3662
Lytton	3945
Mamalelegala-qwu`qwa`sot`	209
Massat	785
Tla-o-qui-aht	75
Coldwater	1633
Comox	74
Metlakatla	231
Moricetown	511
Mount Currie	1506
Ditidaht	522
Mowachaht	105
Douglas	413
Fort Nelson	5606
Fountain	654
BC cont. next page	

INDIAN BANDS PARTICIPATING IN FRDA PROGRAM

BC CONT.	
Nazko	1095
Gitanmaax	2235
Necoslie	597
Nee-tahi-Buhn	203
Nemaiah Valley	459
Neskonlith	1415
Nicomen	905
Chawathil	400
Nimkish	382
Iskut	33
Nooaitch	1285
North Thompson	536
Kincolith	1283
Nuchatlaht	50
Ucluelet	94
Tlatlasikwala	2541
Gwa`sala-kakwaxda`xw	674
Ohiaht	662
Okanagan	3342
Toosey	660
Opetchesaht	85
Upper Similkameen	705
Tahltan	1032
Osoyoos	3602
Adams Lake	1854
Oweekend	642
Alexis Creek	1637
Pacheenaht	96
Ashcroft	321
Bonaparte	530
Broman Lake	194
Canim Lake	951
Penticton	12327
Cayoose Creek	474
Peters	128
Cheslatta	830
Quatsino	253
Fort George	101
Red Bluff	486
Fraser Lake	177

Samahquam	141
Glen Vowell	279
Saulteau	2469
Hartly Bay	131
Scowlitz	173
Homalco	527
Seabird Island	531
Kamloops	3944
Sechelt	781
Kispiox	785
Shackan	2896
Tanakteuk	161
Sheshaht	90
Bella Coola	1511
Siska	206
Chehalis	686
Cook's Ferry	617
Skidegate	555
Ehattesaht	49
Skookum Chuck	608
Gitlakdamix	258
Hesquiaht	165
Katzie	236
Sliammon	1507
Boston Bar	360
Soda Creek	952
Whispering Pines	166
Ingenika	63
Soowahlie	192
Stone	1063
Spallumcheen	1724
Gitwinksihlkw	532
Anahan	1436
Skeetchestn	2187
Spuzzum	360
Squamish	1061
St. Mary's	1878
Stellaquo	319
Total Area Under FRDAs	**131466**
Source: Forestry Canada	

Appendix 4
Aboriginal Forestry Companies

British Columbia

Forest Products:

Teesle Forest Products Ltd.	Fort St. James

Forestry:

Cariboo Indian Enterprise	Williams Lake
Chu Chua Logging & Silviculture	Barriere
Eh Cho Dene Enterprises	Fort Nelson
Similkameen Band Forestry	Keremeos
Siwash Silviculture Ltd.	Lytton

Logging & Skidding Operations:

Al Gagnon & Sons	Moricetown
Burns Lake Native Logging	Burns Lake
Camsell Lake Contracting	Fort St. James
Chu Chua Logging & Silviculture	Barriere
Fus Fus Contracting	McLeod Lake
Gerald Galligos Logging	Powell River
Gitanyow Contracting	Kitwanga
John M. Alec Contracting	Fort St. James
Kootenai Trucking	Fernie
Nazko Logging	Quesnel
Patrick Pierre Contracting	Smithers
R.A.C. Falling	Hope
Sekani Logging	McLeod Lake
Shass Mountain Contracting	Fort St. James
Tobacco Plains Logging	Grasmere
William & Marion Gravelle Logging	Fernie
Zaul Zap Logging	Terrace
Zaul Zap Industries	Canyon City

Lumber:

Interpac Log & Lumber	Vancouver
Sumas Cedar Supply	Abbottsford
Sumas Log Sort	Sardis

Sawmills:

Bella Coola Sawmill	
Esket Sawmills	Alkai Lake
Esket Wood Products	Williams Lake
Kitasoo Band Sawmill	Klemtu
Kitwanga Sawmill	Kitwanga
Khay Forest Products	Moricetown
Lax Kw'alaams Sawmill	Port Simpson
Murray Elkins Contracting	Alexis Creek

Teeslee Forest Products	Fort St. James
Silviculture:	
Siwash Silviculture	Lytton
Tree Farms:	
Jack Thompson Contracting	Port Alberni
Tanizul Timber Ltd.	Fort St. James
Woodlot Operations:	
Glen Vowell Logging Operations	Hazelton

Alberta

Logging and Skidding Operations:	
Augur Logging	Wabasca
Little Red River Band	High Level
Sewapagaham J.B. Logging Co.	Paddle Prairie
Lumber:	
Samson Lumber	Hobbema
Sawmills:	
Kayeeyew Forest Industries	Atikameg

Saskatchewan

Forest Products:	
NorSask Forest Products	Meadow Lake
Forestry:	
Chitek Lake Development Corp.	Chitek Lake
Deschambault Lake Forestry	Pelican Narrows
Ilex Resource Development Corp.	Ile A La Crosse
Montreal Lake Band	Montreal Lake
Northern Fencer	Meadow Lake
Land Clearing:	
Tandem Land Development Corp.	Balcarres
Ivan Thomas	Cudworth
Logging and Skidding Operations:	
Anderson's Logging	Green Lake
Angus Industries	Turtleford

Louis Badger	Prince Albert
Harry Bill	Leoville
Jacob Bill & Sons Logging	Leoville
Canoe Lake Sawmill	Canoe Narrows
Alvin Fineday	Spiritwood
Guiboche Logging	Hudson Bay
Kitsaki Development Corporation	La Ronge
Kyplain Contracting	Ile A La Crosse
John Masuskapoe	Shellbrook
Montreal Lake Enterprise	Montreal Lake
George Netmaker	Lloydminster
Paul's Logging	Livelong
R. & Y. Holdings Ltd.	Green Lake
Andrew Thomas Logging	Spiritwood

Lumber:

Cliff's Service Lumber	Leask

Pulpwood:

Calvin Thomas	Shellbrook
Fred Thomas	Shellbrook
Leonard Thomas	Leoville
Sam Thomas	Shellbrook

Sawmills:

B. & A. Milling	Chitek Lake
Buffalo River Band Sawmill	Dillon
Canoe Lake Sawmill	Canoe Narrows
Fond Du Lake Indian Band	Fond Du Lake
Mistawasis Logging & Sawmill	Leask
Peter Ballantyne Band Sawmill	Pelican Narrows
Warrior Lumber Mill	Dillon
Waterhen Sawmill	Waterhen Lake

Woodlot Operators:

Ni-Hethow Developments	Pelican Narrows

Wood Preservers:

Pilon Wood Preservers	Prince Albert
Vernette Wood Preservers	Spruce Home

Manitoba

Consultants:

George Kemp Logging Consultant	Winnipeg

Firewood:

Braun's Firewood Sales	Thompson

Forestry:

Nelson House Forest Industries	Nelson House

Logging and Skidding Operations:

Channel Area Loggers	Berens River
Delmar Crate	Koostatak
Fisher River Loggers	Koostatak
Langford Guimond	Pine Falls
David Kirkness	Koostatak
Fred Kirkness	Koostatak
Little Black River Skidder	O'Hanley
William Murdoch	Koostatak

Lumber:

McDiarmid Lumber	Winnipeg
Springhill Lumber Wholesale	Winnipeg

Pulp Cutting:

William Bird Pulpcutting	O'Hanley

Wood Supply:

Charles Queskekapow Wood Supply	Norway House

Ontario

Firewood:

Cochrane Mistik Wood Products Inc.	Cochrane

Forest Products:

Lajambe Forest Products	Garden River

Logging and Skidding Operations:

Adams Logging	Fort Frances
Patrick Bouchard Logging	Gull Bay
Peter Collins Logging	Thunder Bay
Stan Collins Logging	Thunder Bay
Grassy Narrows Logging	Grassy Narrows
Kiashke River Development Inc.	Armstrong
Northwest Angle 33 Logging	Angle Inlet
Marcel Pelletier Logging	Thunder Bay
Pic Heron Bay Development Corp.	Heron Bay
Strangecoming Band	Fort Frances

Wabigoon Logging	Dryden
Whitesand Development Corp.	Armstrong
William Wilson Logging	Gull Bay

Quebec

Foresco	Longueuil
A-Pit-See-Win Corp.	Waswanipi
Mishtuk Corp.	Waswanipi
Les enterprises forestieres Ushkuit Inc.	Sept-Iles
Co-op Agro-forestiere Pointe Bleue	Pointe Bleue
Eenatuk Forestry Corp.	Mistassini Lake
Societe d'amenagement et de developpement forestier de Betsiamites	Betsiamites

Appendix 5
Yukon Labour Market Review Abstract

The following is an abstract from the Yukon Labour Market Review, April-October 1991, Whitehorse Canada Employment Centre.

Watson Lake Sawmill

The proposed sale of the failed Yukon Forest Products Ltd. sawmill in Watson Lake continues to generate controversy. Earlier this year, the mill's receiver called for bids on the aging mill and its potentially lucrative tenyear Timber Harvest Agreement (THA). Since then, Kaska Forest Products Ltd. of Watson Lake was the successful bidder and has agreed to pay $750,000 for the mill. The proposed sale would create 85 permanent jobs. Kaska's bid has been made possible with financial backing from Rayonier Canada (a division of the American conglomerate ITT). Rayonier is an active player in the forest products market in Alaska and has worked with Native regional development corporations there.

Originally owned by Yukon Pacific Forest Products, the bankrupt mill was initially re-started by a consortium under the name Yukon Forest Products Ltd. involving the Liard Indian Band, the Yukon Indian Development Corporation and the government-owned Yukon Development Corporation. The operation ultimately proved a failure and led to an $11M loss for the Yukon government in its first attempt to directly participate in Yukon's resource economy. The newly formed Kaska Forest Products Ltd. includes at least one former consortium partner, the Liard Indian Band.

In a recent development, Kaska Forest Products Ltd. has made its offer conditional upon the Minister for the Department of Indian Affairs and Northern Development (DIAND) approving the export of 460,000 cubic metres of raw logs over eight years. Under the terms of Kaska Forest Products Ltd. proposed business plan, $5 per cubic metre for every log exported would be used to finance the development of a small-log mill. Another $5 per cubic metre will be put into a fund for silviculture. Kaska Forest Products Ltd. plans to export 460,000 cubic metres over eight years to overseas markets focusing on Japan. Rayonier Canada, through its parent company Rayonier ITT, will assist in the mill and market development aspects of the operation.

Under the terms of the Kaska bid, the DIAND Minister must decide whether to transfer the THA to Kaska Forest Products Ltd. and also

whether to agree to the proposed log export. The DIAND Minister's approval is required for the exort of raw logs since the proposed timber cut falls under the terms of DIAND's won Timber Harvest Area authority, rather than a timber permit under the federal ***Territorial Lands Act***. In the absence of the THA, raw logs could have been exported at anytime by simply applying to the federal External affairs Department for an export permit. The only justification required for raw log export under the terms and conditions of a permit is that no mill in the vicinity be capable of taking on the timber-processing work.

DIAND officials say that if Kaska's proposal fails there is a chance the THA for the Upper Liard area, covering extensive stands of old growth spruce, may be dismantled. Without a THA, timber could be selectively logged and exported by outside operators without conditions, such as reforestation required under a THA. A Prince George forest company has already expressed an interest in acquiring timber permits outside the Upper Liard THA and others may soon follow suit.

There is currently sufficient yield available in the Liard River basin area to support 2 - 3 small log mills eventually, operating at a cut rate of 100,000 cubic metres per year according to DIAND officials. The key aspect in the current bid by Kaska Forest Products Ltd. for the Upper Liard THA is the company's commitment to develop a modern, high-tech small-log mill together with a specialty log export operation. DIAND is currently undertaking a socioeconomic environmental impact assessment of the proposed operation.

Wildfire Suppression

Wildfire suppression activity is an important feature of Yukon seasonal summer employment. Wildfires are fires in forest or brush started by lightning strikes or by human carelessness, sometimes with criminal intent. In 1991 the wage bill for extra firefighter support was almost $700,000. These wages are paid on top of regular salaries paid to federal Forest Resources management and seasonal fire staff workers. Seasonal staff include contract employees flying air tanker support and fire crews from other jurisdictions brought in to fight fires on an emergency basis.

In 1991, $6.2M was spent fighting 187 wildfires. A total of 132,731 hectares were burned. Fire fighting in Yukon takes place on a priority

zone basis. Areas around communities where life and property are at greatest risk, receive the highest level of protection. Other areas containing prime timber are also part of the priority zone system. Wildfires ouside priority zones are kept under observation.

In 1991, the most expensive fire occurred at the Dempster Highway cut-off near Dawson city. Dawson 21 (wildfires are given both location and numeric designations) cost $1.3M to suppress. The Heckell Hill fire near Whitehorse cost $488,000. Potentially the most dangerous fire of the year, the low-cost of the Heckell Hill fire was due to Forest Resources' decision not to use air support because of the type of fire.

By comparison, Watson Lake 5 and Watson Lake 15, both which burned in prime timber, cost $605,000 and $649,000 respectively. In 1991, total cost for fire suppression was only slightly less than the record $6.6M spent in 1990. Last year the Mayo 5 wildfire alone cost $3.5M."

Appendix 6

Quebec Aboriginal Communities Active in Forestry

Abitibiwini (Amos)

Abitibiwini Council,
P.O.Box 36 - Pikogan
Amos, Quebec
J9T 3A3

Telephone: (819) 732- 6591

Experience: The community has executed forestry work in experimental forestry " clearing " practices to encourage regeneration of existing forests.

Management: The accounting and general administration are viewed as good. It should be considered that a technician in forest management practices be made available to the community so as to perfect the quality of their work force and ameliorate their quality of product.

Comments: It would be seen that if the technical expertise were made available to the community, the effectiveness of their work force would greatly ameliorate; however, it would also be seen as beneficial if they had outside facilitators / trainers to motivate the younger generation.

Betsiamites

Betsiamites Council
20, Menshun Street,
P.O.Box 40,
Betsiamites, Quebec
G0H 1B0

Telephone: (418) 567-2265

Experience: The community owns its own forestry company which exploits a potential forest reserve of approximately one hundred (100) square miles. They presently are practicing sylviculture and owned a small sawmill. They have prepared a land use plan for the community. They have approximately one hundred (100) workers available in the forestry domain. The community wants to expand its operations to other forest lands if it is permitted to do so.

Management: From the governmental sources, the administration is considered excellent.

Betsiamites (cont'n)

The human resources , with the years of experience, are well qualified to do sylviculture works, forest exploitation, drive heavy machinery or fight forest fires.

Equipment: The community owns various equipment which ranges from trucks, tractors, and light equipment used in land clearing.

Comments: The community has a high level of qualified human resources who have undergone training programs. Motivation techniques should be encouraged to press the younger generation to become qualified technicians in forestry.

Nation Council of the Atikamekw-Sipi

Nation Council of the Atikamekw-Sipi
317 St-Joseph Street,
P.O.Box 848,
La Tuque, Quebec
G9X 3P6

Telephone: (819) 523-6153

Experience: The Atikamekw have their own forest organization. They have conducted a land use plan for the lands they own. Furthermore, they are complimented by two (2) forestry engineers , two (2 0 forestry technicians and forest agent protector. The organization has specialized in the planting of trees and sylvi-culture works. They presently have a work force close to one hundred and fifty (150) individuals.

Management: The quality of the management is considered as excellent.

Equipment: The organization has all the equipment to do sylvi-culture works which is complimented with the equipment of each local community.

Comments: There is high youth population among the Atikamekw. The organization is also seeking joint ventures in the domain of re-forestation and new technologies in the green house such as bio-mass and tissue (medicinal plants) techniques.

Kahnawake and Kanestake

Mohawk Council of Kahnawake P.O.Box 720, Kahnawake, Quebec J0L 1B0		Mohawk Council of Kanestake P.O.Box 607, Kanestake, Quebec J0N 1E0
Telephone:	(514) 632-7500	(514) 479-8373
Experience:	The communities, following the development of a work plan on their forest lands situated in Doncaster which is approximately 60 kilometers north of Montreal, are maintaining, selective cutting, clearing and planting the forest lands. The lands are also used to gather medicinal plants and wild berries.	
Management:	The quality of the management is considered as excellent and the human resources are available, well-trained and devoted.	
Equipment:	The Councils owned all the forestry equipment necessary for forestry operations.	
Comment:	To date, the Councils have concentrated their efforts on working on their lands; but, members of the communities are seriously considering venturing into public lands to conduct sylvi-culture works.	

Kipawa - Lac Rapide - Grand Lac Victoria

Note: To date these three communities have not manifested great interest in sylvi-culture nor in forestry operations.

The populations of the communities are quite young and the majority of the populations practice traditional activities.

It would seem that the forest industry has done substantial damage to their traditional hunting and gathering territories.

New agreements such as with Barrier Lake are closely examined as potential alternatives to the traditional way of life and an escape from the welfare system of the reserve.

Lac Simon

Council of Lac Simon
Lac Simon, Quebec
J0Y 3M0

Telephone: (819) 736-2351
(819) 736-3161

Experience: The Council and an entrepreneur, together, share the market of forest operations and sylvi-culture.

Management: Both are considered as excellent managers. The quality of the human resources (approximately seventy-five in number) are experienced and quite available to work on a contract basis.

Comments: The proximity of large forest operations and the practice of traditional activities of hunting and gathering makes the people want to seek alternatives to clear-cutting techniques such wilderness experience tourism and sustainable forestry which will compliment their traditional values.
The younger generation are very environmental conscience.

Les Escoumins

Montagnais Council of Les Escoumins
27 de la Reserve,
P.O. Box 820,
Les Escoumins, Quebec
G0T 1K0

Telephone: (418) 233-2509

Experience: The Council has conducted line cutting operations for Hydro-Quebec
Approximately forty workers are experienced and available to work on a contract basis in forestry operations. They are also in the preservation of the forests due to the fact that they own tourist camps.

Management: The Council has gain the respect in their management skills. The human resources are considered reliable.

Comments: Human resource development remains a high priority. There are even discussions to joint venture with other communities to succeed in obtaining contracts.

Maniwaki

River Desert Band Council
P.O. Box 309,
Maniwaki, Quebec
J9E 3C9

Telephone: (819) 449-5170

Experience: To date, the Council has carried out works in the commercial market with a saw-mill and sylviculture fields. They are have a forestry engineer to plan their land use studies and help the business expand. Currently, they are seeking to expand their operations into the public land regime.

Management: The administration is considered as excellent with approximately one hundred (100) workers with years of experience and reknown as being reliable.

Equipment: All the forestry equipment in sylviculture and forest operations are available within the community.

Comments: Due to the forest industry market and the need to create employment, the Council has requested to expand their operations unto public lands. It would seem that a political pressure is being exercised to negotiate this expansion with respect given to land claim issues.

Maria

MicMacs of Maria Band Council
P.O. Box 368
Maria, Quebec
G0C 1Y0

Telephone: (418) 759-3441

Experience: The Council has had projects in the forest industry. They have had little experience in land management planning and sylviculture.

Management: According to an inquiry, the Council is respected for its management techniques and has a semi-qualified work force.

Comments: The Council has expressed a serious desire to obtain training programs for its work force to expand into resource management, forest conservation and sylviculture works.

Mistissini

Mistissini Council
Mistassini Lake,
Baie du Poste, via Chibougamau, Quebec
G0W 1C0

Telephone: (418) 923-3253

Experience: The Council has proceeded for forest operations on and off Category 1-A lands. It has carried out sylviculture works also. They have numerous entrepreneurs who have machinery to work in forest operations. They have also conducted a land use study which provides for respect of the traditional activities of hunting and gathering.

Management: The Council has earned the reputation of being excellent managers and administrators. There work force are qualified as excellent.

Equipment: The Council as well as entrepreneurs are well equipped to carry out forestry operations as well as sylviculture works.

Comment: The Council is well structured and have done joint ventures with private enterprise in the forest industry. The authorities also respect the opinion of the members of the community in their forestry operations.

Odanak

Band Council of Odanak
58 Wabanaki Street,
Odanak, Quebec
J0G 1H0

Telephone: (514) 568-2810

Experience: The Council owns one thousand two hundred (1,200) acres of forest. With the help of a technician from the federal government, they have conducted works to preserve their forest through a land use study.

Management: The administrators are respected for they way they manage their projects. Due to the small population on reserve, no ambitious plans have been promoted.

Comments: Many of the available human resources have left the reserve to seek work in the U.S.A. and elsewhere. One particular note is that the community is reputed as being excellent basket makers and carvers.

Pointe Bleue Mashteuiatsh

Montagnais Council of Lake St-John
151 Ouiatchouan Street,
Pointe Bleue, Mashteuiatch, Quebec
G0W 2H0

Telephone: (418) 275-2473

Experience: The members of the community are well experienced in forest management and forest operations. Numerous entrepreneurs have their machinery and companies working off public lands acting as contractors. The Council encouraged a cooperative saw-mill so as to create employment.

Management: The members of the community are well educated in all spheres of resource management, forestry operations and conservation of the forest. The administration is divided up in various departments which must work in consensus fashion. The community is well endowed with engineers, technicians and other professional human resources. Furthermore, the work force has accumulated vast years of experience in all aspects of forestry.

Comments: Because of the fact that so qualified human resources are presently available and the proximity of natural resources, the community is but waiting for new challenges in implementation of human resource development programs, resource management training and forest conservation for the community members who continue to practice traditional activities.

Restigouche

Restigouche Band Council
17 Riverside West,
Restigouche, Quebec
G0C 2R0

Telephone: (418) 788-2904

Experience: For nine (9) years, the Council has implemented a sylviculture program to preserve their forest. Entrepreneurs have been involved in forestry operations for decades.

Management: The administration has acquired a good reputation in business development and the community members need opportunities to create employment.

Comments: Should a comprehensive human resource development plan be developed, resource management, forestry and tourism would be encouraged.

Timiskaming (Notre Dame du Nord & Winneway (Long Point)

Long Point Band Council
Winniway River
Timiskaming Band Council
P.O. Box 336
Notre Dame du Nord, Quebec
J0Z 3B0

Telephone: (819) 723-2335

Experience: Both communities have regrouped their efforts in a cooperative mechanism. Many of the community members have acquired good experience in the forestry operations.

Management: The cooperative is well respected for their sylviculture works and the administration is considered good.

Comments: Both communities would welcome a human resource development plan which trains their members to expand their horizons beyond planting and cutting trees.

Uashat (sept-Iles) Maliotenam

Montagnais Council of Uashat & Maliotenam
1089 Dequen,
P.O. Box 8000,
Sept-Iles, Quebec
G4R 4L9

Telephone: (418) 962-0327

Experience: The Council has established a business in forestry operations and sylviculture for the community members. The Council takes special care to preserve their traditional way of life of hunting and gathering.

Management: The administration has a reputation for promoting pilot projects for the benefit of the community members. Over the years, the administration has acquired a good, sound reputation as business managers.

Comments: Their is a large population basin within the two (2) communities which is young and dynamic. Resource management and traditional activities must coincide and adjust to one another. The community would welcome training of new technology and new sciences in forestry.

Waswanipi

Waswanip Council
Diom Blacksmith Building,
Waswanipi, Quebec
J0Y 3C0

Telephone: (819) 753-2587

Experience: The Council has established an enterprise with the object of being in forestry operations and sylviculture. Over the years, local entrepreneurs have acquired their own machinery and seek contract work with the Council or private enterprise. The Council took special precautions to include in their development plan, comprehensive measures to preserve their traditional way of life of hunting and gathering. The community members are consulted in any major development project which is being promote; and, it is the community members who have the final say if the project goes ahead.

Management: Over the years, the personnel have had the opportunity to work with professional in the environmental and forestry fields. The administration is well respected for its management of business and public services.

Comment: The community has evolved greatly in the consultative process. New technology to manage their resources is essential. Human resource development remains a priority for the Council.

Appendix 7

Post-Secondary Institutions offering Forestry Programs

Post-Secondary Institutions Offering Forestry Programs

(* indicates status Indian student enrollment; if number follows, this indicates actual number of status Indian students enrolled)

B.C.

Diploma	**Degree**
B.C. Inst of Tech*, Burnaby	Univ of British Columbia, Vancouver
Cariboo College (1), Kamloops	
Cariboo College (1), Williams Lake	
Col of New Caledonia (1), Prince George	
Malaspina College (3), Nanaimo	
Nicola Valley Inst of Tech (19), Merritt	
Northern Lights Col, Dawson Creek	
Northwest Com Col (2), Terrace	
Northwest Com Col (1), Hazelton	
Selkirk College (1), Castlegar	
Westcoast Forestry Training Ctr, Victoria	

Alberta	**Degree**
Diploma	
Alberta Vocat'l Ctr (1), Grouard	Univ of Alberta, Edmonton
Alberta Vocat'l Ctr, Lac La Biche	
Camrose Lutheran Col Concordia College, Edmonton	
Forest Tech School, Hinton	
Grand Prairie Com Col	
Lethbridge Com Col	
Medicine Hat College	
Northern Alberta Inst of Technology (1), Edmonton	

Sask.	
Diploma	**Degree**
La Ronge Com Col (1)	
National Indian Forestry Inst (1), Meadow Lake	
Northlands Col (1), La Ronge	
Sask. Inst of Applied Sc & Tech, Saskatoon & Prince Albert	

Manitoba

Diploma	**Degree**
Keewatin Com Col, The Pas	

Ontario

Diploma	**Degree**
Algonquin Col (1), Nepean	Lakehead Univ, Thunder B.
Applied Arts & Tech, Pembroke	Univ of Toronto*
Confederation Col (1), Thunder Bay	
Lakehead Univ*, Thunder Bay	
Northern College, South Porcupine	
Sault College (23), Sault Ste. Marie	
Sir Sanford Fleming (3) College, Peterborough	

Quebec

Diploma	**Degree**
	Univ of Laval

N.B.

Diploma	**Degree**
Maritime Forest Ranger School, Fredericton	
	Univ. of NB, Fredericton

N.S.

Nfld.

Diploma	**Degree**
Fisher Inst of Applied Arts & Tech, Corner Brook	
Western Reg'l Com Col, Stephenville	
Memorial Univ (1), Saint John's	

P.E.I.

Yukon

N.W.T.

Appendix 8

Natural Resource Programs other than Forestry

	TOURISM	
	Diploma	Degree
N.B.		
N.S.		Mount St. Vincent Univ*, Halifax
Nfld.		
P.E.I.		
Yukon	Yukon College, Whitehorse	
N.W.T.		

	RECREATION AND	FISH & WILDLIFE MGMT
	Diploma	Degree
B.C.	B.C. Inst of Tech, Burnaby Col of New Caledonia (7), Prince George Malaspina College (3), Nanaimo	
Alberta	Northern Alberta Inst of Tech (8), Edmonton	
Sask.		
Manitoba		
Ontario	Lambton Col of Applied Arts & Tech (1), Sarnia Sir Sanford Fleming (5) College, Peterborough	
Quebec		
N.B.		
N.S.		
Nfld.		
P.E.I.		
Yukon		
N.W.T.		

	TOURISM	
	Diploma	**Degree**
B.C.	B.C. Inst of Tech , Burnaby Camosun College, Victoria Capilano College*, North Vancouver New Summits Univ Col, Vancouver	Simon Fraser Univ*, Burnaby Univ of Victoria*
Alberta	Southern Alberta Inst of Tech, Calgary	Univ of Calgary*
Sask.		
Manitoba	Assinboine Com Col*, Red River Red River Com College*, Winnipeg	
Ontario	Canadore College*, North Bay Centennial College*, Scarborough Confederation College, Thunder Bay Fanshawe College*, London Humber College, Etobicoke Georgian College*, Barrie Lambton College*, Sarnia Mohawk College, Hamilton Niagara College*, Welland Ryerson Polytech Inst*, Toronto Sault College, Sault Ste. Marie Sir Sanford Fleming College, Peterborough St. Lawrence College*, Brockville	Univ of Guelph*
Quebec	Champlain Reg'l Col, Sherbrooke	

	ENVIRONMENTAL	STUDIES
	Diploma	**Degree**
B.C.	Kwantlan College*, Vancouver	Simon Fraser Univ, Burnaby Univ of Victoria
Alberta	Lakeland College, Vermilion Lethbridge Com Col Northern Alberta Inst of Tech, Edmonton	Athabasca Univ Univ of Calgary*
Sask.		
Manitoba		Brandon Univ Univ of Manitoba, Winnipeg
Ontario	Canadore College, North Bay Ryerson Polytechnical Institute, Toronto Sault College, Sault Ste. Marie Sheridan College, Oakville Sir Sanford Fleming College, Peterborough	Brock Univ*, St. Catharines Sir Wilfred Laurier Univ*, Kitchener Trent Univ, Peterborough Univ of Guelph* Univ of Toronto Univ of Waterloo* Univ of Windsor* York Univ*, Downsview
Quebec		McGill Univ, Montreal Univ du Quebec*, Montreal
N.B.		
N.S.		Dalhousie Univ, Halifax Tech Inst of Nova Scotia, Halifax
Nfld.	Cape Breton Univ Col	
P.E.I.		
Yukon		
N.W.T.		

	AGRICULTURE	HORTICULTURE
	Diploma	Degree
Ontario	Algonquin Col, Nepean Centralia Col of Agric Tech, Huron Park Fanshawe College, London Humber College (2), Rexdale Kemptville Col of Agric Tech (1) Niagara Coll*, Welland New Liskeard Col of Agric Tech Ridgetown Col of Agric Tech Saint Lawrence College, Brockville Seneca College, North York Sheridan College, Oakville Sir Sanford Fleming College, Peterborough St. Clair College, Windsor	Univ of Guelph (5) Univ of Toronto
Quebec		McGill Univ, Montreal Univ du Quebec*, Montreal
N.B.	New Brunswick Com Col, Woodstock	
N.S.	Nova Scotia Agric Col, Truro Technical Univ of N.S., Halifax	
Nfld.		
P.E.I.		
Yukon		
N.W.T.		

	AGRICULTURE	HORTICULTURE
	Diploma	**Degree**
B.C.	B.C. Inst of Tech*, Burnaby Cariboo College, Kamloops Col of New Caledonia, Prince George East Kootenay Com Col, Cranbrook Fraser Valley College (1), Chilliwack Malaspina College (2), Nanaimo Nicola Valley Inst of Tech (1), Merritt Northern Lights Col, Dawson Creek Vancouver Com Col, Langara (1)	Univ of British Columbia*, Vancouver
Alberta	Camrose Lutheran Col Concordia College, Edmonton Fairview College Lakeland College (3), Vermilion Lethbridge Com Col (16) Medicine Hat College Northern Alberta Inst of Technology, Edmonton Olds College (2) Old Sun Com Col (1), Gleichen Southern Alberta Inst of Technology, Calgary	Univ of Alberta, Edmonton Univ of Lethbridge
Sask.	Sask. Inst of Applied Sc & Tech-Kelsey (1), Saskatoon SIAST, Regina	Univ of Regina Univ of Saskatchewan (4), Saskatoon
Manitoba	Assiniboine Com Col (1), Brandon Red River Com Col, Winnipeg	U of Winnipeg (12) Univ of Manitoba, Winnipeg

	CONSERVATION	/ECOLOGY
	Diploma	Degree
B.C.		
Alberta		Univ of Calgary
Sask.		
Manitoba		Univ of Manitoba, Winnipeg
Ontario	Sault College*, Sault Ste. Marie	Univ of Guelph Univ. of Western Ontario, London
Quebec		
N.B.		
N.S.		
Nfld.		
P.E.I.		
Yukon		
N.W.T.		

	WATER RESOURCE	MANAGEMENT
	Diploma	Degree
B.C.	Okanagan College*, Kelowna	
Alberta	Westerra Inst of Tech, Stony Plain	
Sask.		
Manitoba		
Ontario	Fanshawe College, London Sault College, Sault Ste. Marie	Univ of Guelph*
Quebec		Inst National de la Recherche Scientifique*, Montreal
N.B.		
N.S.		
Nfld.		
P.E.I.		
Yukon		
N.W.T.		

Appendix 9

Course Offerings in Various Aboriginal Natural Resource Management Programs

Arctic College, Yellowknife, NWT
Renewable Resource Technologist

Year 1:
Communications 1
Communications 2
Drafting and Mapping
Forest and Range Botany
Winter Camp
Fire Science 1
Fire Science 2
Geology and Soils
First Aid and Survival
Mathematics
Photogram & Photo Interpretration
Wildlife Biology
Forest Mensuration
Ecology
Introduction to Parks
Resource Economics & Geography
Introductory Field Camp
Arctic Marine Camp
Practicum: Cruising

Year 2:
Wildlife Techniques
Wildlife Management
Water Resource Management
Park Design and Management
Surveying
Law Enforcement
Firearms
Photography
Marine Fisheries
Biometrics
Admin & Supervision
Combined Field Trip
Freshwater Fisheries
Typing
General Forestry
Anthropology
Renewable Energy
Oil Spill Response
Small Engines
Environment Policy & Planning
Technical Project

National Indian Forest Institute, Meadow Lake, SK
Integrated Forestry Worker Program

INTRODUCTION (4 weeks):
Importance of Forest Industry
Tree & Understory Identification
Plant Associations & Ecosystems
Occupational Health and Safety
Communications & Job Relations

CHAIN SAW & SKIDDING (12 weeks):
Stand Harvesting Systems
Planning Job Layout
Use of Wood Handling Tools
Chain Saw Selection/Operation/
Transport/Filing
Minor Repairs & Troubleshooting
Felling Techniques
Limbing Techniques
Bucking Techniques
Wood Production & Utilization
Practicum: Logging with Mistik

MEASUREMENTS (12 weeks):
Forestry & Metric Math
Introduction to Scaling
Use of Compass
Use of Forest Maps
Use/Interpret'n of Aerial Photos
Computer Applications
Calculat'n of Area & Vol MAI/AAC
Classification by Ecosystem

INTEGRATED RESOURCE MGMT (7wks):
Site Preparation
Seedling Care
Planting Tools, Techniques &
Sites
Job Layout
Christmas Tree Culture
Planting Assessment
Silvics of Reg'l Forest Trees
Practicum: Planting with Mistik

FOREST PROTECTION SKILLS (4 wks):
Fire Tools & Equipment
Prevention Techniques
Insect Identification
Insect Survey & Control Techniques
Disease Identification
Disease Survey & Control Technique

FISH & WILDLIFE (3 wks):
Management Practices
Habitat Requirements
New & Traditional Guidelines
SCAT Inventories & Pellet ID
Logging Impacts
Migratory Birds vs. Logging Design

ECONOMICS (7 wks):
Logging Contracts
Silviculture Contracts
Tendering and Bidding Processes
Cost-out Projects
Business Plan Requirements
Entrepreneurships
Small Business Legal Requirements and Taxation

SPACING SAW SKILLS (7 wks):
Repairs, Maintenance and Troubleshooting
Related Equipment
Safe Operating Techniques
Planning & Job Layout
Spacing & Felling Techniques
Practicum: Tending with Mistik

ROAD AND TRANSPORT (3 wks):
Location
Design
Construction
Maintenance
Tenders and Bidding

Nicola Valley Institute of Technology, Merritt, BC
Natural Resource Technologist Program

Year 1:
Term 1:
Native Land Ethic 1
Intro to Computers
Botany & Zoology
Soils & Hydrology
Resource Measurements
Fire Management 1
Technical Math 1
Techical Communications

Term 2:
Native Land Ethic 2
Silvics & Dendrology
Ecology
Intro to Fish & Wildlife
Forest Products
Air Photo & Mapping 2
Technical Math 2
Principles of Management

Year 2:
Term 3:
Fire Management
Summer Technical Report
Contract Administration
Land Tenure Systems
Employment Skills

plus
Forestry Option:
Timber Harvesting
Timber Cruising
Silviculture
Forest Entomology

or
Fish & Wildlife Option:
Fish Management
Wildlife Management
Wildland Recreation
Grassland Management

Term 4:
Native Law and Government
Small Business Development
Community Leadership & Supervision
Integrated Resource & Community Management
Coastal Field Management

plus
Forestry Option:
Advanced Timber Harvesting
Timber Scaling
Advanced Silviculture
Forest Pathology

or
Fish & Wildlife Option:
Advanced Fish Management
Advanced Wildlife Mgmt
Advanced Range Management
Advanced Grass Management

Northwest College, Hazelton, B.C.
Forest Technology Program

Year 1:
Term 1:
Computer Science 1
Technical Communications 1
Intro to Resource Management
Botany
Surveying
Silvics & Dendrology
Traditional Land Management
Native Culture & History
Cartography
Math Review

Term 2:
Computer Science 2
Technical Communications 2
Forest Measurements 1
Forest Policy/Legislation
Fire Control 1
Meterology
Geology and Landforms
Forest Ecology
Fish & Wildlife

Year 2:
Term 1:
Business Studies
Forest Measurements 2
Fire Management
Forest Studies & Hydrology
Silviculture 1
Remote Sensing
Forest Harvesting

Term 2:
Integrated Resource Planning
Management Skills
Silviculture 2
Forest Engineering
Forest Products
Forest Recreation

Sault College of Applied Arts & Technology, Sault Ste. Marie, ON
Native Resources Technician Program

Year 1:
Communication Skills
Introduction to Forestry
Descriptive Dendrology
Forest Mensuration 1
Descriptive Dendrology 2
Mapping
Technical Mathematics
Environmental Science

Year 3:
Environmental Biology
Reading & Writing for Out-of-Doors
Watershed Management
Forest Mensuration 2
Spring Field Exercises
Forest Roads
Forest Soils
Integrated Resource Management
Introductory Statistics
Surveying

Year 2:
Biology/Ecology
Forest Biology
Human Relations
Computer Concepts & Applic'ns
Technical Reporting
Forest Protection
Photogrammetry
Forest Entomology
Forest Pathology
Silviculture
Forestry Law
Technical Math

Optional Courses:
Intro to Fish & Wildlife
Intro to Forest Management
Intro to Lands & Parks

Yukon College, Whitehorse, YK
Renewable Resources Management Program

Year 1:
Camp 1 (mid-Aug, 21 days):
Northern Science Field Methods
Intro to Northern Environment
Land Use by First Nations
Field Skills 1

Semester 1 (Sept-mid-Dec):
Written Communications
Intermed. Algebra or elective
Natural History of the North
Environmental Science
Cross-cultural Relations
Plant Identification
Intro to Computers

Semester 2 (Jan-Apr):
Oral Communications
Microcomputer Applications
Environmental Science
Northern Field Biology
Maps & Air Photographs
Winter Travel & Survival
Inter-personal Relations
Biometrics

Camp 2 (7 days):
First Aid
Field Skills 2

Semester 3 (through May):
Guided Independent Study in First Nations Traditions
Bird Identification
Fish & Mammal Identification
Firearms Use & Safety
Geology
Geomorphology
Soil Science

Camp 3 (visits to commercial & traditional fisheries):
Anadromous Fisheries Field Methods

Year 2:

Semester 4 (Sept-mid-Dec):
Ecology
Land Use & Resource Management in the North
Northern Resources & Environmental Law
Environmental Chemistry
Habitat Management, Modern & Traditional
Supervisory Skills
Aquatic Organisms Identification
Elementary Surveying

Semester 5 (Feb-May):
Guided Independent Study in Renewable Resource Mgmt
Wildlife Management
Fisheries Management
Forestry Management
Parks & Wilderness Mgmt
Water Resources Management
Environmental Assessment & Waste Management
Renewable Resources Mgmt:
Techniques 1
Techniques 2

Appendix 10

A Comparison of Aboriginal Natural Resource Management Programs

	COLLEGE OF NEW CALEDONIA	MALASPINA COLLEGE	NICOLA VALLEY INSTITUTE OF TECHNOLOGY	NORTHWEST COMMUNITY COLLEGE
LOCATION	Prince George, BC	Nanaimo, BC	Merritt, BC	Terrace, BC
COURSE & DATE OF ESTABLISHMENT	Fisheries Technical Assistant, 1989	Fisheries & Aquaculture (proposed)	Natural Resources Technology,	Forest Technology
OBJECTIVE	To provide aboriginal people with sufficient basic skills to allow them to work on seasonal fisheries-related projects	To help west coast B.C. First Nations obtain fisheries management knowledge necessary to succeed in fisheries co-management ventures	To provide First Nations people with access to a system of the highest quality post-secondary, academic & career/technical education in a culturally reinforced environment	
LENGTH OF COURSE	18 weeks	2 years	2 years, with optional 3rd year	2 1/2 years
FUNDING	100% Federal	50% Federal 25% Provincial 25% Aboriginal	40% Federal 40% Provincial 20% Aboriginal	
ABORIGINAL INSTRUCTORS	None	Unknown, until program is approved	1 of 4 instructors	
ABORIGINAL PARTICIP'N IN COURSE DEVELOPMENT	None	Institute/aboriginal advisory cttee, Tribal Councils, with minor role by non-aboriginals	Institute/aboriginal advisory cttee, provincial gov't with minor role by federal gov't and non-aboriginal advisory cttee	
INVOLVEMENT OF ELDERS	None	Involved in development & expected to act as guest lecturers	Involved in development & act as guest lecturers	
INCORPOR'N OF TRADIT'L ECOLOGICAL KNOWLEDGE	None	Expected to emphasize aboriginal values & traditional knowledge	Based on values which reflect traditional native ethics of respect & care for the environment	
CULTURAL/COUNSELLING SUPPORT	None	Unit on campus run by institution, although much of the program will be based in aboriginal communities	Unit organized & run by aboriginal staff at institution	
MATURE STUDENT/ BRIDGING PROGRAMS	None	None	Upgrading & college prep classes offered to help students meet admission requirements	

	Arctic College Thabecha Campus	Yukon College	Northern Alberta Institute of Technology	National Indian Forestry Institute
LOCATION	Fort Smith, NWT	Whitehorse, Yukon	Edmonton, AB	Meadow Lake, SK
COURSE & DATE OF ESTABLISHMENT	Renewable Resource Technology, 1978	Renewable Resources Management, 1991	Wildlife Management, 1988-1991 (discontinued)	Integrated Forestry Worker, 1990
OBJECTIVE	To train northerners to meet the workforce requirements of the public & private sectors for professional resource technicians	To qualify northerners to occupy key roles in managing the North's fragile environment.	To satisfy prerequisites for Resource Enforcement course at Lethbridge Community College to address lack of aboriginal fish & wildlife officers in Alberta	To meet needs of Meadow Lake Tribal Council under Forest Management agreement to supply hardwoods to Millar Western pulp mill & Meadow Lake sawmill
LENGTH OF COURSE	2 years	72 weeks	3 years	62 weeks
FUNDING	100% Territorial Gov't	90% Territorial 10% Federal	95% Federal 5% Aboriginal	100% Aboriginal
ABORIGINAL INSTRUCTORS	?	3 of 12 instructors	None	2 of 3 instructors
ABORIGINAL PARTICIP'N IN COURSE DEVELOPMENT	60% aboriginal: a reflection of aboriginal population in NWT	Institute & joint cttee made up of aboriginal and gov't reps	Institute & joint aboriginal/non-aboriginal advisory cttee	Institution & Meadow Lake Tribal Council
INVOLVEMENT OF ELDERS	?	Involved in development & as guest lecturers with commitment to increased involvement	None	None
INCORPOR'N OF TRADIT'L ECOLOGICAL KNOWLEDGE	?		None	?
CULTURAL/COUNSELLING SUPPORT	None	Unit organized and run by institution	Unit organized and run by institution, but dismantled at end of program	Unit run by institution
MATURE STUDENT/ BRIDGING PROGRAMS	Most students are older on average than students attending other colleges in Canada; college has very flexible admissions policy	Bridging program to assist mature students lacking entrance requirements. First year concentrates on "foundation courses".	Designed as bridging program (see objective)	No special admission requirements for mature students
TRANSFER AGREEMENTS	Various arrangements with universities in western Canada & U.S.; endorsed by Canadian Parks Service, Renewable Resources Dept. of NWT & INAC; currently seeking recognition from Society of American	Designed to enable graduates to enter 3rd year programs at other colleges specializing in forestry, enforcement, watershed mgmt, & parks & rec. Some courses may be transferrable to degree	Designed for transfer to Lethbridge Community College Resource Enforcement Program	No agreements to encourage further education; discontinued program was 2-yr forest technician recognized by Society of American Foresters. Integrated Resource Mgmt & Conservation Officer

	Sault College of Applied Arts & Technology	University of New Brunswick	Western Regional Community College	
LOCATION	Sault Ste. Marie, ON	Fredericton, NB	Stephenville, NFLD	
COURSE & DATE OF ESTABLISHMENT	Native Resources Technician Program, 1989	Wildlife Management, 1991	Wildlife Guiding	
OBJECTIVE	To provide tech educat'n in natural resources with forestry emphasis equal to regular program, while providing opportunity for Native students to consider tradit'l aspects of their heritage in rel'n to current issues & practices	To train aboriginal game wardens and others to take an active approach to new hunting rights and to reinforce a conservation ethic		
LENGTH OF COURSE	3 years	10 weeks	20 weeks	
FUNDING	95% Provincial 5% Federal	100% Federal	100% Federal	
ABORIGINAL INSTRUCTORS	None	None	2 of 4 instructors	
ABORIGINAL PARTICIP'N IN COURSE DEVELOPMENT	Institute & aboriginal advisory cttee with input from Ont. Ministry of Natural Resources	None	Institution and off-campus aboriginal groups	
INVOLVEMENT OF ELDERS	Not involved in development but act as guest lecturers	None	Involved in development of program and as guest lecturers	
INCORPOR'N OF TRADIT'L ECOLOGICAL KNOWLEDGE	Tries to include aboriginal values. Curriculum review underway to increase aboriginal content	None	?	
CULTURAL/COUNSELLING SUPPORT	Institute has unit with aboriginal staff, but course is distance ed so students remain close to home communities	Unit on campus run by aboriginal institution	None	
MATURE STUDENT/ BRIDGING PROGRAMS	Encouraged to upgrade at local high schools. 3-yr program allows more emphasis on math & english	None	None	
TRANSFER AGREEMENTS	Agreement with Lakehead University	No further education; no accreditation	Non-academic course; other courses offered when requested by local Band	

Appendix 11

Institutions and Centres offering Native Studies

Source: INAC Cultural and Educational Centres Branch, Education Policy and Planning Directorate, 1991.

British Columbia

Nuxalk Education Authority	Bella Coola
Canoe Creek Indian Band	Dog Creek
Coqualeetza Educational Training Centre	Sardis
Cowichan Band	Duncan
En'owkin Centre	Penticton
Heilstuk Cultural Educational Centre	Waglisla
Lake Babine	Burns Lake
Mount Currie Band	Mount Currie
Native Adult Education Resource Centre	Salmon Arm
Nimpkish Band	Alert Bay
Nicola Valley Institute of Technology	Merritt
North Island Community College	Comox
Okanagan Indian Resources Society	Penticton
Saanich Cultural Educational Society	Brentwood Bay
Secwepemc Cultural Educational Society	Kamloops
Sliammon Cultural Centre	Powell River
Stoney Creek Band	Vanderhoof
U'Mista Cultural Centre	Alert Bay
University of Victoria	Victoria

Alberta

Alexander Education Centre	Morinville
Beaver Lake Band	Lac La Biche
Blue Quills First Nations College	St. Paul
Frog Lake Indian Band	Frog Lake
Kehewin Cultural Educational Centre	Bonneyville
Maskwachees Cultural College	Hobbema
Ninasktako Cultural Centre	Cardston
Oldman River Cultural Centre	Brocket
Old Sun Community College	Gleichen
Saddle Lake Cultural Educational Centre	Saddle Lake
Sarcee Cultural Program	Calgary
Stoney Curriculum Educational Centre	Morley
University of Alberta	Edmonton
University of Lethbridge	Lethbridge

Saskatchewan

Flying Dust Local Learning Centre	Meadow Lake
Makwa Sahgaiehcan Learning Centre	Loon Lake
Saskatchewan Federated Indian College	Regina
Saskatchewan Indian Cultural College	Saskatoon
Saskatchewan Indian Federated College	Regina
Saskatchewan Institute of Technologies	Saskatoon
University of Regina	Regina
University of Saskatchewan	Saskatoon

Manitoba

Brandon University	Brandon
Brokenhead Cultural Centre	Scanterbury
Cross Lake	Cross Lake
Dakota Ojibway Tribal Council	Brandon
Interlake Reserves Tribal Council	Ashern
Manitoba Indian Cultural Education Centre	Winnipeg
Norway House Indian Band	Norway House
Peguis Cultural Centre	Hodgson
Rolling River	Erickson
Sagkeeng Cultural Centre Inc.	Pine Falls
West Region Tribal Council	Dauphin
Yellowquill College	Portage la Prairie

Ontario

Batchewana	Sault Ste. Marie
Carleton University	Ottawa
First Nations Technical Institute	Barrie
First Nations Technical Institute	Deseronto
First Nations Technical Institute	Kitchener
Lake of the Woods Ojibway Cultural Centre	Kenora
Lakehead University	Thunder Bay
Laurentian University	Sudbury
North American Indian Travelling College	Cornwall Island
Ojibway and Cree Cultural Centre	Timmins
Ojibway Cultural Foundation	Manitoulin
Trent University	Peterborough
University of Sudbury	Sudbury
University of Toronto	Toronto
Woodland Cultural Centre	Brantford

Quebec

Atikamek-Montagnais Education Institute	Wendake
Avatag Cultural Institute Inc.	Montreal
Algonquin College of Western Quebec	Val d'Or
James Bay Cree Cultural Educational Centre	Chisasibi
Kanasatake Cultural Centre	Kanasatake
Kanien'kehaka Raotitiohkwa	Kahanwake
Lac Simon	Comte Villeneuve
Maria Band	Maria
Nation Huronne-Wendat	Huron Wendat
Odanak	Odanak
Restigouche Institute of Education	Restigouche
River Desert Band	Maniwaki

Labrador

Torngasok	Nain

New Brunswick

Big Cove Cultural Centre	Rexton
Bouctouche Micmac Band	Bouctouche
Eel Ground	Newcastle
Eel River Indian Band	Dalhousie
Fort Folly Indian Band	Dorchester
Kingsclear Indian Band	Fredericton
New Brunswick Community College	Chatham
Oromocto Nation	Oromocto
Pabineau Indian Band	Bathurst
Red Bank Band	Red Bank
St. Mary's Indian Band	Fredericton
St. Thomas University	Fredericton
Tobique Indian Band	Perth

Nova Scotia

Micmac Learning Centre	Halifax
Nova Scotia Community College	Truro

Northwest Territories

Arctic College	Fort Smith
Dene Cultural Institute	Yellowknife
Inuit Cultural Institute	Arviat

Prince Edward Island

Lennox Island Band	Lennox Island

Yukon Territory

Champagne/Aishihik Indian Band	Haines Junction
Teslin Indian Band	Teslin
Yukon College	Whitehorse
Yukon Indian Cultural Education Centre	Whitehorse