

2000
SMITHERS COMMUNITY FOREST
PLAN

Submitted by:
The Smithers Community Forest Steering Committee
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Approved by

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Bulkley Forest District

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1.0 INTRODUCTION

1.1 Background Information

The Smithers Community Forest is located on the South facing slopes of Hudson Bay Mountain, about 5 kilometers West of the town of Smithers on the Hudson Bay Mountain Road or Ski Hill Road. (See map appendix #1)

The Smithers Community Forest was formed in 1991. It is situated on crown land in the Smithers Provincial Forest. The Provincial Forest is managed according to the Forest Act and the Forest Practices CODE of B.C. Act under the authority of the Bulkley Forest District Manager. The District Manager approves the Community Forest Plan.

The Smithers Community Forest was considered to be a good outdoor classroom that would provide an opportunity for the public to see how recreation, timber and wildlife values of a forest are managed. The intensity of activities in the community forest is low. Examples of low intensity activities that are planned within the forest include small-scale logging, planting trees, thinning, brushing and weeding, wildlife enhancement projects, demonstration trails, nature trails, mountain bike and cross-country ski trails.

The Smithers Community Forest covers an area of 4,620 hectares; more than 11 times the size of Stanley Park. Its location was chosen for the following reasons:

- good all-weather road;
- close to Smithers;
- scenic area;
- recreation opportunities;
- opportunities for demonstration of harvesting and silviculture;
- ecological diversity;
- good summer and winter wildlife habitat opportunities.

One of the main objectives of the Community Forest was to get local involvement in preparing a forest management plan. Local involvement was achieved by setting up a committee with representatives from various sectors of the community. People were chosen because of their interest in the project and in the completion of a Community Forest Management Plan.

1.2 Logging History of the Area

The northern portion of the forest above the Hudson Bay Mountain Road (Ski Hill Road) was logged in the late 1940s through the 1950s. The loggers then practiced "diameter-limit" cutting. Trees had to meet the following minimum size requirements before they could be cut:

Balsam & spruce	35 cm
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Lodgepole pine

30 cm

The average age of the trees harvested was 140 years.

To minimize damage to leave trees, the following logging restrictions were in force:

- Trees were to be felled uphill.
- No trees were left lodged in the process of felling.
- No highlead or overhead systems of logging were used.
- Skidding of logs exceeding ten metres was prohibited.
- All skid trails were to be field located before felling begun. The trees were to be felled at an angle to the skid trails, herringbone fashion. Tractor operation was confined to the skid trails.

Most of the early logging crews used horses to skid the logs to a centrally located sawmill site. This gradually changed to "horse and cat" shows (horse and tractor skidding operations). In the early 1950s, especially when logging bigger timber, tractor skidding became more common. During this period, several small sawmills operated in the area, each employing up to four people. Large sawdust piles in the forest still clearly identify the location of these old mill sites.

The mainstay of these mills was lumber production; however, some lodgepole pine was also sawn into railway ties. The rough, cut lumber was hauled from the forest by truck and taken to local planer mills in town, such as operated by Northern Interior Forest Products Ltd., of Smithers. Hanson Tie and Lumber Company was the big local tie buyer. Stumpage fees paid to the Province for these ties ranged from 6¢ each for Grade No. 1 & 2 in 1946, to 18¢ each, by 1954.

Some of the local operators were: Anderson Bros., Maillot Bros., Helmer Larson, J. Osinga, Bob Brouwer, Jim Whalen, Martin Hahre, F. Gardner and B. Zerr.

2.0 MANAGEMENT OF THE SMITHERS COMMUNITY FOREST

2.1 The Smithers Community Forest Committee Responsibility

The Smithers Community Forest Committee was established by the Bulkley Forest District Manager to prepare for District Manager approval, a Forest Plan for the Smithers Community Forest. The Committee was requested to prepare and include in the plan, the objectives of the community forest, the committees' terms of reference, membership, meeting attendance, meeting times, and places.

2.2 Objectives of the Smithers Community Forest

- Plan and integrate forest uses through public involvement.
- Create and improve recreation opportunities recognizing a diversity of compatible interests.

- Create outdoor education opportunities in a safe environment.
- Establish an area where forest management practices and forestry research can be demonstrated.
- Demonstrate integrated forest management recognizing the importance of maintaining a mix of forest habitats.
- Ensure local community watersheds are protected.
- Plan activities that minimize visual impacts on other users.
- Plan activities that minimize impacts on the natural environment of the forest
- Maintain the diversity and abundance of existing species.
- Designate a no shooting zone

2.3 Committee Terms of reference:

- Develop a Forest Management Plan, to be approved by the District Manager, that meets the objectives of the Bulkley Land and Resource Management Plan and any future objectives established under Landscape Unit Plans;
- Review and make recommendations to the DM on all plans, proposals or changes that affect the Community Forest;
- Plan a trail network that accommodates cross country skiing, hiking, mountain biking, nature interpretation, forestry demonstration, and other compatible uses;
- Review and recommend approval of structures, parking and other facilities that are compatible with the objectives;
- Provide interpretive signs, viewpoints, blinds and similar facilities to promote education along trails;
- Plan and demonstrate forestry practices that include harvesting and silviculture activities;
- Identify important wildlife habitats and incorporate the desired mix of habitats into long-term plans.

2.4 Committee Membership

Membership on the Smithers Community Forest Committee is currently open to a representative from each of the following groups:

B.V. Cross-Country Ski Club
 B.V. Naturalists
 B.C. Environment, Fish and Wildlife Branch
 B. C. Forest Service
 Share Smithers
 B.C. Lands
 Smithers District Chamber of Commerce
 Smithers Ski Corporation
 School District #54
 Town of Smithers

Bulkley-Nechako Regional District
Other groups approved by the District Manager

2.5 Committee Meetings:

Hold meetings three times a year or as required by the committee. Meetings are held at the Bulkley Forest District Office. A representative of the Bulkley Forest District chairs meetings. Meetings are open to the any member of the public.

2.6 Harvesting and Silviculture:

The Smithers Community Forest is included as an operating area of the Small Business Forest Enterprise Program (SBFEP). The SBFEP plans and manages harvesting and silviculture in the Community Forest in compliance with the Smithers Community Forest Management Plan. The District Manager approves the SBFEP plan. Harvesting of trees for any reason must be approved in a permit issued by the District Manager.

2.7 Funding and Fiscal Control

Funding is available to manage the forest resources through the Small Business Forest Enterprise Program (SBFEP) and/or the Bulkley Forest District recreation program. Since the Community Forest has been identified as a separate project under the SBFEP, the revenue generated from the sale of timber will offset the cost of silviculture activities and timber development planning. The Forest Service will exercise direct fiscal control of these expenditures.

From time-to-time, it is anticipated that supplementary funding programs will be available for activities such as intensive silviculture projects, forest education programs, habitat enhancement, and recreation. The committee will identify these sources of funding and oversee the expenditure of any funds obtained. Voluntary contributions of labor and material will be an important component of these projects.

3.0 AREA INVENTORY AND DESCRIPTION

3.1 Landforms and Soils

Several distinct landforms and associated soils are represented within the Smithers Community Forest and, to a large extent, are responsible for the diverse variety of ecosystems within the forest. Morainal material (glacial till) dominates throughout; while colluvial, fluvial, lacustrine and organic materials, as well as exposed bedrock, are less extensive but locally important. Additional information is included in Appendix II.

3.2 Bedrock Geology

Volcanic rocks of middle to upper Jurassic age (140 - 170 million years old) underlie the Smithers Community Forest (Armstrong 1944, Tipper et al. 1979). These medium- to fine-grained, moderately acidic rocks include andesitic, dacitic, and rhyolitic flows, tuffs and breccias. They are included as a map unit of the Hazelton Group of interbedded sedimentary and volcanic rocks that make up Hudson Bay Mountain (Tipper and Richards 1976). Mineral deposits, including gold, silver; lead, zinc, copper and bismuth are associated with volcanic rocks of the Hazelton Group. There are several mineral properties on Hudson Bay Mountain containing values in one or more of these minerals. Few of these mining properties are active today.

3.3 Biogeoclimatic Ecosystem Classification

Three biogeoclimatic zones *(Pojar et al. 1987) occur in the Smithers Community Forest. Most of the forest lies within the Sub-Boreal Spruce Zone (SBS). A large variety of both seral and climax, forested and non-forested ecosystems are represented within this zone. The Interior Cedar-Hemlock Zone (ICH) forms a mid-elevation band above the SBS on the east side of Hudson Bay Mountain and extends into the northern portion of the community forest. The ICH includes mainly mature and old growth stands. Some “selective” cutting or “highgrading” occurred in these forests about 40 years ago. The Engelmann Spruce-Subalpine Fir Zone (ESSF) occurs in the extreme northwestern portion of the forest above 1260 metres elevation.

The distribution of these three zones and the ecosystems within them is illustrated on the ecosystem map of the Smithers Community Forest in Appendix III along with a description in Appendix IV.

3.4 Wildlife

The Community Forest, on a seasonal basis, supports a wide diversity of birds and mammals due to the variety of habitats found at different elevations. Mixed or pure forests of deciduous and coniferous tree species, and wet areas at differing elevations, and aspects provide unique habitat types to which have adapted individual species, or groups of species of wildlife. The number of wildlife species present often varies dramatically, depending upon the time of year.

Ungulate (moose and deer) capability mapping is available for the area and indicates that the area has moderate capability to support moose and deer in the summer. For most of the Community Forest capability is poor during the winter except on the eastern, lower slopes where moderate capability to support deer and moose exists. Those ratings are primarily a reflection of habitat type, aspect, slope and winter snow depths.

Deer and moose use the area frequently, although they become more common in deciduous habitats along the eastern boundary of the forest as winter approaches. Grizzly bear are occasional visitors, while black bears are more commonly seen. Wolf, coyote and red fox are often present but at low densities. Furbearers such as martens are common; while wolverines, lynx and fishers are less so. Grouse and hare densities will fluctuate depending on the time of their cycle. Various species of rodents such as squirrels, chipmunks, mice, voles, moles and lemmings often become abundant and form the prey base for certain carnivores or raptors. Although birds provide the greatest species diversity, most migrate from the area as winter approaches. Amphibians and reptiles are not common. Fisheries' values are not significant in the Community Forest.

Appendix V provides lists of birds, mammals, amphibians and reptiles that are known or suspected to occur in the forest.

* A biogeoclimatic zone is a large area with a broadly homogeneous climate.

3.5 Timber

The principal objective of any timber development within the Community Forest strategy is to provide an opportunity for research, demonstration and education. Timber practices particularly harvesting and road building should emphasize low key activities that are sensitive to other users. Activities that minimize impacts on the natural environment of the forest are preferred.

The majority of the present forest regenerated after a fire, which occurred about 60 years ago, except for the northwest corner. This unburned area contains mature stands of balsam (= Subalpine fir) and, to a lesser extent, spruce and hemlock. The balsam is found at the higher elevations where the spruce component was logged in the 1940s and 1950s. Immature balsam stands have regenerated naturally within the logged portions. Some pockets of mature pine are also present in this corner of the forest.

Outside the northwest corner of the forest the remainder of the stands are fire-origin immature pine with lesser amounts of spruce, balsam, aspen and other deciduous species.

The Community Forest contributes to the annual allowable cut of the Bulkley Timber Supply Area (TSA). Timber harvested from the forest contributes to the Small Business Program volume apportionment. The five-year development plan for the Small Business Program outlines the harvesting road building plans in the Community Forest for five years and is renewed every year.

4.0 EDUCATION AND INTERPRETATION

4.1 Introduction

One of the primary goals of the Smithers Community Forest is to provide an outdoor classroom for the study of natural history, ecological principles and forest management, including the wildlife and recreation components.

4.2 Objectives

Two of the stated objectives of the Smithers Community Forest are:

- i) Creation of outdoor education opportunities in a safe environment.
- ii) Provision for an area where forest management practices can be demonstrated.

These objectives will be accomplished by the development of a trail network that allows for nature interpretation and forestry demonstration, as well as recreational activities. Providing interpretive signs, viewpoints, viewing blinds, etc will promote education along these trails.

4.3 Nature Trail System

A system of nature trails for year-round nature observation has been established. The trail system is designed to encompass and pass through as wide a diversity of ecological habitats as possible. The area is primarily second-growth forest that developed after a fire 60 or so years ago. It includes dense second-growth fir (balsam) forest, open dry hillsides with deciduous trees, a small lake, a marshy fen connecting the lake and a small pond, a spruce bog, wetlands bordering an ephemeral stream, and rocky, dry knobs with mature pine.

The present trail system consists of one main loop trail with interconnecting and side trails to areas of natural history interest. All trails are narrow, yet wide enough for two people to pass comfortably. Trails are constructed to preserve the natural terrain and forest floor but, at the same time, meet required trail standards. In wet spots, boardwalks or planks may be laid down to avoid unnecessary erosion. Trails will not be track set for cross-country skiing in the winter. Mountain Biking is not permitted on the nature trails. Cross-country touring, snow shoeing, winter hiking or other activities' compatible with nature observation will be encouraged.

a) Nature Trail

The main loop trail (referred to as the "Nature Trail" or "Forest Interpretation Trail") was established in 1989. It is approximately 3.5 km long and includes a wide boardwalk that crosses over a wet, marshy area bordering the outlet of the lake.

Members of the Bulkley Valley Naturalists designed the main trail with advice from the Ministry of Forests and Parks Branch. The Environment Youth Corps and volunteers from the Bulkley Valley Naturalists carried out construction of the trail. Funding for materials for the trail construction and the accompanying descriptive brochure was provided, in large part, by a Green Gold Grant (funded through FRDA II -- Canada-British Columbia, Partnership Agreement on Forest Resources Development).

The trail is designed as a self-guided nature trail, which can be used without the assistance of a trained forester or naturalist. Stations, or points of interest, are marked with numbered posts. The numbers correspond to those in a trail brochure, which describes in detail the different features at each station. The brochure ("Interpretive Nature Trail") was designed and produced by members of the Bulkley Valley Naturalists and other volunteers.

The aim of this trail is to provide information about the natural history and forest dynamics of the "unmanaged" or natural forest. Some brochures are available at the trailhead or they may be picked up in town at the district office of the Ministry of Forests, the Information Centre, or the Chamber of Commerce offices.

b) Viewing Blind

One narrow side trail on high ground leading to the edge of the lake on the south side was brushed out and it concludes in a viewing blind to allow for quiet viewing of wildlife activity on, or around, the lake.

c) Wetland Trail

A wetland, boardwalk spur trail leading off the main boardwalk out to the edge of the lake was constructed in the fall of 1990. This trail passes through the wetland, or fen, which contains some unusual and rare plants. Funding for materials and labour for this side trail came from the Community Forest Fund, Ministry of Forests. Interpretative features for this trail were developed as a self-guiding brochure ("Wetland Trails") by members of the Bulkley Valley Naturalists using Green Gold Grant Funds and donations.

d) Viewpoint

One side trail that was minimally brushed out and is not signed leads off the main loop to a high point, where there are views of the surrounding forest and part of Hudson's Bay Mountain.

e) Boardwalk and dipping dock

A short boardwalk and dipping dock was constructed at the small pond downstream from the lake. Funding for this was provided by the Environmental Partners Fund. This area is excellent potential for teaching pond and wetland ecology and has been widely used since its construction by school groups, summer playground programs, etc.

Access to the dipping dock needs to be repaired, as footing is very uneven. The dock itself needs to be secured so that it does not tip. It is suggested that an inflatable boat be taken into the pond and used to help secure guy wires from the corners of the dock and to anchor these out in the pond.

f) Viewing Platform Trail

This trail leads from the vicinity of marker 15 at the highest point on the nature trail and leads off in a south to southeasterly direction towards the well-hidden viewing platform. The trail was routed and brushed out by members of the Bulkley Valley Naturalists with advice from personnel from Fish and Wildlife.

The Viewing Platform was designed (and is high enough) to provide opportunities to observe birds in the tree and shrub canopies as well as moose browsing on the slopes below. The access to the platform is deliberately obscure in the hopes that people can approach the platform quietly and without being seen by wildlife in the area. The next step in this project is to do some manual willow browse enhancement to encourage moose to use the area.

The B.C. Fish and Wildlife Branch of the Ministry of Environment, Lands, and Parks will carry out enhancement.

Proposed Trails and Facilities:

Future plans include the construction of a loop boardwalk through a spruce bog located northeast of the main loop. This trail will be developed eventually as a self-guided trail that demonstrates the dynamics of a spruce bog ecosystem. Numbered stations and an accompanying descriptive leaflet will be developed.

Additional side trails, especially to potential viewpoints, will be developed, as funding becomes available. Some areas may have to be opened up to enhance the views.

Further plans for the southeastern section of the Nature Interpretation Area have not been developed yet. However, this area has great potential for wildlife viewing and study activities; and it is anticipated that the area will eventually include more trails. Part of this area also lends itself to establishing good bird-watching sites. There is a series of ridges overlooking swales and ridges where observers could look directly into the tree canopy.

A shelter at the head of the trail would provide a meeting place where guides could introduce their trips or do post-trip activities.

Eventually, a wheel chair access loop is planned which would lead from the Buchfink Memorial Lodge out onto part of the existing Nature Trail and then back to the lodge.

A Native Plant “garden” near to the lodge, where plants that are typically found in the Community Forest are labeled, would provide handicapped people with an opportunity to see some of the plants that grow in the forest beyond the reach of the wheel chair accessible trail. Also this would help the general public to identify plants they may see (or already have seen) on the trails.

Maintenance of existing trails has been performed as needed on an annual basis by the members of the Bulkley Valley Naturalists and Fire Suppression Crews working for the Ministry of Forests.

Use of the existing trails (especially the main Nature Trail and the Wetland Trail) has been heavy since establishment. A registration sheet at the head of the main trail reveals that the trails are used by organized school groups (guided and self-guided), the Town of Smithers Summer Playground Program, local families and their guests, and tourists from all over the world. The average number of people using the trails in the summer months is estimated to be 500 annually. In addition, a few small groups tour the trails on snowshoes in the winter months.

4.4 Design and Implementation of Education Programs

Current Education Programs

Since the establishment of the trails, volunteers from the community have offered school programs. One and two week programs of half-day tours around the Nature Trail were organized for several years in the Spring and Fall by the Bulkley Valley Naturalists using volunteer naturalists, foresters, government researchers, etc. as guides. These were highly successful and well over subscribed. Activities included learning about the forest, digging soil pits and doing “ecoplots”, plant identification, wetland explorations, “un-nature trails”, and various forest “games”. Organizing this program is labour-intensive and was not run for while, but was recently resurrected (spring 1998). Teachers have arranged other guided tours individually with members of the community and B.C. Ministry of Forests as guides.

Each summer the Town of Smithers Summer Playground Program takes children up to the wetland and dipping dock to study aquatic invertebrates, frogs and plants.

Further Educational Programs

Future plans include further development of programs designed to teach students about the different aspects of the Community Forest centred on both the Nature Trail System and the Demonstration Forest Area. The main emphases will be on:

- natural history interpretation;
- the ecology of natural forest systems;
- resource management, with particular reference to forestry and wildlife;
- and
- the relationships between natural history and forest management techniques, etc.

The programs are aimed at primary and secondary school students, but will be designed in such a way that, if desired, community groups can use the program as well. The programs to date have received the cooperation of the local school board and every effort has been made to develop activities that meet the needs of the school curriculum.

4.5 Self-guiding program

The design and implementation of further education programs will be carried out concomitantly with the development of new nature trails and with the completion of the Demonstration Forest area. It will be an ongoing process over the next few years. As new trails are completed, new programs will be introduced into the system.

Generally, self-guided trails will be built and the accompanying leaflets will be made available to both the general public and to community groups and schools. Schools will be encouraged to use the trails. If teachers and students use the self-guided trails, they will be in a better position to assess their needs and can provide valuable input into the design of the long-term programs. It has been shown in other similar facilities (demonstration forests, research forests) that most of the user public prefer self-guided to guided tours and it is anticipated that these trails will receive wide use by the local general public, community groups and schools, as well as by visiting tourists.

4.6 School Programs

Short-Term:

a) Brochure and School Packages

It is recommended that a brochure be put together by all members of the Community Forest Committee to explain what trails and facilities are available in the Community Forest for school use. The brochure would also make some suggestions about activities that teacher and students can do on their own, or with a guide on both the Nature trails and in the Demonstration Forest.

A short presentation (a talk accompanied by a slide show or videotape) could also be developed, which would be given to schools to inform them about the Community Forest. The talk would make teachers aware of how field trips into the area can enhance the use of the numerous environmental education packages already available.

To date, naturalists have gone into the school to talk to the teachers about the Community Forest and encourage their use of the area for school field trips.

b) Displays - Work has started on the accumulation and production of natural history displays and hand-on activities that would be used in the Community Forest in a room in the Buchfink Memorial Lodge or can be transported to other parts of the community. It is envisioned that one or two week nature programs could be offered in the summer, or even during the school year. In the short-term these would be run strictly by volunteers. However, it is hoped that, eventually, long-term plans (see below) can be developed which a paid student naturalist would run.

c) Demonstration Forest Area
Organization of a School Program with Field trips into the Demonstration Area will be started when the trail system through the Demonstration Forest Trail system is completed. A self-guiding brochure will be produced to accompany this trail.

Suggestions for programs in the Demonstration Forest area are offered below.

Long-Term:

a) Educational Packages

The design of educational packages integrated with the school curriculum. The packages will include pre- and post-trip information and activity suggestions. Teachers will be given suggestions as to projects and research that can be done before and after their visit to make their students' experience more meaningful. Opportunities for nondestructive, "hands-on" activities will be provided. Suggestions for post-trip assignments will be offered.

The packages will be designed in such a way that the schoolteachers can visit the area without the assistance of trained forestry personnel or naturalists. It is conceivable that a series of workshops and field trips could be designed to give teachers' background information about the features of the Community Forest before introducing the program into their schools. Alternatively (or additionally), a slide show or videotape could be distributed to the teachers that would serve as alternative, or an adjunct, to a talk.

The school packages will be made available (on request) to all potential user groups. These groups will be supplied with enough information so that they can develop and conduct programs to suit their own specific needs. On-site workshops for group leaders wishing to conduct their programs will be considered.

b) Nature Program

A long-term plan would be to obtain funding to operate a part-time (semi-permanent) Nature Program that would be delivered by a paid naturalist. This would tie in with the development of educational packages with pre- and post-trip activities for the teachers and students.

Future Educational Opportunities

“Adopt-A-Stand”: Classes could plant and tend a young forest; the job would be passed on over the years to future classes.

Post-Secondary Education: It is hoped that post-secondary institutions will show an interest in developing programs that use the Community Forest as an outdoor classroom.

The area has potential for use by post-secondary students (especially students of forestry and natural history) as an outdoor laboratory or for research. The area could be used in college forestry courses offered in Smithers and Hazelton.

Active participation in the development of the forest by post-secondary students (as well as primary and secondary students) will be encouraged.

Offer field trips for the General Public.

Future Programs and Activities

The following is not meant to be a comprehensive list, but merely some suggestions of the types of studies that could be carried out. The programs finally produced will be designed in response to the desires of the user groups, and input from potential users will also be requested.

I. Programs in Nature Interpretation Area

i. Ecology and/or Natural History of a Natural Forest

General ecology or natural history of a natural (unmanaged) forest. An examination of ecological principles, study of forest dynamics, post-fire succession, etc.

This could be subdivided into smaller units dealing with, for example:

- a) components of different ecosystems found within the forest; e.g., dry open slopes, wet depressions, marshy fen, spruce bog);
- b) plant diversity - a study of different plant groups (e.g. mosses, ferns, flowering plants, conifers etc.);
- c) plant-animal relationships;
- d) bird biology and behaviour;
- e) where plants grow - a study of how plants are adapted to their environment.

ii. Ecology of a Spruce bog

iii. Life in a Marshy fen

iv. Life in a Lake

v. Winter Botany

vi. Animal Adaptations to Winter Survival

II. Forestry Demonstration Area

i. Forest management and how it relates to the ecology of a forest.

ii. Further divided into studies of:

- a) past partial cutting and results
- b) new partial cutting systems
- c) current harvesting techniques and alternatives
- d) current silvicultural practices
- e) potential for future research

N.B. Combinations of trips conducted in both the nature interpretation area (natural or unmanaged forest) and demonstration (managed) forest provide opportunities for studies of the relationships between natural history and forest management techniques.

III. Geography and Geology of the Community Forest and Surrounding Bulkley Valley:

There are some interesting geographical and geological features in the area.

IV. Wildlife

a) habitat conservation

- b) habitat enhancement
- c) wildlife habitat requirements

Potential User Groups

It is anticipated that the education programs and self-guided trails could be used by a wide variety of groups including:

i. Educational Facilities

- Primary and secondary schools
- Post-secondary institutions (e.g. Northwest Community College)
- Guide-outfitter training schools
- Ministry of Environment CORE program

ii. Special Interest Groups

Bulkley Valley Naturalists
Canadian Institute of Forestry
British Columbia Forestry Association

iii. Community and Youth Groups

- Brownies, guides, cubs, scouts venturers, etc.
- Junior Forest Wardens
- Church groups
- Seniors groups
- Day care and playschool groups

iv. Tourists

Pamphlets describing the Community Forest would be made available at the Tourist Information Centre, motels, government offices and some businesses.

Assessment of Programs

It is essential that there be continuous assessment of the education programs and use of the facilities, in order, to evaluate use by the public and modify programs where desired.

Since establishment, a voluntary registration system has been used. This consists of a “sign-in” sheet that asks for information about the date, number in party, where the party comes from and for any comments on the trail, ideas for improvement, interesting observations along the trail. Judging from the comments we have received, people really like the trails and brochures (but not the mosquitoes!). We have also asked for feedback from the teachers about the school programs and if the education programs are meeting the needs of the users. Future evaluations of programs could be done on a more formal basis.

5.0 RECREATION and LANDSCAPE MANAGEMENT

5.1 Introduction

Recreational use of this area was generally unrestricted before the creation of the Community Forest. Only access constraints and the demand for recreational opportunities, both intensive and extensive in nature limited public use. Established extensive use included berry picking, hiking, viewing, and hunting, while intensive uses included cross-country skiing, target shooting and four-wheel driving.

The formation of a demonstration forest has resulted in the need for a new recreational use emphasis for this area.

5.2 Recreation Objectives

A stated objective of the Smithers Community Forest Committee is to create or improve recreation opportunities while recognizing a diversity of interests.

Some of the diverse uses, which might occur in the Smithers Community Forest with appropriate planning, coordination, and controls, include:

- hiking or viewing
- cross country skiing
- snow-shoeing
- mountain biking
- berry picking
- horseback riding
- biathlon
- tobogganing or sliding

This plan recognizes the need to encourage a wide range of recreational uses while minimizing potential conflicts. Some of the potential conflicts that must be addressed are:

- Single vs Multi-use facilities;
- Active vs Passive environments;
- Restricted vs Unrestricted areas.

5.3 Cross-Country Skiing

Objectives for participation in the Smithers Community Forest are as follows:

1. To secure a designated and recognized cross-country ski area, in which the club is able to operate programs and activities, which foster cross country skiing for club members and the general public.
2. That in committing their efforts to the development of this area the Club will be recognized as the representative body for cross-country skiing interests.
3. To develop a network of cross-country ski trails that maximize the natural terrain, provide views and vistas and yet maintain adequate snow levels for the purposes of skiing. In carrying out trail development, the needs of the following skier groups will be considered and accommodated; beginner and recreational track skiers, families, tourists, specific club programs (lessons, Jackrabbits, junior racers). These trails are suitable for use by hikers, horseback riders and mountain bikes.
4. The trails and facilities will need to be of a standard that will enable the club to host special events such as family ski days, the Bulkley Valley Marathon and Canadian Ski Association (C.S.A.) sanctioned race events such as the B.C. Cup series.

In summary, it is the Bulkley Valley Cross-Country Ski Club's primary objective to play an active role in the development of a cross-country ski area that meets the needs of its members and the community as a whole. The area designated within the Smithers Community Forest has varied terrain, favourable snow conditions and excellent development potential.

In conjunction with the alpine ski area the development of a transportation infrastructure would facilitate improved access to both areas. It is foreseeable that the two ski areas could complement each other and provide a diverse skiing experience. Hosting events brings out-of-town competitors and dollars to Smithers.

The Bulkley Valley Cross-Country Ski Club is proud to spearhead the development of this cross-country ski area within the Smithers Community Forest. It is the intention of the Club to develop a facility valued by the citizens of the Bulkley Valley and worthy of provincial recognition.

Development to Date

Original Pine Creek Trails

Since clearing first started in 1982, sporadic work carried out jointly (and separately) by the ski club and the Forest Service has gradually improved these 12 kilometers of flat trails. Consisting of a 1, 2.5, 5, 7.5, and 10-km loop, these trails are extensively used by beginner, family and recreational skiers. These trails were widened in 1996 to allow for mechanical grooming. Due to the flat terrain, views are limited. The trails are used as a main section of the annual B.V. Marathon.

New Trails

The Bulkley Valley Cross Country Ski Club's desire to develop more challenging ski trails resulted in the presentation of a proposal in April of 1987 to the Forest Service. This proposal outlined the potential and possible usage of an area (directly across the ski hill road from the existing trails) that was later designated as the Smithers Community Forest. A trail consultant's report financed by BCFS laid out the sequencing and development of trails. The Community Forest Program supplied funding for the construction in 1989 and 1990 of 11 kms of the trail that are, in the main, to the standards and widths specified by the trail consultant. A suitable parking lot and staging area were also built. This trail system was named the Chris Dahlie Trails after a pioneer of skiing in the Bulkley Valley.

As the skiing memberships continued to rise the need was expressed for more novice and intermediate trails. To this meet this need, in 1991 to 1992 an additional 6 kms of novice to intermediate trails were added to the northwestern portion of the area as were two connecting trails around the scenic Goldeneye Lake area. Small modifications to improve track setting, safety and view scapes are carried out as they are identified. The 35km trail system is now considered one of the finest in the province.

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The membership still expresses an interest in longer touring trails in the forest and long range planning with the Community Forest. The Cross and club in conjunction with the Community Forest Committee is working plans to meet these needs.

Track Setting Equipment

With the increasing membership (approaching 300 in 1992-93) and use of the ski trails, a fundraising effort was begun to upgrade the track setting capability. The twin track snowmobiles used by the club were unable to keep up with demand and were aging to the point where reliability was a problem. In the fall of 1993 a 200HP Piston Bully track setter was purchased by the club purchased a 200 HP Piston Bully track setter. Funds were split equally between donations of club

members, a B.C. Community 21 grant and financial support from service clubs and businesses in the community. A new equipment shed was constructed in fall of 1994 to house the new track setter, snowmobiles and other equipment.

Day Lodge

In the summer of 1994 construction began on the day lodge. The club had been growing to the point where on a typical 'Jackrabbit' Saturday in excess of 200 people were at the staging area of the trails. A day lodge big enough to accommodate the growing sport became priority. After much research and planning an 1800 sq. ft. two-story structure was decided upon. It was named the "Buchfink Memorial Lodge" after a tragic helicopter crash in January of 1994 took the lives of an active family of enthusiastic skiers. The foundation was completed in 1994 and the structure was completed enough to use for the 1995 - 96 season. Funding was similar to the track setter and the over \$50,000 worth of labor was volunteer. The day lodge has been an important addition to the area and the community as a whole. At all times of the day there are

families using the facility to enjoy an outdoor winter activity in a natural setting. The lodge is also available to other user groups in the Community Forest for events. The whole facility of ski trails and lodge was renamed at the AGM as the Bulkley Valley Nordic Centre.

Lighted Track

As the ski club membership reached over 450, new interest and demand for night skiing arose. In 1996, using club funds and generous support from BC Hydro the power line on Hudson Bay Mountain Road was extended several kilometers up to the day lodge. The line to the ski area and lodge was planned with sufficient capacity to provide power for a 3 to 5 km lit track. In 1997 Forest Renewal BC approved a grant application by the club to construct the lit track, a new access road and parking lot nearer the day lodge. Although the grant fell short of the projected costs, the 'Adopt-a-Pole' campaign and club funds along with enthusiastic volunteer labour succeeded in making up the deficit.

Event Highlights:

B.C. Winter Games 1994
B.C. Cross Country Ski Championships - 1996
Canadian Junior National Championships - 1999

Programs and Annual Events

Junior Racing Program:

With over 50 skiers and a dozen volunteer parent coaches the BV Junior Racing team is the largest in the province. They are the perennial favorites to win the BC Championships and have won the national club championships three times. In the world of cross-country skiing these young skiers have made Smithers and the Bulkley Valley known throughout the country. Local and regional Races: The Bulkley Valley Nordic Centre is now the venue of choice for many annual races.

Rabbit Program:

The BC Rabbit program has grown to over 150 young children participating annually. It is quite a sight to see all these young children enjoying themselves on a winter Saturday afternoon.

Women's Ski Festival:

A popular event held in early December has become a model for similar events in the province.

B.V. Marathon:

This family oriented fun event has grown along with the club so that in 1998 the annual BV Marathon was the third largest in the B.C.

Adult Ski lessons:

One of the fastest growing aspects of the ski club is the Masters' ski program. Coaches and junior ski racers volunteer their time to teach adults how to ski.

Back Country:

Along with the Nordic Centre in the Community Forest, the BV Ski Club also maintains three Backcountry cabins for use of club members and the general public.

5.4 Biathlon:

The Biathlon range and hut was constructed to host the 1994 B.C. Winter Games' biathlon races. Range entry, exit and penalty loop trails were also constructed, adding to the existing Nordic ski trails.

The Bulkley Valley Biathlon Club (BVBC) is affiliated with Biathlon B.C., with individual and family membership with the Bulkley Valley Cross-Country Ski Club. Club membership is relatively small, yet consistent in numbers. Recreational and competitive biathlon events have been regularly hosted by the BVBC, with a number of participants coming from out-of-town.

The BVBC maintains a good relationship with the Bulkley Valley Cross-Country Ski Club and with the BV Naturalists. The club has actively thought out agreement with these user groups for compatible use of the Community Forest. Members have also contributed time and dollars to ski facility construction and regular maintenance.

Other than improvement work to the existing Biathlon facility, the BVBC foresees no additional work within the Community Forest more than that of the Bulkley Valley Cross-Country Ski Club.

5.5 Mountain Biking:

The Mountain Biking Club built 4.5 Kms of trails for mountain biking in 1998. Approximately half the trails are signal track following new routes and the other half follows the existing cross country ski trails. Mountain biking complements skiing because it occurs in the summer only. Mountain biking is not allowed on the nature trails at any time.

5.6 Hiking:

several The nature, ski and bike trails are all suitable for hiking. These trails are all designated non-motorized to improve the hiking experience. There are also trails in the community forest that are suitable for hiking.

Future hiking trail development could include the old Duthie Mine road that would link Smithers with the Community Forest. This road was once used to access the Duthie mine and follows Dahlie creek from behind the CN station. Currently it is only suitable for snowshoe hiking in the winter

5.7 Landscape Management:

Landscape management will be an integral part of all planning activities that might result in alteration of visual resources within the Smithers Community Forest. Activities will be assessed for Visual Sensitivity

The viewpoints used for Visual sensitivity are;

- Town of Smithers
- Village of Telkwa
- Highway 16 East
- Hudson Bay Mountain Road
- Hudson Bay Mountain Ski Area Facilities

An analysis of all harvesting activities is undertaken and all proposed blocks' are subject to the application of landscape management principals of design and layout, to ensure the VQO is maintained.

6.0 WILDLIFE MANAGEMENT

6.1 Objectives

To maintain the diversity and viability of species represented and to ensure that the capability and biological limit of each species of wildlife is available in sufficient abundance to meet the needs of society. Specific objectives are to actively modify or protect habitats for the benefit of wildlife and to provide the public with general information regarding biological processes and habitat requirements of wildlife.

6.2 Habitat

Habitat enhancement programs will be aimed at modifying particular habitats for the benefit of one or more species of wildlife. Within the community forest, enhancement opportunities exist primarily for deer and moose. Moose habitat enhancement will be achieved by stressing (i.e., knocking over with a caterpillar tractor or cutting down by chain saw) decadent or mature willow, which currently do not provide stems or twigs as browse. That stressed willow will immediately provide a source of food from the crown of the shrub, and over the course of the following summer, new suckers will provide winter food for moose. Moose enhancement areas are generally confined to the lower elevation deciduous forests on the east boundary of the forest. Higher elevation sites would be used less intensively as snow depths in winter force moose to lower elevations. Mechanical knockdown of willow occurred in 1986 in an area next to lots 2518 and 5452. Deer enhancement opportunities are limited.

Demonstration logging activities will provide the opportunity to illustrate how changes to logging plans can be incorporated so that wildlife and their habitat are better protected. This may include modification of cut block size, location, shape, retention of snags, buffer zones, access routes, silviculture prescriptions, etc. Studies to assess the impact of forest practices on wildlife will be encouraged.

6.3 Public Information

Informational signs will be erected by the Bulkley Valley Naturalists to assist the general public in becoming aware of the natural resources of the area and how they are affected by man's activities. In addition, informational signs will be erected at specific sites where habitat alteration, either as part of the demonstration forest activity or direct habitat enhancement programs, has taken place. Other public groups such as scouts and school classes may be encouraged to compile nesting and sighting records of all wildlife and/or their sign.

6.4 Trapping and Hunting

A No Shooting Area was established in 1990 for the purposes of public safety. The area around the Gravel Pit and an area extending downslope from 100 metres north of the Pine Creek road will remain open to the discharge of firearms.

Registered trappers will be encouraged to continue to trap as they see fit and to use caution during high public use periods.

7.0 FOREST MANAGEMENT

7.1 Forest Management Objectives

Public education and demonstration will be a significant factor in determining what forestry practices will be used. * (See section 4.0 for additional information on forest education.) The preferred harvesting methods are low intensity machine and horse logging. Road right of way widths will be 15 m or less where feasible. Selection cutting systems that maintain the uneven-aged forests that were left behind after logging 50 years ago are preferred. A variety of silviculture practices for regenerating and enhancing the forest are preferred. The forestry plan will recognize the importance of maintaining a mix of forest habitats and provide for the integration of non-timber resource values.

A Demonstration Forest has now been completed for the Community Forest. Clear-cut, clear cut with reserves, selective, diameter limit, overstory removal, strip and patch shelterwood are demonstrated as silviculture systems. A self-guided trail is planned and being built to link up the different systems and show visitors a variety of forest treatments. Several guided tours have already been carried out in the demo forest to show the community the results of different methods of silviculture systems. Another area is now being developed next to the existing demo forest. Plans are already in progress to use group selection and irregular shelterwood silviculture systems in this area.

The current demo forest roads are now being used in conjunction with the cross-country ski trails. Future roads are being designed and built to accommodate cross country skiing, when not being used for logging.

Harvesting licenses will be awarded by the SBFEP.

7.2 SBFEP Forest Development Plan:

The following is the recommended strategy for the SBFEP Forest Development Plan for the Community Forest.

EDUCATION/ INTERPRETATION

The Community Forest is an outdoor classroom that provides the public with an opportunity to see how recreation, timber and wildlife values are managed in a forest. Examples include small-scale logging and road building, tree planting, brushing and weeding, thinning, wildlife enhancement projects, nature trails and cross-country ski trails.

RECREATION

It is important to encourage a wide range of recreational uses. Some established recreational activities are hiking/viewing, mountain biking and

WILDLIFE/ BIODIVERSITY	cross-country skiing. A wide range of habitats supports a variety of birds and mammals. The number of wildlife species can vary a lot depending on the time of year. The goal of this plan is to maintain wildlife populations through habitat conservation and enhancement.
DEMONSTRATION FOREST/RESEARCH	The goal is to demonstrate forest management through selection and group selection (less than half-hectare openings) silviculture systems. A trail through the demonstration forest has been established so that these systems can be viewed. Research will focus on the relationship between natural history and forest management (unmanaged versus managed forests).
HARVEST LEVEL	The target harvest level is 5,000m ³ of 100% sawlog per year. This will not be attained until year five of this plan.
HARVEST STRATEGY	Harvesting will focus on mature timber in the northwestern area of the Community Forest. Selectively logged in the 1950's and 1960's, the stands currently being proposed in the plans are mostly mature balsam and spruce. These timber types are well suited to single tree or group selection harvesting which requiring entries every 25 to 30 years. Prefer harvesting employing horses to minimize damage to the residual stand. Selection harvesting achieves the goal of retaining old growth stand attributes.
ROAD CONSTRUCTION VISUAL SENSITIVITY	Establish permanent circle roads/trails suitable to be used for ski trails. Road right of way width should be limited to 15 m or less. Portions of the community forest are visually sensitive from Smithers, Telkwa, Highway 16, Hudson Bay Mountain Road and Ski Smithers. Selection harvesting and narrow roads will maintain the current visual quality.
FOREST HEALTH	The incidence of Mountain Pine Bark Beetle is low. Falling and burning will be used to control beetle outbreaks. Harvesting of some pine patches (less than one-hectare) may also occur.

8.0 MONITORING AND ANNUAL REPORT

The Forest Service is responsible for plan implementation and regular field inspections of activities within the community forest. The Committee is responsible to monitor the implementation of the Community Forest Management Plan. The main action groups in the Community Forest including the Mountain Bike Club, Cross Country Ski club, SBFEP, and the Bulkley Valley Naturalists Club submit five-year plans to the committee for review and comment. The five-year plans are updated annually and the committee meets once a year in the community forest to review the various plans. The committee was also actively involved reviewing the SBFEP strategy in 7.2 above.

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APPENDICES