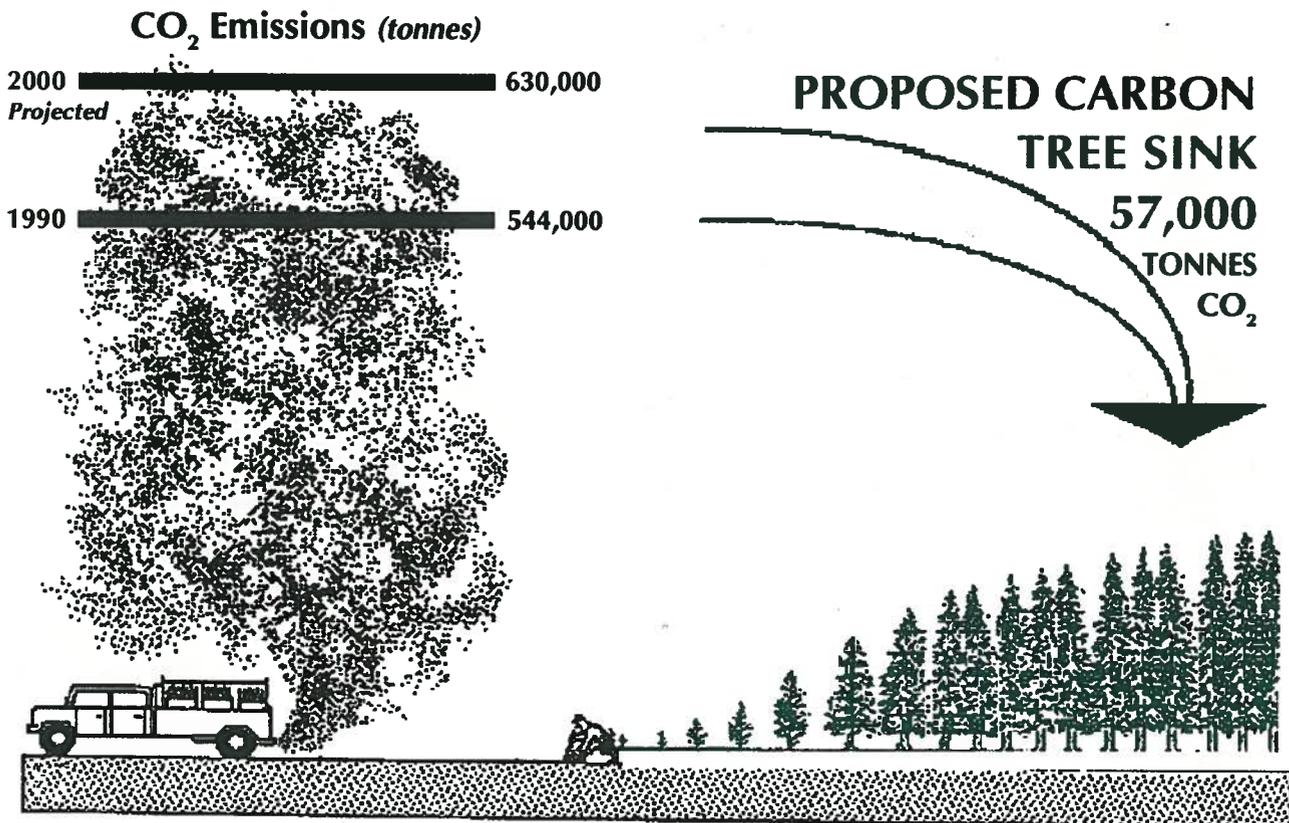


# WSCA

Fall/  
Winter 1992

N E W S L E T T E R

## *Canada's Commitment: Keep 2000 CO<sub>2</sub> Emissions at 1990 Levels*



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# 15 billion tree Carbon Sink Silviculture Proposal

PLUS: Future Silviculture Markets • Double Jeopardy Deja Vu • WCB Safety Regulation Review

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# Western Silviculture Contractors Association

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## Contents

### Feature Articles

Carbon Sink Silviculture <i>by Joyce Murray</i>	4
Planting on the Coast <i>by Tony Harrison</i>	10
Future Silviculture Markets <i>by Dirk Brinkman</i>	12
Timber Supply Analysis <i>by Steve Northway</i>	16
Double Jeopardy DeJaVu <i>by Dirk Brinkman</i>	20

### Departments

News Briefs	2
Editorial	3
WSCA Reports	22
Safety Reports	24
Training Reports	26
Ministry Reports	27
WSCA 1993 Conference	28
Mail In/Out	29

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# NEWS BRIEFS

## Ontario Forest Audit Released

The Ontario Ministry of Natural Resources has released an independent audit of Ontario's boreal forest. It is the first audit of its kind in Canada and will be valuable in developing forest management practices on an ecosystem basis. The audit shows that forest areas logged between 1979 and 1985 are regenerating, but the composition of the forest is changing.

In Ontario's boreal forest, the dominant species have been spruce and jack pine, which are vital to the forest industry. The committee found that after harvest and regeneration, hardwoods such as poplar make up a larger component of the forest. This trend is more evident on productive forest sites. The report notes that if only conifer species are considered, 84% of areas have been successfully regenerated, but only 40% meet minimum height requirements for free-to-grow status.

Of the 1.9 million hectares harvested within the review period, about 35% were treated for artificial regeneration, the rest regenerated naturally. The report indicates that planted and seeded areas more nearly represent the original forest cover type than naturally regenerated areas.

Natural Resources Minister Bud Wildman has committed the province to acting on the implications of the audit. He specifically included the need to address concerns about the change in the boreal ecosystem.

## Carrier Loses License for Refusing to Pay for Spacing

Carrier Lumber has lost its license to cut trees in the Chilcotin after refusing to commit approximately \$6 million for future treeplanting and spacing projects. Carrier clearcut 15,000 hectares of forest under this 10 year timber license, which was to expire in 1993. MOF officials estimated that approximately 60% of the area Carrier cut needs to be thinned.

The Ministry has stated that unless Carrier guarantees to cover these future silviculture expenses, they are also in danger of losing their 20 year renewable forest license in the Prince George area.

## Oregon Launches Forest Resource Trust

Oregon's natural resources are similar to BC's, but they often seem to be running at least five years ahead of us in resource policy issues. The Secretary of State says they are now facing a "significant decline in timber supply, and the need for protecting valuable forest resources and preventing job losses." The Oregon state government is proposing a \$200 million Forest Resource Trust to reforest, increase production and protect other values on over one million hectares of private forest lands (through financial and management incentives). The Trust is to be funded through the sale of Forest Resource Trust bonds to Oregonians.

## U.S. Wants Canadian Raw Logs

An NDP delegation that went to Washington, D.C. to lobby the U.S. government against the softwood lumber tariff has reported that the political agenda behind the action is free trade in raw logs. The Americans want access to Canada's timber resources and are using the countervail to beat us into submission. The U.S. lumber lobby stated that if Canada would only lift its ban on raw log exports, the U.S. countervail would dissolve. Representatives of U.S. Senators stated flatly that access to Canada's raw log market is the prize they seek. U.S. politicians have since released a letter to the press calling for free trade with Canada in raw logs. The NDP claimed this is a sovereignty issue and demanded that the governments say a resolute "NO" to the invasive U.S. action.

## CFA Reports on Biodiversity

The Canadian Forestry Association has published the third in its series of special issues of Forestry on the Hill. This issue, "Biodiversity and Monocultures" reflects the views of over 25 agencies and individuals from government, industry, academia, and organizations. Copies of this report cost \$6.00 (+ \$1.90 shipping/GST) and can be ordered by calling (613) 232-1815.

## Canadian Public Opinion on Forestry Issues

(from a national survey commissioned by Forestry Canada)



**53%**  
of Canadians say too many trees are logged in Canada each year.



**81%**  
think chemicals used in forest management pose a hazard to human health and the environment.



**79%**  
think clearcutting is a poor forest management practice.



**71%**  
say clearcutting is used too widely.



**86%**  
think most old growth forests in Canada should be protected.

## E D I T O R I A L

**Is Reforestation Wasteful?***Dirk Brinkman*

From a much noted and reported dinner conversation between M&B and Western Canada Wilderness Committee (WCWC) on clearcuts, old growth and forest management practices, the Globe & Mail printed the following comments by Joe Foy of WCWC:

*"...we don't believe in planting. We think it's wasteful, costs a whole bunch of money. We believe you can do it through natural regeneration. If it's done right you don't have to [re-plant]... It isn't me inventing some weird, brand new idea, this is coming out of the scientific community."*

This notion that artificial forest renewal is a waste of money is a very serious problem for the silviculture industry.

Like seedling damage, the effect of bad news on the public's confidence is accumulative. When only bad news is news, like any other industry, we have to work

hard to get out the good news. Media hype about stashed seedlings, low survival, sick and disillusioned planters and problem plantations have had a negative effect on our industry over the years.

However, that is not what we are dealing with here. In addition to their campaign against clearcutting, environmentalists are ridiculing Canada's reforestation program as mono-culture plantations with slogans such as "A tree farm is not a forest!" Environmentalists are demanding a structural change in harvest practices that result in more natural regeneration.

When the public was concerned that we were not planting all the area being clearcut, public pressure drove the creation of the present forest renewal legislation. Now their concern is being focused on how the forests are being logged and regenerated.

Increased use of natural regeneration also makes economic sense to the forest industry. The WSCA lobbied for the 1987 Silviculture Regulation knowing it would encourage forest companies to integrate their logging and regeneration operations.

Indeed, forest companies are now discovering that by logging selectively (or very carefully) to preserve naturals they can reduce their forest renewal costs more than they increase their logging costs.

The silviculture industry needs to be more aware of how such changes in logging practices will effect the future of reforestation.

mean the end of the forest (and silviculture) industry.

Canada's slow growing resilient ecosystem can be managed on sound ecosystem principles. Through innovative harvesting and forest renewal we can avoid mono-culture plantations. Today's innovative plantations are mixed species, multi-aged ecosystems and are evolving toward biodiversity goals.

We can harvest and renew old-growth forests by prescribing our forest practices on an ecosystem basis. Canada can avoid the forestry mistakes of European nations (where many environmentally conscious consumers of our products also live).

***...we don't believe in planting.  
We think it's wasteful...  
you can do it through natural  
regeneration... -WCWC***

The number of trees to plant may continue to decline. The remaining trees will be larger, with more area planting, mixed species and microsite selection. Innovative logging practices will be integrated and a part of ecological forest renewal in the future.

This future of fewer trees will require fewer planters who are more technically competent in the art and science of renewing forest ecosystems.

The fight to stop the cutting of old growth forest also continues. Some European lumber yards now advertise that their products are from second growth plantation forests, so that the buyer can be sure they are not responsible for the cutting of old growth trees.

These twin pressures to not create mono-culture plantations and to stop cutting old growth do not have to

It is vital to get this message to the confused public. The environmental movement's confusing messages may have allowed the Ontario government to cut the

reforestation program from under the public's nose. This creates worse problems—the conversion of softwood to hardwood forests and a crippled silviculture industry.

The public, and the environmental movement, need to know that good silviculture is not a waste of money. Clear cutting and selection cutting both need artificial reforestation of hard to regenerate critical species. We also need to tend plantations to volume levels that will support the forest industry harvest value from a shrinking land base.

We need to correct public misconceptions and ensure that we retain the valuable experience of the foresters and silviculture practitioners presently working in the forest. In Ontario that is being lost.

# Global Warming: Proposal for a Carbon Sink Silviculture Program

by Joyce Murray, Chairperson of the Board, Brinkman & Assoc. Reforestation

*Note: This article is selected from Ms. Murray's MBA thesis— "Global Warming: Policy Analysis and Proposal for a Carbon Sink Silviculture Program" The full text (more than 150 pages) is available from Brinkman & Associates.*

Global warming results from human activities such as deforestation and energy combustion that increase concentrations of atmospheric greenhouse gases. The great majority of climatologists and informed leaders agree that effectively irreversible greenhouse gas concentrations risk environmental catastrophe. Canada has committed its participation in the UNCED's immediate and concerted international response to limit the sources of global warming.

Canada is among the highest per capita producers of greenhouse gases, largely owing to inefficient energy use. Canada is expected to experience higher than average warming resulting in environmental, social and economic disruptions. The Canadian government recognizes the need for government intervention in the market, and has made a commitment to reduce greenhouse gas emissions to 1990 levels by the year 2000.

The current Canadian government's response policies are inadequate to achieve the emissions reduction target. Conflicting policies and subsidies still encourage the individual and corporate activities responsible for greenhouse gas emissions. Action to reduce net emissions has been delayed by concern over losing trade competitiveness and by pressure from affected industries, such as those in the energy sector. Canada's passive strategy must change— inaction only increases the risks. The net costs of action are less than predicted when external and

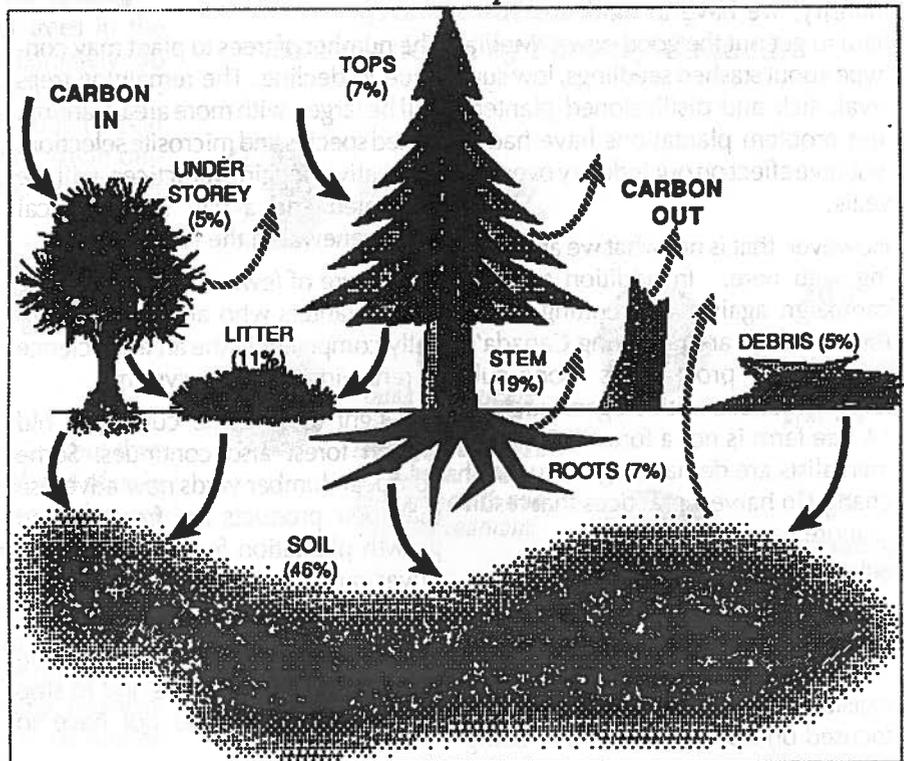
long-term benefits are properly valued. In this context, moral leadership by Canada is affordable and will encourage parallel unilateral action by other nations.

Declining global forest cover contributes to global warming since trees absorb carbon dioxide, the foremost greenhouse gas. Carbon sink silviculture— planting trees and managing forests to increase carbon uptake— is unanimously considered to be an essential part of a global warming response program. The required infrastructure already exists in Canada, as does a national timber supply crisis and a vast expanse of unproductive forest and agricultural land available to be forested. Canadians place a high value on the many other benefits from healthy forests. Along with programs which decrease energy use and shift to less polluting energy sources, a large silviculture program should be undertaken.

National and international benchmarks suggest a national program to plant fifteen billion trees over fifteen years. Incorporating the principles of environmental sustainability is crucial to its success.

Policy goals and practical constraints dictate that the program include diverse components. Planting urban trees, converting marginal agriculture lands to timber and bio-fuel plantations, restoring degraded wilderness areas, and financing tropical agro-forestry projects are among the favorable options.

A cost-benefit sketch of the fifteen billion tree program, in which future product values and a conservative estimate of non-consumption benefits are accounted for, suggests that the net cost of the program could be as low as one-third of the gross cost. Carbon sink silviculture is one of the least net cost options for Canada to achieve its CO<sub>2</sub> reduction commitments.



**Rationale For Carbon Sink Silviculture**

Canada should change its present CO<sub>2</sub> reduction strategy and implement effective and measurable policies to achieve its limitation targets. Achieving the targets will require action on many fronts, both in reducing the emission sources, and in protecting and increasing carbon sinks.

Silviculture, which includes reforestation and other forest treatments, can buy time and minimize future loss of choice while providing valuable external benefits. Carbon Sink Silviculture satisfies all of the criteria identified by the International Panel on Climate Change (IPCC) as being important components of the most effective potential response strategies, especially in the short-term:

1. Beneficial for reasons other than climate change and justifiable in their own right (better management of forests is given as an example of this).
2. Economically efficient and cost effective, in particular those using market-based mechanisms.

3. Able to serve multiple social, economic and environmental purposes.
4. Flexible and phased, so that they can be easily modified to respond to increased understanding of scientific, technological and economic aspects of climate change.
5. Compatible with economic growth and the concept of sustainable development.
6. Administratively practical and effective in terms of application, monitoring, and enforcement.
7. Reflects the obligation of both industrialized and developing countries in addressing this issue, while recognizing the special needs of developing countries, in particular in the areas of financing and technology.

**Defining a Program Size and Carbon Impacts**

The first task is to determine the scale of the proposed silviculture program. The Green Plan's Community Tree-planting Program program calls for planting 325 million trees. The pro-

gram will, for seven years, plant the equivalent of merely one-quarter of the forest we are losing each year by not ensuring regeneration of areas currently harvested. The proposed new silviculture program needs to be much larger to make a serious dent in Canada's current or future CO<sub>2</sub> reduction commitments.

**Achieving a portion of Canada's CO<sub>2</sub> net emission reduction targets**

Canada has an international commitment to limit emissions to 1990 levels. House of Commons Standing Committee on the Environment recommended limiting emissions to 80% of 1988 levels.

A fifteen-year program designed to realize close to two-thirds of the reduction to 1990 levels in the year 2000, and over one-quarter of the reductions needed for the Toronto target in 2005 would encompass **840,000 hectares annually, or 12.5 million hectares in total**. At an average stand density of 1220 trees per hectare, this means the equivalent of **15.25 billion trees** over the term of the program.

Program Segment	Portion of Program (%)	# units (000 ha)	Discount rates:				
			Gross cost (\$million)	5% Benefits (\$million)	8% Benefits (\$million)	5% Net cost (\$million)	8% Net cost (\$million)
Tropical	10	1,250	630	0	0	630	630
Urban	10	1,250	18,000	10,816	6,760	7,184	11,240
Non-commercial	20	2,500	2,593	29	18	2,564	2,575
Timber supply	50	6,250	7,075	7,614	1,193	-539	5,883
Bio-fuel supply	10	1,250	1,455	1,455	42	0	1,413
<b>Total</b>	<b>100</b>	<b>12,500</b>	<b>29,753</b>	<b>19,914</b>	<b>8,013</b>	<b>9,838</b>	<b>21,740</b>

### Cost of the Silviculture Program

Suppose for a moment this proposed 15 billion tree program were to be actualized. How much would it cost Canadians? What would be the real cost per tonne carbon sequestered? The purpose of the following cost-benefit sketch is to illustrate one of the central themes of this paper: the true social cost of some global warming response policies, silviculture particularly, is less than the presumed cost, when social and long-term benefits are recognized and included in the analysis.

This hypothetical carbon sink silviculture program covers a total of 12.5 million hectares, and has the following composition:

1. Tropical silviculture options	10%
2. Urban silviculture options	10%
3. Rural non-commercial options	20%
4. Timber supply options	50%
5. Bio-fuel supply options	10%
Total	100%

Economists disagree amongst themselves as to the appropriate discount rate to use in evaluating forestry investments. A low discount rate reflects the relatively low risk of a large, diversified portfolio of silviculture investments.

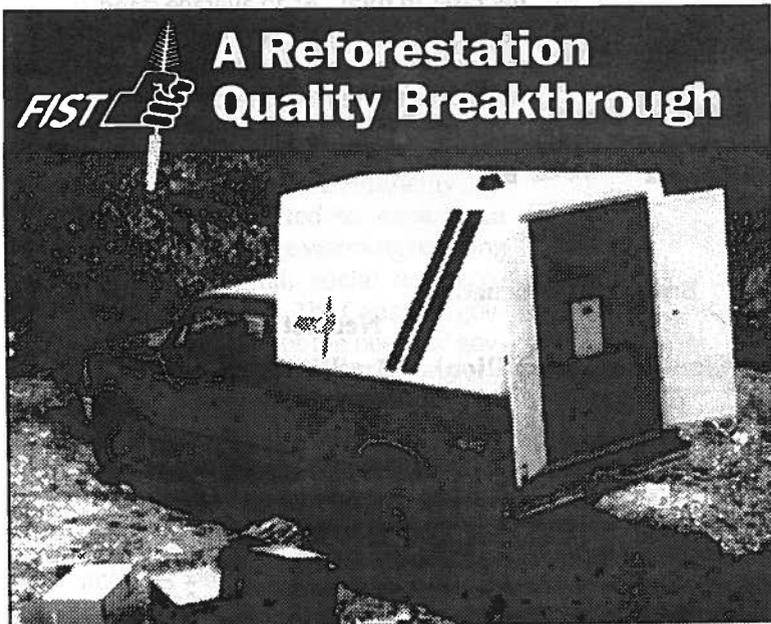
Despite conservative assumptions, the table on the preceding page shows that the net cost of the carbon sink silviculture program is approximately 33% to 73% of the gross cost, depending on the expected rate of return, when benefits are deducted from the appropriate segments of the program. The timber harvest component by itself shows a net negative cost at the low discount rate.

A large-scale silviculture program, which will account for approximately two-thirds of the CO<sub>2</sub> reductions needed to meet Canada's current CO<sub>2</sub> limitation target in the year 2005, should have a net cost of roughly \$10 billion to \$22 billion over 15 years,

and still provide many hidden benefits. The net cost of carbon avoided will be \$3.78 to \$9.73 per tonne of carbon.

### Long-term Vision

We probably will not know for many years, if ever, whether the catastrophe that we are taking action to prevent would have occurred. The strength of an effective large-scale silviculture program is that we Canadians do our part to avoid the risk of failing to take action to prevent something that eventually does happen. And at the same time we reduce the risk of costly action for something that does not happen. Carbon sink silviculture, with its mix of economic, ecologic and other benefits, is in many ways not a cost but a gain which will ignite Canadians' imaginations and reinforce the vision of being a society which protects its atmosphere and its forests for future generations.



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**Carbon Sink cont...****Selected Responses to the Carbon Sink Proposal****WSCA Endorses Carbon Sink  
Silviculture Program**

*Note: This letter was sent to BC's Minister of Forests & Minister of Environment in June, 1992*

I am pleased to submit this thesis to you, which thoroughly researches the policy and program problems for a CO<sub>2</sub> silviculture sink in Canada.

Using national and international precedents to determine a program see of 15 billion trees on 12.5 million hectares, combined with other forest management practices over fifteen years, we can meet up to 50% of the national and provincial CO<sub>2</sub> goals with the proposed silviculture program.

We have the land, the wood supply crisis, and the industry to do the job.

The marginal benefits to the forest industry, the economy, and to society through the environment justify a silviculture sink as a key component of a provincial and national strategy.

**CSA Endorses Carbon Sink  
Silviculture Program**

*Note: This letter was sent to the Ontario and Federal Forest Ministers and to the Prime Minister on July 31, 1992 on behalf of the CSA.*

A new forest renewal initiative can reduce Canada's net CO<sub>2</sub> emissions.

The Canadian Silviculture Association (CSA) endorses the recommendations of this thesis as practical, thorough and unique, and urgently draws them to your attention.

The proposed silviculture program is well within the silviculture industry's capacity. These recommendations meet a wide number of diverse Canadian needs. It is especially unique to have a program that so directly meets the agendas of the forest industry and the environment.

The CSA is prepared to cooperate with your Ministry to develop a Canadian silviculture strategy for absorbing Canada's CO<sub>2</sub> emissions and meeting our UNCED targets.

**Dirk Brinkman**

**BC MOE Response**

*Note: This reply from BC's Ministry of Environment was dated July 23, 1992*

This is to acknowledge receipt of Global Warming: Policy Analysis and Proposal for a Carbon Sink Silviculture Program. It is being studied carefully by Air Resources Branch staff and will also be passed on to staff in the Ministry of Forests for comment.

We have added your name to our mailing list so we can keep you up-to-date on the strategy consultations, as well as new information when it is available. Please contact the Air Resources Branch if you have additional comments or questions.

**Hu Wallis, Manager of Air Policy & Assessment, MOE**

**BC Forest Minister's Response**

*Note: This reply from BC's Ministry of Forests was dated July, 29, 1992*

Thank you for your letter of June 13, 1992 and for the copy of Joyce Murray's report. I have forwarded the report to our Research Branch for review by their specialists.

As you are aware, we planted 245 million trees on 204,000 hectares of Crown land in British Columbia during 1990. The Forest service is endeavouring to reforest the remaining two million hectares of backlog NSR lands over the next decade.

The reforestation program in British Columbia should contribute significantly to national and international programs to enhance carbon uptake by forests. However, we are still interested in exploring methods for further increasing net carbon uptake by the forestry sector.

**Dan Miller, Minister of Forests**

**Federal Forest Minister's Response**

*Note: This reply from the Federal Forest Minister was dated Sept. 14, 1992*

Thank you for your letter of July 31, and enclosed copy of Ms. Murray's thesis entitled "Global Warming: Policy Analysis and Proposal for a Carbon Sink Silviculture Program".

The policy analysis is very thorough and well thought out. The author presents a number of excellent arguments, and in general Forestry Canada agrees with the overall principles expressed in the proposal. It should be noted that the Department is currently supporting a great deal of silviculture activity under the Green Plan, within the Model Forests Program, and through its federal-provincial development agreements, in an effort to improve sustainable forestry practices.

With regard to the size of tree-planting program required, the author does not seem to have considered the replacement of harvested or naturally destroyed forests through the efforts of industry and provincial governments. Consequently, her estimate of what is needed may be on the high side.

In addition, there is no reference in the analysis to the current government policy of addressing issues and problems through the creation of partnerships with other government agencies, industry and interest groups.

The thesis offers some interesting ideas with respect to the problem of reducing carbon emissions. We will take them into consideration when reviewing existing programs and planning new ones. As well, Forestry Canada officials will be pleased to join with members of the Canadian Silviculture Association to discuss strategies for meeting UNCED targets for reducing CO<sub>2</sub> emissions.

I greatly appreciate your bringing this thesis to my attention and look forward to future collaboration with your Association.

**Frank Oberle**

## Carbon Sink Incremental to Harvest Renewal

*Note: This letter was sent to the Federal Forest Minister on Dec. 9, 1992.*

Thank you for your response to the CSA's proposal to plant 15 billion trees as a carbon sink.

The vast forests of Canada are a vital carbon sink for the world. It is our national responsibility to maintain these living storage reservoirs of carbon and keep them from entering the atmosphere.

Your comment that the author does not seem to have considered the replacement of harvests by industry and provincial governments, overlooks the underlying assumption of the CSA proposal.

When we harvest a forest, the impact on the CO<sub>2</sub> reservoir of that forest stand is massive. Much of the CO<sub>2</sub> in storage before the harvest ends up in the atmosphere. From a CO<sub>2</sub> perspective, the regeneration program merely re-establishes a forest stand CO<sub>2</sub> reservoir over fifty to two hundred years. Restoring the carbon reserve to its former level does not remove more carbon from the atmosphere than the harvest released into the atmosphere. Reforesting the harvest does not act as a sink for our industrial CO<sub>2</sub> emissions.

In fact, the carbon fixed by a second growth stand is expected to be less than the carbon in the old growth stand. Canada's forest harvest, despite the successful regeneration program, may be a net contributor to Canada's anthropogenic emissions. I have not seen a Forestry Canada analysis which adequately quantifies the impact of harvest conversion from old growth forests to young forests on the CO<sub>2</sub> balance.

To reduce the projected CO<sub>2</sub> emissions in the year 2000 to the level of Canada's CO<sub>2</sub> emissions in 1990, a national Carbon Sink Silviculture Program has to be incremental to existing provincial and Industrial reforestation programs. Ms. Murray's proposal begins from this assumption, then analyses the options available in Canada today.

Tree Plan Canada's 325 million trees over 6 years is such an incremental program, but it is only an inadequate beginning.

The Model Forest program, which includes some research and innovative initiatives, does not appear to be a net silviculture sink program.

To the degree that the FRDAs contribute to restoring the CO<sub>2</sub> lost from forest sites harvested before 1990—eg. reforesting the NSR, they may be considered a net silviculture sink. The FRDAs signed after 1990 do not have a CO<sub>2</sub> component. In fact, some of these FRDAs had backlog reforestation deleted, since it was rightly viewed a provincial or industry cost of harvest.

I look forward to meeting your department about initiating this proposal in the near future.

*Dirk Brinkman*

## Greenhouse Gas from Parliament Hill

*Note: The following is reprinted from Forestry on the Hill published by the Canadian Forestry Association.*

### No firm figure on CO<sub>2</sub> emissions

Jim Fulton (NDP) was frustrated last Spring in his attempts to get a firm figure from the Minister of Environment on the actual 1990 Canadian CO<sub>2</sub> emissions. "Is it the National Energy Board Figure of 517 megatons? The Energy, Mines and Resources figure of 508 megatons, or the Council of Environment Ministers' at 467 megatons?" Federal Environment Minister, Jean Charest, only answered generally. He noted that part of the program would involve improving scientific understanding to resolve the issue.

Mr. Fulton also asked when Canadians could expect publication of the government's proposed study of the feasibility of an all-party recommendation for a 20 percent reduction in CO<sub>2</sub> emissions from the 1988 levels by the year 2005. Mr. Charest replied that a lot of work has already been done on this issue. However, he further noted that it "is going to require a great deal of cooperation within government and within jurisdictions to attack this problem. We have taken a position based on what we think is a first step. Whether we will go beyond the climate change convention proposed in Rio or not is something that we will want to examine at that time."

### Government Inaction Denounced

Marlene Carterall (Liberal) also denounced the government's actions on global warming. "Instead of putting forward solid proposals to meet its own commitment reduce the emission of CO<sub>2</sub> gases Canada is asking for credit for tree planting. Planting to

deal with the symptoms of the problem rather than dealing with the fundamental cause of energy production and use in Canada. She said we have joined other nations in blocking a proposal to put environmental controls on international corporations. It is fine to talk about sustainable development, but where was Canada when GATT decided that environmental protection was not necessarily an acceptable trade impediment?"

### Long-term Commitment Questioned

Lynn Hunter (NDP) questioned the government about its long-term commitment: "It is clear we must shift from a carbon based economy to a hydrogen economy. What action is Canada taking on this front?"

Jake Epp (Minister of Energy, Mines and Resources) replied that many countries, such as China, were still burning coal and that Canada should help these countries find ways to diminish this use. He also noted that we were engaged in hydrogen research.

Ms. Hunter then asked what actions the government was taking to disprove a recent study by Infometrica which predicted Canadian greenhouse gas emissions will increase 80% by 2020?

Mr. Epp said that it was known that as the economy expanded that there would be increased emissions. "In terms of what the department is doing in hydrogen, we are funding hydrogen research. We are funding clean coal technology research. We are funding alternate energies research. We are funding ethanol. We are funding methanol. We are funding the fusion program... We have a new database in place. As well we have programs relating to R-2000..."

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# A View of Treeplanting on the Coast

by Tony Harrison, WSCA Coast Region Coordinator

**Note:** Last Spring almost a million seedlings went unplanted because of a dispute between IWA Local 1-80 and Fletcher Challenge (FC) over the use of a non-union treeplanting contractor when loggers were laid-off. [For more background see the Summer 1992 issue of the WSCA Newsletter.]

The following article was originally written as a WSCA brief for an arbitration hearing between IWA and FC last July. The WSCA was invited by FC to make a presentation, but our participation in the hearing was effectively blocked by the IWA representatives. FC presented data to the hearing indicating that the average cost per tree for union workers was three times higher than the average for outside contractors (\$1.07/tree vs. \$0.33/tree).

As a result of the arbitration, 13 laid off IWA workers were hired to plant trees, but the use of outside contractors was

allowed to continue. An IWA representative was heard to say: "Everyone knows that silviculture contractors just hire their workers off the street."

The non-union contract treeplanting industry has emerged as the workforce of choice in the province and has done the major share of silviculture work on the South Island for the past fourteen years. The union silviculture crews that planted in the early 1970s have all but disappeared. In their place is a skilled non-union labour pool which does a cost effective, quality job on a seasonal basis. The IWA has tried unsuccessfully to voluntarily sign up this work force with two organizing drives. The IWA has problems identifying the needs of existing silviculture workers and the labour needs of the industry.

There are two major factors that shape the labour needs of the silviculture industry.

## The skilled nature of the job

One of the major misconceptions of our industry is that silviculture work is an entry-level or unskilled job. It takes 3 to 4 seasons for a coastal planter to become proficient and reach a reasonable production level. Most coastal contractors do not hire planters to work on the coast without a minimum of two interior seasons planting; even then crews are made up of at least 80% experienced coastal planters. In other words very few planters get there initial training on the coast.

The difficulty of starting a inexperienced crew of treeplanters in the demanding working conditions of the coast have pushed more than one contractor to bankruptcy. The weather conditions, rough terrain, area based production and the necessity for mixed bag or multi species planting, make the coastal planters job one that is not mastered easily. It usually takes an inexperienced planter two months

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to meet the minimum requirements of the job and become acquainted with the specifics of spacing, microsite identification tree species identification and planting technique

This job is **not suitable as fill-in** for laid off harvest workers with no planting experience. When this approach has been tried in the past, it has proved to be at least twice the cost of a contractor service. In almost all these cases the harvest workers involved have not been satisfied with the prospect of making their living in silviculture.

**The importance of timing**

There are critical times in the year when silviculture treatments such as planting must be carried out or the survival of the seedlings is drastically affected. The labour requirements needed to match these biological windows are usually met by a large mobile work force which can accomplish the necessary volumes of work in a short period of time. This labour requirement do not fit the IWA approach and has been left to contractors

With creative scheduling a limited amount of silviculture work can sustain a small local crew for part of the year. This has often been the role of the hourly union silviculture crews. The labour model of having a smaller local crew supplemented by large mobile seasonal crew is one that works as long as the large seasonal crews are experienced treeplanters. To retain an experienced workforce for their large seasonal crews, a contractor must offer employment through out the province corresponding with the changing planting windows.

The nomadic aspect of the job does not suit many of the forest workers with backgrounds in logging. It attracts workers with different needs and lifestyles than the traditional IWA forest worker. These differences have been hard for the IWA to acknowledge and are the major cause of two dismal IWA organizing drives.

**Conclusion**

The health of the working forest is at risk if planting is delayed. Without

healthy plantations, forestry jobs and job security for the entire Forest Industry are in jeopardy. Current IWA members do not have the expertise needed to do the job and experienced union crews have not proved cost effective in the past.

As a result of a stand off between Fletcher Challenge and the IWA last Spring, the WSCA tried to communicate with the IWA. There was never an official response to any of our three letters. The IWA seemed unconcerned that it had no official position on the renewal of the coastal working forest.

The WSCA is deeply concerned that this dispute has postponed critical reforestation and threatens to do so for sometime. This undermines not only our members immediate employment but ,the future employment of all forest workers, our economy, and the forest environment. We hope for a clear resolution to this dispute that addresses the need for cost effective renewal of our coastal working forests using the appropriate worker for the job.

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# The Future of the Silviculture Market

Dirk Brinkman

## Total B.C. Silviculture Expenditures \$2.7 Billion (1991-1996)



From 1989 to 1991 silviculture expenditures increased in Canada at 10-20% per year. In 1990 this trend was expected to continue over five years and until expenditures exceeded \$2 billion per year. At that time planting was expected to continue to grow. Since then Canada's reforestation program has declined.

Predicting this future is very difficult today with so many new external factors influencing our market.

### BC Silviculture Expenditures

In 1991, the waning Socred government announced a \$2.7 billion five-year program for BC (see chart above).

While the general commitment to these expenditures is still in place, a number of unanticipated changes have fundamentally changed the market.

## Government Impact on the Market

### BC Planting Program

The graph "Planting Program Components" shows MOF's 1991 projection for BC's planting program.

What follows details some of the changes that the BC silviculture market is going through.

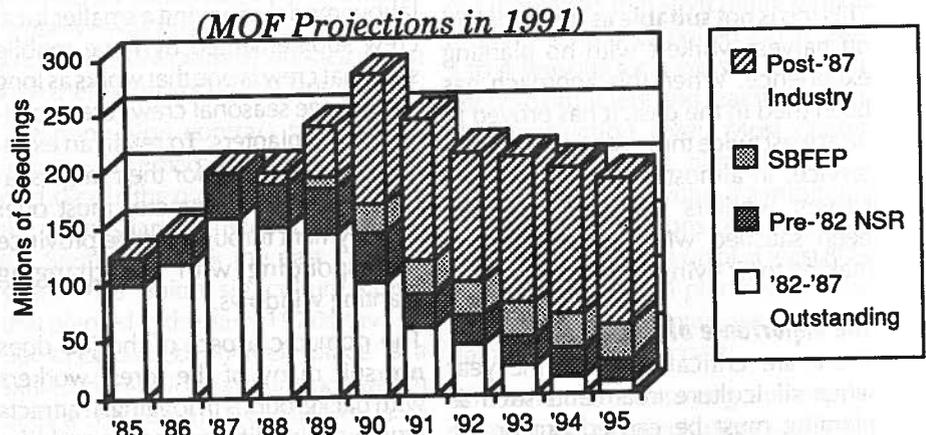
### FRDA II

FRDA II (established in 1991) is \$200 million not the planned \$350 million.

FRDA II excludes any funding for reforestation and allocates a higher percentage to consulting, research and technology transfer.

The Federal commitment of \$200 million was recently extended from four

## BC Planting Program Components



years to five, reducing the annual budget from \$50 million to \$40 million.

### Eliminating NSR By the Year 2000

On the "BC Planting" graph, the combination of Pre-'82 NSR and 1982-87 Industry Outstanding components were designed to meet the governments commitment to "Eliminating the NSR by the year 2000".

The WSCA first threw this slogan at Vander Zalm in 1987. He then challenged MOF to create a program that would accomplish this and was affordable.

The WSCA intention was to require the reforestation of the 3.7 million hectares of NSR in BC (twice the size of Vancouver Island).

The MOF reduced the target area to be eliminated through a "Net Down" process, ignoring the following types of NSR settings until there was only 700,000 hectares left:

- "Doubtful Stocking"— area which may become stocked over the next twenty years through natural regeneration.
- "Poor Sites"— slower growing areas which give a lower return on silviculture investment.
- "Inaccessible"— areas which are difficult to reach.
- "Remote"— areas distant from processing facilities where the wood could be utilized.

A greater proportion of the redefined NSR was planted during 1989-1992 than anticipated— less than 250,000

ha. remain to be planted.

The MOF is now having difficulty finding NSR areas to plant, and the 1993-1999 backlog reforestation program will be smaller than anticipated.

However, a brushing & weeding program required to bring these plantations to free growing is emerging.

### 1987 Silviculture Regulation

This regulation applies to all areas currently being logged.

Approximately 15% of the harvest is auctioned through the small business program which is still being regenerated by the Ministry of Forests District Offices through it's traditional contract program (along with the backlog reforestation program).

The other 85% is the responsibility of the forest companies.

In 1987, the MOF projected that '100% reforestation' or 'Steady State Program' -i.e. reforesting all areas harvested currently -would cost the province \$750 million and would require the planting of 72% of the area being logged.

Today this costs the forest industry approximately \$220 million and involves planting only 48% of the area being harvested.

In part, this is a predictable benefit of changing the reforestation program from a government delivered program to a strongly enforced regulation being met by free enterprise.

**Ministry Procurement of Services**

With a large number of good contractors to choose from, the Ministry of Forests is being encouraged to use more traditional government contract procedures.

Districts are using a blend of Low-Bid, Proposal, Multi-year and Direct award contracts. Many smaller contracts are available to locals only.

**Forest Industry Influence on the Market**

A number of other external influences have further effected the degree and nature of the work available through the silviculture regulation.

**The Recession!**

The volume of logging has been reduced from 90 million cubic meters in 1990 (which we reforesting 1991-3) to 75 million cubic meters in 1992 due to reduced market demand.

Reforestation work is being postponed to the last year allowed in the Pre-Harvest Silviculture Plan (usually three years).

Licensees are looking for cheaper costs today even if it jeopardizes their future replanting costs. Negotiated contracts are converted to select viewings and select viewings are opened up.

Some companies look the other way while contractors violate the camp and WCB standards in exchange for cheaper prices.

**Natural Regeneration**

There has been an increasing reliance on natural regeneration.

There has been a shift in the spectrum of species acceptable within the ecosystem to species which are easiest to regenerate, such as preferring pine to spruce, whenever that is an option. This reduces the number of trees needed to ensure the minimum target stocking is met at free-growing.

The acceptable species has been expanded to include aspen, birch and alder which more often regenerate naturally after harvest.

**Experience Curve**

From 1987 to 1992, seedling survival has gone up from 70% to 85%. This is due to many innovations: smarter prescriptions, proper site prep, not screening if that creates frost pockets, using Vexar in browse areas, mixed bag planting, microsite planting, etc.

Initially, foresters were planting higher numbers per hectare to insure that stocking standards in the new silviculture regulations were being met. Now, with five years experience in meeting the regulations, more and more foresters have achieved free growing in various ecosystems. This experience allows a refinement (reduction) in number of trees required to meet minimum stocking standards.

**Reduced Minimum Stocking**

Through negotiation with industry, stocking standards have been lowered on average by 10%, reducing the number of trees required for minimum and target stocking.

More companies are planting to minimum—rather than target—stocking standards to reduce costs, even though this increases their risk.

**Maximum Stocking Standards**

Maximum stocking standards were introduced for pine ecosystems and are being negotiated for hemlock and others, resulting in a larger proportion of the program requiring spacing.

This has created a spacing cost for natural regeneration that is causing

some foresters to choose immediate planting to avoid spacing costs.

In the case of Carrier Lumber's salvage operations in the Chilcotin, where they are now required to space about 10,000 out of 15,000 hectares harvested. At \$600/hectare, it adds \$6,000,000 to their silviculture liabilities. However, since their salvage licence is expiring in 1993, they have refused to do this work

**The Changing Emphasis of Silviculture Work**

**Intensive Silviculture**

Intensive silviculture or tending the established forest includes: taking care of the plantations (brushing and weeding); reducing the costs and improving performance of plantations through special services (consulting, fertilizing, end-results contracting to supply a free growing plantation) and enhancing the growth and value of the established stands.

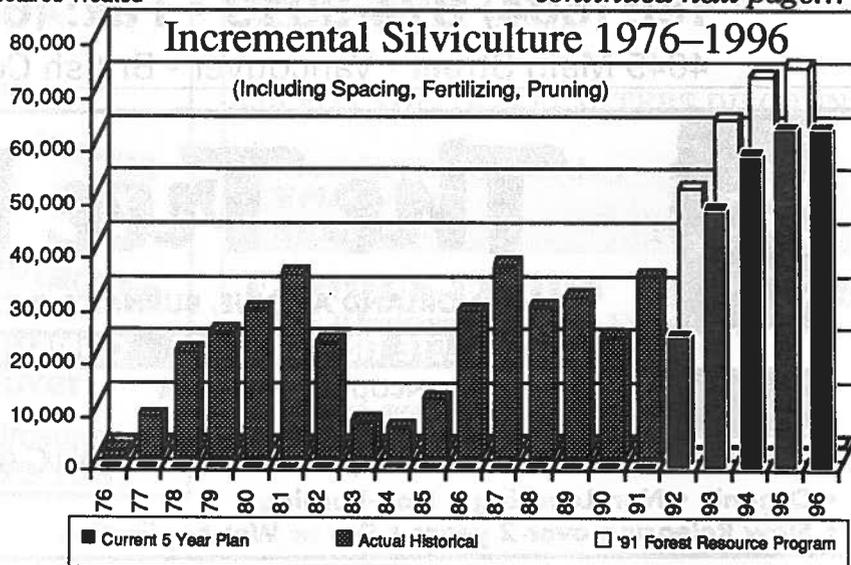
It is generally assumed that Canada will eventually have a similar mix of reforestation and tending as Sweden, where the tending market is 80% the size of the reforestation market.

**Slower Increases in Intensive**

The 1991 Forest Resource Enhancement Program was going to increase intensive silviculture from \$20 million per year to \$70 million per year over the next four years (see Incremental Silviculture graph).

Hectares Treated

*continued next page...*



**Silviculture Markets cont...**

The promised increases, while still gradually being introduced, have been slowed down and extended into the future. These programs are funded out of general revenue and may face further deficit trimming.

**Free Growing -> Harvest**

The WSCA is lobbying the BC government to have the intensive silviculture program on the "Working Forest" (where harvesting is the dominant use) made the financial and planning responsibility of harvest licensees.

The Silviculture Regulations would be amended to require licensees to manage forest renewal to the harvest age, instead of to free growing.

Through spacing the age class, companies could increase the long range sustained yield, allowing them to increase their annual allowable cut.

A more secure tenure should be motivation enough to fund a major intensive silviculture program.

**(Un-)Employment Pressures on the Silviculture Market**

**The IWA**

In both Fletcher Challenge's south island and M&B's Port Alberni operations, sudden increases in the number of laid off loggers meant IWA demands that laid off loggers plant the trees.

Both Fletcher Challenge and M&B decided to postpone any planting they could, removing almost 15% of the coastal program. This created intense pressure from contractors on the remaining contracts.

It is reasonable to project that this problem will reappear repeatedly as the CORE process being conducted by the Owen commission carves out parks and reserves and lays off more workers in forest communities.

At the Forest Summit Conference last September, I was in a heated panel

debate with Jack Munro of the Forest Alliance (who's son plants with a non-union contractor). He repeated again and again that he wants to get rid of silviculture contractors, so the work can go to local loggers who are out of work. This Alliance position is hard to reconcile with the best interests of forest companies, the public or the forests. Analysis of coastal planting records by Fletcher Challenge indicates that planting by IWA crews is, on average, three times more expensive and of lower quality than work by silviculture contractors.

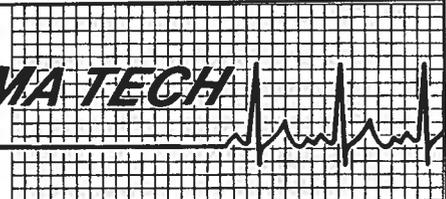
**Native Silviculture Work**

The task force on Native involvement in the Forest Sector recommended that 20% of the current silviculture program be transferred to the natives.

While the MOF's Advisory Council on Native Involvement is still being formed to implement this and other recommendations, some bands are already being awarded direct contracts in their local forest district.

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**Forestry Make Work**

The NDP Government appears to be preparing an initiative to allocate some of the contract silviculture program to job creation for welfare and UIC recipients in municipalities where there are major shortfalls of trees. This could pose a major challenge for contractors.

**Environmental Pressures on the Market**

**Snag falling and Selective Cutting**

At the recent National Roundtable on the Environment & the Economy, I participated in a discussion of clearcuts. I took the position that if unharvested trees were left standing, the resulting forest would be more diverse in age and species.

In New Brunswick (similarly to BC) everything was cut for safety reasons. Any tree standing after harvest was a SNAG and was felled because it posed a danger to silviculture workers.

In fact, the only recorded snag acci-

dents are to harvesters and to snag fallers sent out to make the forest safe. Slash pits created by felled snags also create a lot of minor injuries for silviculture workers.

The WSCA has recommended establishing wind speeds above which a snag filled site is considered unsafe, rather than the WCB's current policy of cutting everything down.

**Stop Clearcuts, Not Stop Forestry**

From that Roundtable session, I realized the importance of steering the movement to "STOP CLEARCUTS" toward more selection or careful logging. Careful logging, or the careful preservation of all naturals and standing stems, produces a multi-age stand, that is more genetically diverse and preserves more of the under-story brush species. Although careful logging increases the harvesting cost 15-30%, the reforestation costs decrease with higher natural regeneration.

Integrating the logging and regenera-

tion costs through careful logging creates an opportunity to meet the public agenda to reduce clear-cutting and increase bio-diversity while saving on the net harvest to free-growing cost. The shift to careful or selective logging will reduce the number of trees required to regenerate the harvest.

**Disturbing Trend in Ontario**

Poor reforestation success in the past and mixed messages from environmentalists (see page 3), have made the Ontario NDP government cynical about artificial reforestation. In a misguided attempt at budget restraint, they slashed the reforestation budget.

**Conclusions**

Current trends point to a reduced number of seedlings to be planted. There will be an increase in work for local crews, including unemployed loggers and natives. Overall, the silviculture industry will involve fewer people who will need greater expertise and technical competence.

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# Elements of a Timber Supply Analysis

by Steve Northway, RPF, MacMillan Bloedel

**A**ny discussion of response to silvicultural treatment must start with an understanding of the development of the undisturbed stand. In Timber supply Analysis (TSA) this involves predicting the development of stands, after harvesting, and in the absence of any further silvicultural intervention.

Table 1 shows a description and relative frequency of the undisturbed development of regeneration in the TFL44 portion of Clayoquot Sound. It also details the silvicultural prescription that would normally be applied to each regeneration type.

The estimates in Table 1 have been developed from the anecdotal evidence of local foresters. The estimates have been checked for consistency among foresters and against relevant silvicultural records. Although long

term measurements would allow more precise estimates, government and corporate policies require prompt intervention in circumstances of long regeneration delay and low stocking levels.

In the TSA, various levels of silvicultural treatment are superimposed over the natural condition. If low stocking levels or long regeneration delays are expected, planting at various densities and site preparation are explored. In dense stands spacing is considered. Pruning, fertilization and thinning might also find a place under unusual circumstances.

The regeneration model entry 120 in Table 1 is a typical candidate for planting. It represents a natural condition of 500 stems per hectare of poorly distributed natural regeneration with no anticipated brush problems. Figure 1

illustrates the volume development of a medium stand, under a variety of planting levels. 85% of planted trees are expected to survive the rigours experienced in the first two years.

In general higher plantation densities result in higher initial volume growth. Maximum mean annual increment is a measure of stand growth that is used by many foresters. It is the average growth rate of a stand over its life time.

Figure 2 shows the MAI for the planting situations illustrated in Figure 1. The \* shows the point of maximum mean annual increment. The point of maximum MAI is often referred to as the biological rotation, as it will maximize the from the forest over successive rotations.

The point of maximum MAI is higher biological harvest and occurs earlier in stands that have been planted to

**Table 1(A) TFL44 Clayoquot Sound Working Circle: area allocation of silvicultural prescriptions in second rotation. Hemlock species type**

Regen Model Number	Description	Silvicultural Prescription			Area Allocation - ha		
		Poor Site	Medium Site	High Site	Poor Site	Medium Site	High Site
120	500 nat	Pl 900	Pl 1200	Pl 1200	4644	6172	810
122	500 nat Brush	Pl 900 Treat 0	Pl 1200 Treat 1	Pl 1200 Treat 2	3878	6168	1255
126	Slash/Brush 600 nat	P. Burn Pl 900	P. Burn Pl 1200	P. Burn Pl 1200	795	1020	1345
128	Slash/Brush 600 nat Brush	P. Burn Pl 900 Treat 0	P. Burn Pl 1200 Treat 1	P. Burn Pl 1200 Treat 2	731	1165	203
130	1200 nat	Pl 600	Pl 600	Pl 600	3650	4796	1122
132	1200 nat Brush	Pl 600 Treat 1	Pl 600 Treat 1	Pl 600 Treat 2	1624	2051	385
136	Slash/Brush 1200 nat	P. Burn Pl 600	P. Burn Pl 600	P. Burn Pl 600	674	867	134
138	Slash/Brush 1200 nat Brush	P. Burn Pl 600 Treat 1	P. Burn Pl 600 Treat 1	P. Burn Pl 600 Treat 2	723	929	168
150	3000 nat				2600	2463	361
152	3000 nat Brush	Treat 1	Treat 1	Treat 2	1304	1649	254
160	6000 nat			Space	3838	4109	262

higher densities. The differences decrease at higher levels, reflecting diminishing returns. Typically, a planting level of 1200/ha would be chosen. This will result in a 100% increase in maximum MAI over the unplanted stand.

Current policy is to plant in conditions that cover about 70% of the areas harvested in Clayoquot sound. One of the consequences of a prompt planting program is the minimization of early seral stages. This holds a cost for biodiversity, but is done to minimize the need for brush treatments.

**Spacing**

Spacing is considered in stands that have been naturally regenerated to excessively high densities. Regener-

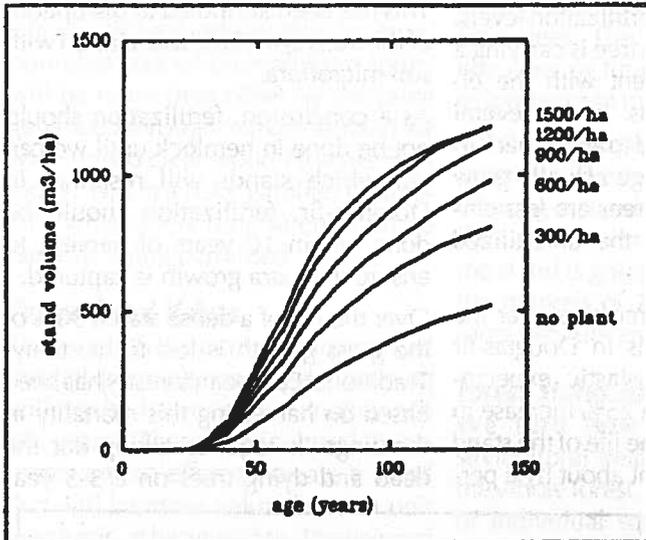
ation model number 160 in Table 1(A) is a typical candidate for spacing. It represents conditions of 6000 competing natural stems per hectare. (Trees greater than 2/3 the dominant height are considered competitors.) Figure 3 illustrates the volume development of a high site index class stand, with and without spacing. Without treatment, the stand is off such a high density that suppression of height and volume growth occur. By spacing out the trees in the stand it is possible to alleviate this suppression.

The spaced stand has a higher maximum MAI, but it has a longer biological rotation. Some foresters advocate spacing as a way to shorten rotations, but they only accomplish this in terms of a technical rotation.

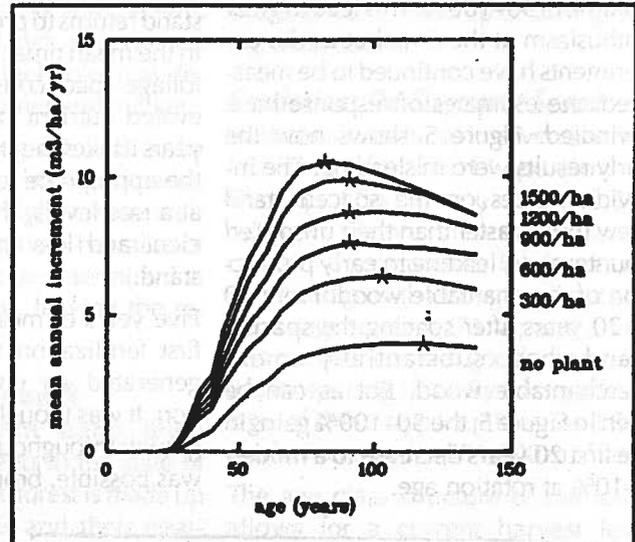
A technical rotation is defined as the time to meet a specified minimum size. Figure 3 has a \* to indicate when the spaced and unspaced stand have reached 30 cm. average diameter. The spaced stand reaches this size 20 years earlier than the unspaced stand but that point is well before maximum MAI; harvesting then would result in sacrificing considerable growth.

Figure 3 also illustrates the response of a poor site to spacing. With the same 6000 stems per hectare, the poor site shows no stand level response, where the high site does respond. The density that a stand can carry is a function of stand height and uniformity. The poor site does not attain the stand heights of

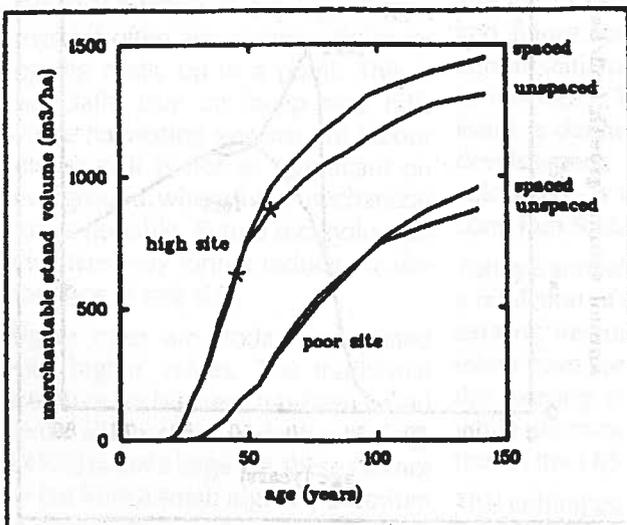
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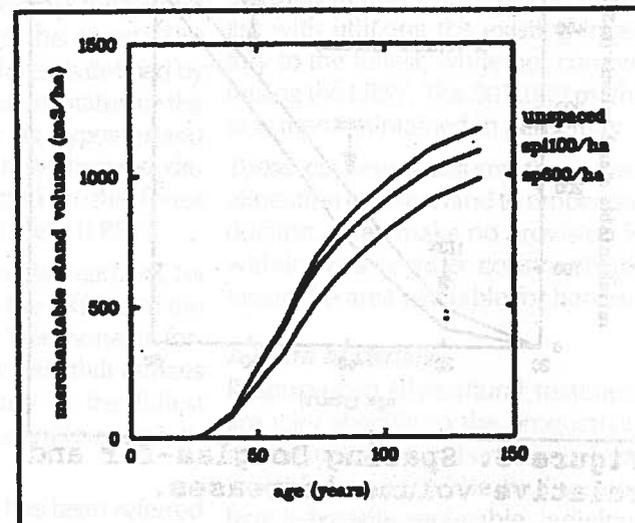
**Figure 1. Planting hemlock into existing natural regeneration.**



**Figure 2. Timing of maximum MAI for hemlock plantations (\*).**



**Figure 3. Spacing hemlock on high and poor sites. (\*=30cm dbh)**



**Figure 4. Spacing a hemlock plantation on a medium site.**

**Timber Analysis cont...**

the high site, and so is capable of carrying more stems without suppression of growth.

Figure 4 illustrates the impact of spacing a planted stand to various levels. A natural stand of 500/ha on a medium site (regen model 120 Table 1) was planted with 1200/ha. Because the planting was done to an optimal density, the spacing only decreases the volume growth of the stand. The lower the density left after spacing, the greater the impact on growth.

In the three spacing situations we have looked at, the increase in maximum MAI has ranged from 0-10%. In the 1960s, short term experiments showed increases to merchantable volume of 50-100%. This led to great enthusiasm at the time but as the experiments have continued to be measured, the estimates of response have dwindled. Figure 5 shows how the early results were misleading. The individual trees on the spaced stand grew much faster than their unspaced counterparts, leading to early production of merchantable wood. From 10 to 20 years after spacing the spacing stand has substantially more merchantable wood. But as can be seen in Figure 5, the 50-100% gains in the first 20 years decrease to a modest 0-10% at rotation age.

Spacing is sometimes advocated as a way to increase the value of a stand. It is impossible to know what the log market will consider as "quality" when today's spaced stand is harvested, but spacing is not associated with what today's market calls "quality". Spacing results in wider rings, bigger knots and a greater proportion of juvenile wood.

**Fertilization**

Figure 6 shows the annual growth of a fertilized and an unfertilized stand. Initially, the fertilizer makes the existing foliage more efficient. In subsequent years the trees in the stand put on more foliage to take advantage of the extra nutrients. Unfortunately, the fertilizer goes through the system; and after 10 years, the nutrient status of the stand returns to pre-fertilization levels. In the mean time, the tree is carrying a foliage load consistent with the elevated nutrient status. In the several years it takes the stand to adjust back to the appropriate foliage actually grow at a rate levels, the trees are less efficient and less than the unfertilized stand.

Five years of measurements after the first fertilization trials in Douglas-fir generated an enthusiastic expectation. It was thought a 25% increase in growth throughout the life of the stand was possible, brought about by a per-

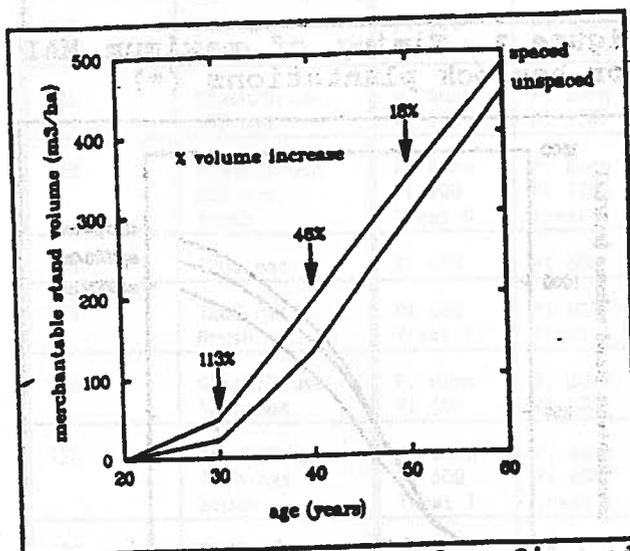
manent change in the nutrient cycling of the stand. The next 10 years of measurements deflated this enthusiasm and led to an average expectation of only a 2% gain over the life of the stand, and a realization that not all stands respond.

Multiple applications of fertilizer have been tried, but the law of diminishing returns sets in quickly. The next application may respond similarly to the first, but in subsequent applications other nutrients likely limit the response.

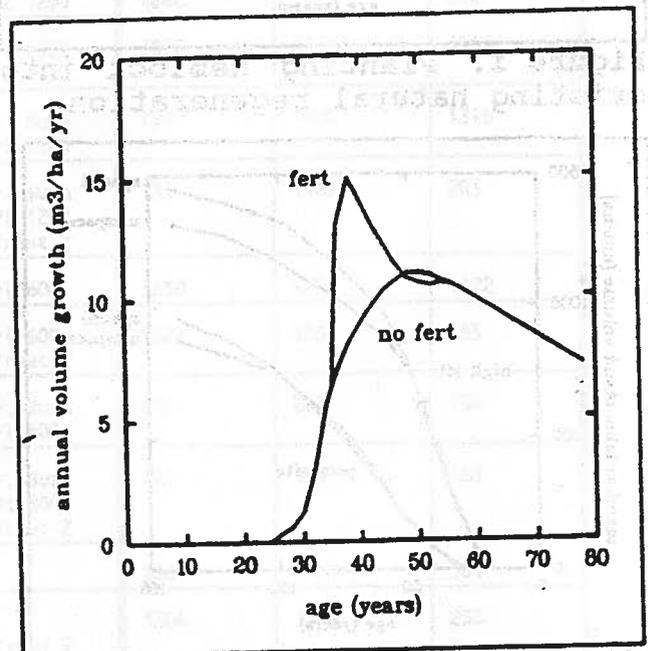
Most of the work has been done in Douglas-fir, with some in hemlock. Hemlock responses have been erratic. On some sites the response has been on the order of 2%, while on others the response has been reduced growth. This has been attributed to disruption of the trees symbiotic association with soil microflora.

As a conclusion, fertilization should not be done in hemlock until we can tell which stands will respond. In Douglas-fir, fertilization should be done within 10 years of harvest, to ensure the extra growth is captured.

Over the life of a dense stand, 30% of the gross growth is lost to mortality. Traditional European forestry has been based on harvesting this mortality in thinnings. It requires taking out the dead and dying trees on a 3-5 year



**Figure 5. Spacing Douglas-fir and relative volume increases.**



**Figure 6. Annual volume growth rate for fertilized Douglas-fir.**

cycle. This is no longer prevalent in Europe, the disappearance of traditional markets and the resulting low prices for small wood, together with increased labour costs have made it economically impossible.

There may be local opportunities in coastal BC for one commercial thinning, but its aim will be to even the flow of wood across age class imbalances rather than to increase the growth of the forest.

### **Pruning**

Pruning has to take place early in a stand's life, if it is to produce a significant proportion of clear wood. This means that we might prune a stand today, at age 10, in anticipation of harvesting it in 2060. We would be gambling that the compounded cost of pruning from today will be more than offset by the price generated through market demand for wide ringed clear wood 70 years from today. This is a risky gamble, particularly where there is no surety of future harvests being permitted.

### **Future Stand Values**

The stands that are created or modified through planting, spacing and pruning will not be harvested for another 60-80 years. These silvicultural treatments are an effort to create a stand that will be more valuable, on a unit area basis, at harvest time. The value of the stand will be determined by two components: 1) the cost of harvesting, and 2) the value of the logs. Bigger trees are often associated with lower logging costs, up to a point. This is especially true on steep side hills where harvesting systems are labour intensive. It is not so significant on level ground, where fuller mechanization is possible. Future technological advances may further reduce the importance of tree size.

Bigger trees are, today, associated with higher values. The traditional premium for big trees has been based on the ability to cut wider boards (e.g. 2X12s) out of a large log; these can not be cut from a small log. Any premium in the future will likely be related to savings associated with handling

fewer pieces. Technological change in products and mills is already eliminating the premium for wider solid wood products; and reconstituted wood products may well dominate the market 80 years from now.

As we have seen from earlier figures, bigger trees in the second rotation forests are usually associated with smaller stand volumes and lesser forest growth rates. This is the forester's

## ***...the forester's conundrum, big trees with less stand volume or bigger stand volume with little trees...***

conundrum, big trees with less stand volume or bigger stand volume with little trees. The balance depends on our view of future technological developments in machines and markets.

Spacing and pruning are both risky practices. They are primarily aimed at creating a stand of higher value with little or no volume gain. The value of the stand is going to be determined in the markets of 2060, leaving the returns very uncertain.

### **Forest Status And Growth**

We turn now from stand level silvicultural treatments to the state of the whole forest. The forest is made up of individual stands and their treatment determines the development of the forest.

The TSA of a forest portrays the current and future status of the forest. The current status of the forest is defined by its inventory. The future status of the forest is defined by its hypothesized development. The hypothesized development is reflected in the forest Long Run Sustained Yield (LRSY).

Today's annual allowable cut (AAC) is a reflection of both the LRSY and the existing inventory. Traditionally foresters have used an AAC that utilizes the existing inventory to the fullest while planning for an ordered transition to the LRSY.

This cutting pattern has been referred to as sustained yield by BC foresters

since the 1950s. It is a case of co-opting every day words into the forestry jargon. It never meant the non-declining even flow that can be taken from the literal meaning of the phrase. This is evidenced by the TSA documents in the province that include a statement of intent about sustained yield while illustrating a declining cut level.

A policy of non-declining even flow has been adopted on the US National Forests. From a forester's point of view, this policy is nonsense. While it will take a little longer to cut the existing inventory, the whole forest is still scheduled to be cut. In the mean time the full potential of forest

growth is not achieved, as a larger part of the forest is made up of slow growing older stands.

### **Conclusions On Clayoquot Sound**

Without silvicultural intervention, the LRSY of the TFL44 portion of Clayoquot Sound would be 320,000 m<sup>3</sup>/ha/yr. Many of these natural stands contain opportunities for increased value and growth through prompt artificial regeneration (71%); and a limited number contain good opportunities for spacing (1%). By taking advantage of these opportunities the LRSY can be increased to 501,000 m<sup>3</sup>/ha/yr.

The age class structure of the forest allows for a current harvest level above the LRSY. A cut pattern starting at 640,000 m<sup>3</sup>/ha/yr and declining to 501,000 m<sup>3</sup>/ha/yr at 2096 is consistent with utilizing the existing inventory to the fullest, while not compromising the LRSY. The 501,000 m<sup>3</sup>/ha/yr is then maintained in perpetuity.

These cut levels assume the current allocation of forest land to timber production. They make no provision for withdrawals or other constraints that lessen the area available for harvest.

### **A Word of caution**

Responses to silvicultural treatments are very specific to the productivity, species make-up and structure of each individual stand. While the discussion here is broadly applicable, individual circumstances may vary.

# Double Jeopardy DeJaVu

*Dirk Brinkman*

*Note: The following letters are part of a WSCA lobbying effort to reverse the recent recurrence of double checking problems. The industry foresters have been positive, but they are waiting for a response from MOF.*

## **Long Payment Delays Unacceptable**

*Note: This letter was written to Acting Minister of Forests Art Charbonneau Oct. 8, 1992*

We are taking this opportunity to write to you with some concerns of ours regarding the length of time it is taking some of our members to get paid for Ministry-funded projects.

In some Forest Districts it is taking three months or longer to receive any payment. This problem is not uniform over all the Districts. It is, for example, bad in the Arrow Lake District.

Much of the work in question is Industry Outstanding work which our members take on contract with private companies/licensees who then refuse to pay us until they have been paid by the Ministry. Contractors are forced to pressure not only their client, but several levels within the Ministry in order to receive payment for services rendered.

In an industry which has a 60 to 70% labour component, payment practices which exceed thirty days becomes a significant financial burden for our members.

At a recent meeting of contractors, it was noted that in Ontario all Ministry-funded contracts are required to be paid out in full within 30 days of completion. We think that this is a fair standard which most private companies expect and adhere to. Governments expect us to pay all our bills promptly, pay our workers in full every two weeks, etc., and we find it unconscionable that they, in turn, cannot or do not pay us for, sometimes, up to three months after we have finished a project.

We would like to propose that administrative changes be put in place which would ensure that all Ministry-funded contracts — both Industry Outstanding and M.O.F. direct contracts — be paid out in full within thirty days of completion.

## **Inconsistent Checking Problems**

*Note: This letter was written to Chief Forester John Cuthbert on Oct. 8, 1992*

It has come to our attention (from our members' experiences) that some Licensees are again including a clause in their contracts on Industry Outstanding work that states: "Payment is subject to Ministry of Forests approval." This is a familiar problem which is resurfacing. Our members are put in a situation of not knowing who they are working for and to what standards. Please remember that the variations in site-specific quality specifications allow for a wide latitude of subjective interpretations.

If the M.O.F. cannot trust company personnel to check quality accurately, then we should be dealing directly with those who have the authority. Companies want to have a say in how the work is done on their license and the M.O.F. should be prepared to give them that responsibility head-on.

Obviously, this problem of double jeopardy occurs more frequently in Forest Districts where the M.O.F. checking is very tough and the Licensees have been "burned" before. In those cases the Licensee checker (often a third-party contractor) becomes a nuisance factor, checking extremely severely just to make sure that the job meets M.O.F. approval. This does not make for a constructive working environment and often leads to much higher costs (+30%) in those Forest Districts (as word gets around the contracting community).

Our Association would support any directive which would clearly identify the Licensee as the party responsible for checking. The alternative would be for contractors to deal directly with the Ministry on Industry Outstanding work, leaving the Licensee out of the formulae.

The two licensee contracts which have given rise to our members recent concerns, are not the only examples of this problem.

## **Payments Being Withheld**

*Note: This letter was written to the Silviculture Foresters at Pope & Talbot and Slocan Forest Products Ltd. on Oct. 8, 1992*

It has been brought to our attention by some of our members that your company is withholding payment on Industry Outstanding projects until you have received payment from the Ministry of Forests.

This practice often results in a three month payment delay which is unacceptable for a silvicultural contracting business with a 70% labour cost component.

Since the signatories of the contract are yourselves and the contractor, it is our feeling that payment should be made promptly following satisfactory completion of the project. Although we appreciate that your company must wait for payment from the Ministry, we would like you to understand that contractors are being exposed to third party jeopardy and therefore risks non-payment. Interest costs on outstanding accounts are also a significant concern.

We would like to know if this is company policy on Industry/Outstanding work. We have written a letter to the Ministry of Forests (attached) urging the M.O.F. to pay their debts promptly and address the third-party jeopardy (also attached).

We look forward to continued cooperation between industry and the WSCA.

# W S C A R E P O R T S

## Selections from the Directors' Meeting, on Aug. 24, 1992

### Green Gold Grants

Ross Styles has not been able to follow-up on a grant for a WSCA brochure yet. It was noted that the public perceives that there is a very low number of trees being planted in BC each year (i.e. 3,000,000) and that our brochure should stress the actual figures, which are much higher.

### Financial Status Report

There was a discussion of the printing and distribution of the transcripts from the last three AGM's and the related costs. The distribution should be fairly broad and should include some related organizations. There was also discussion regarding the editing that should be done on the 1991 proceedings and it was suggested that we pay \$2400 for the editing of selected speeches from the 1990 and 1991 conferences.

Karline reported that 37 members still owe all, or a portion, of their membership fees (not including those who still owe only the GST portion).

### Information Updates

*Moved that the WSCA requests MOF to forward copies of all submissions from contractors, regarding changes to silviculture policy, regulations, or administration, for its review and comments. CARRIED*

### Unions and Treeplanting on the Coast

Tony Harrison handed out copies of a planned presentation that he was unable to make. He commented on the report, touching upon the events at the meeting.

*Moved that FIR be requested to negotiate changing the tree planting classification in the Coast Master Agreement so that it is no longer an entry-level job. CARRIED*

### Regional Chapters

Merl's resignation from the position of Northern Region Co-ordinator has been noted. Bill Williams will follow-up and look for a replacement for Merl.

### Safety Regulations

Bill Williams indicated that it is his understanding that WCB is in the process of re-writing the camp safety standards manual. In addition, snags are a problem, i.e. who is responsible for the work and the subsequent costs involved in snag

falling. It seems that live trees have caused more problems than the snags; i.e. snags have caused more fatalities and problems to fallers and none to the silviculture workers over the years.

r.e.: Dirk's August 17th letter to Dan Miller. There was some discussion pertaining to the changes that Alberta enacted in 1991 and the fact that BC didn't make any changes and now there has been another fatality. If we still want WCB to be the enforcement agency, we can get some action, with Dan Miller's support. It was agreed that WCB is the only agency available for enforcement and we will have to go to them. There was further deliberation whether we should be stressing enforcement or training our own people in safety issues. It was agreed that we should do both.

*Moved that the Directors appoint, at their discretion, at least two people to represent our Association to WCB to actively engage in the process of developing camp standards and safety regulations. CARRIED*

### Employment Standards Branch

Stashing was discussed, as well as fines and quality assessments. Dennis Graham will find out who the Crown Prosecutor is and advise Dirk Brinkman, who will then follow-up with a phone call regarding if the WSCA recommendations.

### WSCA 1993 Conference Preparation

Ross Styles reminded the Directors that, at our last meeting, it was suggested that we hold our next AGM in Prince George in November. Possible venues were discussed, with Kamloops, Vancouver, and Prince George being suggested. It would appear that Vancouver would be a better location, from attendance point of view.

We need to focus on our contractor community and attract them; rather than the technical and Ministry p. What do they require? It was decided on an informational-type meeting in late January or early February, that could include some practical workshops on topics of urgent interest to contractors.

Dirk talked about a meeting that he had with the Chief of Labour Services (Forests Canada) who suggested that training funds could go through the industry association's hands. Dirk also advised that there will be a CSA National AGM held in September 1993, in Ontario.

## Selections from the Directors' Meeting on Oct. 26, 1992

### WSCA Financial Status Report

Chris reported that the Association was doing quite well. After bills have been paid, we will be down to approximately \$10,000. The Association has taken in \$9,000 this year in both subscriptions and advertising; which is a very good amount. If another newsletter were done, it may start to get expensive, unless the Association was able to get more advertising. It was agreed that Karline has done a very good job with the advertising in the newsletter.

A summary of the costs associated with the last Conference was perused. The revenue was \$10,700. It was noted that 38 registrants was a very small number. The \$4,400 FRDA grant was very helpful. Chris pointed out that the 1992 Conference did break even.

### Regional Meetings

Tony Harrison reported that the Coastal Region Meeting was held on Sept. 17, 1992. Dirk also gave a brief update.

There was general consensus that Regional meetings should be paid for by the Association. It was suggested that a flat rate (i.e. \$25) be charged to a non-member to attend Regional meetings, as the Association wants to encourage non-members to attend them.

*Moved that Regional Chapter meeting costs are covered in the membership fees to a maximum of \$200 per meeting, per chapter. CARRIED*

### Safety Regulations

A WSCA committee will be formed to handle several items, such as First Aid recommendations; camp standards; vehicle safety; bear safety; ergonomics (equipment used, etc.); put together a presentation to the WCB Regulation Review Silviculture Sub-committee regarding modifications to Safety regulations.

Contravention of the existing rules were discussed as this area has been of some concern. The Association should be looking at enforcing and strengthening the current regulations, rather than modifying them and creating another "level". Some sites are very difficult when the crew members are spread out over a large area. Sometimes an injured crew member is closer to the hospital than the emergency vehicle. Dennis Graham reported there is classification which allows for a mobile dressing station, it can be used instead of an ETV on large, spread-out sites.

### First Nations Forestry Advisory Council

After a brief discussion, it was noted that the Directors were in full support of Dirk Brinkman being on this Council.

### **Stashing—Boundary Case**

There was some discussion regarding this case, where 5,000 to 10,000 trees ended up in the Kettle River. The case has gone forward and the principal of the company has been summoned. Dirk suggested that it would be useful to obtain the methodology to properly handle stashing problems in order that the Association can undertake its own enforcement. It was suggested inform members that there are standards, with which the Association is in agreement, that should be enforced.

### **Canadian Silvicultural Assoc. (CSA)**

Dirk reported that the CSA has requested \$2,000 from our Association. He mentioned that the purpose of the CSA is to act on common problems for all provincial silvicultural associations. There was considerable discussion of this request.

*Moved that we pay CSA \$1250. CARRIED*

### **Commission on Resource Environment (CORE)**

Dirk Brinkman gave a brief discussion and indicated that CORE would like the silviculture industry involved in a series of regional Round Table meetings. Dirk proposed that the Association send representatives to these meetings.

### **Forestry Training Advisory Group**

Don Whiteside (BCFCSN) discussed the formation of a Forestry Training Advisory Group, comprising different groups, including the WSCA, in order to discover training needs and concerns. There will be a proposal submitted by mid-December. Mid-term and long-term goals will be identified. Dirk Brinkman indicated that the WSCA fully supports this and reminded Don that this was expected to have gone ahead last March.

### **WSCA 1993 Conference Preparation**

Tony Harrison reported on the planned workshops in a three-day period prior to the AGM. The Association must decide whether or not Jean Heineman of the BC Forestry Continuing Studies Network (BCFCSN) is to organize everything, including booking rooms, etc. Jean Heineman arrived and indicated that she had tentatively booked instructors for the workshops.

*Moved that the BCFCSN co-ordinate the AGM. CARRIED*

### **Proposed Workshop Topics:**

Block Layout and Traversing, Pruning, Reforestation Recommendations, Wildlife/Danger Tree, Ecological Classification, Contract Admin., Bear Hazard, Learning How Adults Learn

### **Proposed Workshop Budget**

Costs would be \$65-90 per day, per person with 20-25 people attending each workshop. The workshops will be by subscription, with a list being sent out to the members for registration. Last-minute registrants would probably be charged a 20% surcharge. BCFCSN want an agreement, so they do not get stuck holding all costs for a course cancelled at the last minute.

### **Workshop/Conference Funding**

Tony Harrison enquired if the BC Government would be able to carry any of the workshop costs, and Don Whiteside suggested that the Association contact CEIC. Usually CEIC would consider funding on a shared-cost basis, with WSCA paying 20% and CEIC carrying 80%. It was advised that WCB does not provide any funding for safety courses. WCB has emphasized that the employer should provide "adequate" training.

### **Conference Theme:**

It was agreed that the conference theme should focus on the needs of individual contractors. Tony Harrison's suggestion of "Profits and Regulations" was accepted as the theme for the 1993 AGM and Conference.

# Husqvarna

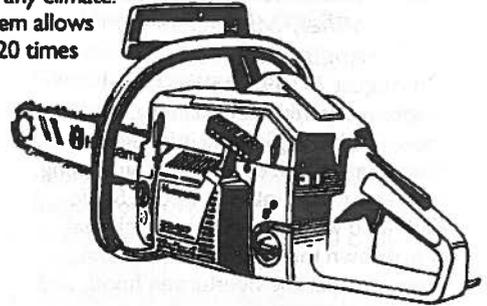
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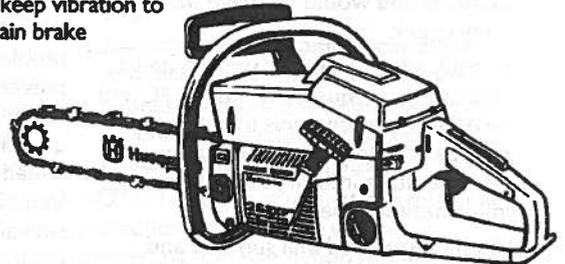
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## S A F E T Y R E P O R T S

## Accident Shows Lack of Effective BC Silviculture Safety Standards

Dirk Brinkman

*Note: This letter was written to Dan Miller, Minister of Forests, on August 17, 1992*

On August 7, 1992, on the Island Highway, south of Port Hardy, a 1985 crew cab belonging to Little Giant Treeplanters Ltd. crossed the oncoming lane and rolled into the ditch. Sukie Gill, who was riding in the back seat, was thrown through the windshield, pinned under the overturned hood, and suffocated.

There were eight spacers in the crew cab and six seat belts.

The vehicle had steering, brake, and tire problems and would not have passed a safety check.

In 1990, after 11 deaths, we initiated a simultaneous request to both the BC and the Alberta governments to entrench a set of basic safety recommendations in the silviculture industry and ensure uniform enforcement.

Alberta responded that summer and acted before the 1991 season. In BC, our requests floundered in inter-ministerial jurisdictional confusion and there have been no changes.

This fatality is a tragic case in point, which was preventable. For vehicles, the four basic and primary changes we requested were:

- A Seat Belt for Every Worker
- Safety Checks on Silviculture Crew Carriers
- Trained Experienced Drivers
- A Minimum Insurance Requirement

Ministry of Forestry staff have had some meetings to resolve these issues, however, with no effective result.

I draw this matter to your attention, so that you can provide the "political" will to cut through the jurisdictional problems here and effect some sound safety standards in our industry.

## Contractors Should Obey the Law

Art Charbonneau

*Note: This response was received from the Acting Minister of Forests, on Nov. 4, 1992*

I am responding to the letter you sent to my predecessor, Dan Miller, where you expressed your concern over the death of a forestry worker near Port Hardy this summer. The Ministry shares your concern over the apparent lack of safety measures taken in this incident.

There are many possible courses of action which could be taken to try and avoid further occurrences of this nature. One course, as you pointed out in your letter, would be to have the MOF establish safety requirements and institute safety checks on all contract crews.

It is important to look at all aspects of the problem before deciding on a course of prevention. The standards for worker safety and the requirements for driver qualifications and vehicle safety are already covered by the WCB and Motor Vehicle Branch. The standard MOF silviculture contract states that, "The contractor shall observe, abide by, and comply with all applicable laws, bylaws, orders, directions, ordinances and regulations of any competent governmental authority." Failure to do so would be grounds for suspension and termination of the contract.

The contractor involved in this incident was clearly in violation of WCB and Motor Vehicle standards for vehicle safety, seat belt, and driver requirements. It is neither appropriate, nor desirable, to empower MOF staff to conduct inspections and charge offenders; this is clearly the responsibility of the WCB and local police forces. I would expect MOF staff to contact the proper authorities where they suspect that violations have occurred.

In closing, I would like to emphasize that it is the responsibility of the contractor to follow the law. Failure to do so can be very costly, as this incident shows. The WSCA may wish to take a more proactive role with its members to ensure that they operate within the laws of the province.

## WSCA Silviculture Safety Committee Requests WCB Regulation

Dirk Brinkman

*Note: This letter was written to Kenneth Dye, WCB Chairman, on Sept. 3, 1992. See the next page for more information.*

The WSCA has established a Standing Committee on Health and Safety in Silviculture.

Dirk Brinkman, Bill Williams and Dennis Graham have agreed to serve as committee members. These positions will be for more than a year in order to ensure continuity.

The Committee would like to work directly with WCB to develop safety and health standards for our industry.

It is of utmost importance to our members and our silviculture practitioners that practical, effective and beneficial regulations be uniformly and strongly enforced within all sectors of our industry.

After many years of having various regulations poorly enforced or lost in interministerial jurisdictions, it has become apparent to our members that the best long term solution is to consolidate all health and safety regulations within WCB. It is very urgent to put this in place.

On August 7th, 1992 another fatality occurred which resulted from violations of vehicle regulations which our Association has been calling for since two accidents in 1990 which claimed eleven lives. Please put us in communication with your designated representatives so we can present them with our recommendations. Areas in which we have developed recommendations include:

- vehicle safety
- bear safety
- camp standards
- first aid regulations
- worker ergonomics
- pesticides and herbicides

Thank you for your attention to our industry.

# S A F E T Y R E P O R T S

## WCB Announces Silviculture Safety Regulation Review

*James E. Dorsey, Chairman of the Governors of WCB*

**Note:** The following is selections from the Terms of Reference for the Silviculture Subcommittee of the WCB Governors' Committee for Regulation Review, announced on Nov. 9, 1992

### **Mission Statement**

The mission of the Silviculture Subcommittee is to assist the Governors with the development of regulations for accommodation, sanitary and safety conditions in and around silviculture camps.

The Subcommittee shall observe the principles of the regulation review process in carrying out its mission; for example:

- It shall be respectful of the interests of workers, employers, the community and the WCB
- Its proceedings shall be open and participative
- It shall respect consensus and involve the parties with the most direct interest in outcomes.

### **Structure**

1. The Governors' Committee for Regulation Review shall appoint three persons representative of workers, three persons representative of employers, and two persons seconded through the Secretariat who will provide advice and administrative support. The Governors Committee shall consult with worker and employer groups in the selection of worker and employer representatives. In addition, the Governors' Committee shall ask for a representative from each of the Ministry of Health and of Forests to participate as advisors.

2. The Subcommittee shall be chaired by one of the persons appointed through the Secretariat. In that person's absence the second Secretariat appointee shall serve as chair.

3. The Subcommittee shall report to the Governors' Committee for Regulation Review which, in consultation with the Regulation Advisory Committee, shall review any reports and recommendations issued by the Subcommittee.

4. The Subcommittee may request the presence at meetings of professional and expert persons considered necessary by the Subcommittee.

5. The Secretariat for Regulation Review shall provide administrative and advisory services to the Subcommittee. The Chair of the Subcommittee shall consult with the Coordinator of Regulation Review on matters which involve the expenditure of moneys' in Subcommittee activity.

### **Protocol**

1. Where practicable, the agenda and any supporting materials shall be delivered to each member of the Subcommittee not later than seven days prior to the date of the meeting.

2. The preferred method of decision making shall be through consensus.

3. Summaries shall be kept of each meeting of the Subcommittee and shall be forwarded to the Secretariat for Regulation Review for retention.

4. The Chairman of the Governors and his designate are the official spokespersons for the Subcommittee.

5. Members shall support any consensus or decision reached by the Subcommittee in which they have joined. Minority reports shall be included in any report of the Subcommittee at the request of any person(s) holding a minority opinion.

7. The Subcommittee shall work within a time frame of Dec. 1, 1992 to March 1, 1993 for proposals for regulations.

### **Responsibilities**

1. The Subcommittee shall develop proposals for submission to the Governors' Committee for Regulation Review.

2. The Subcommittee shall be guided by the perspective that effective regulations are those which

- are achieved through participation and consensus
- Clearly address workplace hazards
- Define responsibilities & accountability
- Clearly state the criteria for compliance
- Are in plain language, technically competent and easily understood
- Provide a mechanism for ongoing review and update in areas subject to changing knowledge and technology
- Affect workplace activity ad conditions only to the extent necessary to address hazards
- Address the diverse character of workplaces

- Are compatible with, and do not overlap related regulations.

3. The Subcommittee shall, in its deliberations, be cognizant of the documents:

- Proposed Silviculture Camp Regulation (developed 1991 – WCB)
  - Schedule D: Camp Standards – MOF Silviculture Contract
  - Industrial Health & Safety Regulations
  - Occupational Environment Regulations
  - Public Forum on Health and Safety Regulation Review
  - Policy and Procedure Manual of the OSH Division
  - Coroners' recommendations relative to the Subcommittee's work
4. The Subcommittee shall ensure the following issues are addressed:
- Notification of Project for silviculture work
  - Accommodation, sanitary conditions and facilities for silviculture camps
  - Miscellaneous safety conditions in and around camps related to worker-check, work around snags

NOTE: The issue of regulations related to protection from wildlife will be addressed by the Regulation Advisory Committee. The measures for the protection of workers from pesticides will be addressed by the Occupational Hygiene Subcommittee; those related to musculoskeletal injuries, by the Ergonomics Subcommittee.

5. Notwithstanding clause 4, the Subcommittee may offer recommendations of a general nature on regulatory matters related to the health and safety of workers in the silviculture sector.

6. The final report of the Subcommittee shall provide proposals for regulations in as specific a manner as practicable, covering matters identified in clauses 4 and 5. The drafting of actual regulations will be undertaken by the Secretariat at the direction of the Governors' Committee on Regulation Review. It is the intent of the process to reconvene the Subcommittee to provide the opportunity for review of draft regulations and for comment to the Governors' Committee on Regulation Review.

# TRAINING REPORTS

## WSCA Standing Training Committee Proposed

*Dirk Brinkman*

*Note: This letter was written to Coleen Wood, MOF Training Coordinator on Oct. 26, 1992*

The WSCA is proposing to form a Standing Training Committee in order to better focus the development and evolution of the issues in training the industry. This is a request for \$5,500 from your training budget to create a standing WSCA Training Committee whose objective would be to:

- 1) find out how to best implement silviculture training in BC
- 2) steer and input into existing programs
- 3) propose and initiate new programs.

The committee would be composed of representatives from our Coastal, Northern Interior and Southern Interior Chapters. The members would stand on this committee over a period of several years in order to create continuity.

Work would commence with the review

of current needs analysis and studies and coordination with CEIC, AE&LT, Ministry of Forests, Forestry Canada, Council of Forest Industries and UBC's extension programs. The programs proposed by all agencies would be reviewed and responded to by the committee. The committee would report to the Board of Directors and respond to emerging training issues in the Province.

With the federal initiative to put training funds into provincial hands through Provincial Labour Force Development Boards, our sectoral participation will have to be anticipated and developed and this committee will become an essential representative of our sector.

The anticipated costs are \$ 5,500:

- a) travelling: \$ 2,000
- b) phone, fax and postage: \$500
- c) meeting room rental and secretarial services: \$1,500
- d) phone surveys, report writing: \$1,500

## Training Committee Proposal will be Considered

*Janis Smale, Forestry Worker Training Officer*

*Note: This letter was received on Nov. 17, 1992.*

On behalf of the Worker Training Program of FRDA-2, let me thank you for your proposal to form a Standing Silviculture Training Committee.

Your proposal has been circulated to the Working Group for their consideration. We will advise you of their resolution as soon as possible.

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# MINISTRY REPORTS

## Camp Standards Update

*Robin Brown, MOF*

*Regeneration Programs Manager*

This is to follow-up on a meeting held this spring between yourself and Mr. Larry Atherton of L.P. Atherton & Associates whom the Ministry of Forests had contracted to discuss the issue of silviculture camp standards with all affected parties.

From these consultations Mr. Atherton identified several options which were reviewed at a meeting between the Ministries of Labour, Health, Forests and the Workers' Compensation Board. It was agreed that the matter would best be resolved by means of a regulation under the Workers Compensation Act.

It is anticipated that work will commence on this regulation sometime early next year.

All affected parties will be consulted by the Workers' Compensation Board in the development of these regulations and public hearings will be held.

Until such regulations are in effect the Ministry will be continuing to manage silviculture camp standards as it has in the past with the cooperation of the Ministry of Health. We are also asking the forest industry to do the same.

Thank you for your Association's assistance in this matter.

## Insurance Updates

*Courtesy of Howat Insurance*

### ATVs on Forest Service Roads

The government approved changes to the Forest Service Road Regulation on Sept. 18, 1992. The regulation now states that ATVs may use forest service roads and that the operators of these vehicles must have a valid driver's license and carry a minimum \$200,000 worth of liability insurance. If the ATV is being used commercially, you must obtain the liability insurance from a private insurance company.

The Regulation now states that all operators of two or three wheeled vehicles must wear a safety helmet.

### Rental Vehicle Policy

ICBC has been denying claims involving the Rental Vehicle Policy when the driver is not listed on the rental agreement. Even in the case of company rentals, you must ensure that all drivers have been listed on the rental agreement because failure to do so may result in unpaid claims.

In the case of a company that has numerous employees who drive the rentals, make sure that the rental company writes on the rental contract that: "All authorized employees of the above named company are insured under this agreement." With this written on the contract, the ICBC rental policy would be valid, without it coverage may be denied.



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# 1993 WSCA Conference: *Profits & Regulations*

From the WSCA Directors

## Conference Dates

**February 8/9/10**

Workshops

**February 11**

Conference, Tradeshow,  
Banquet Dinner

**February 12**

Conference and AGM

## Conference Location

**Coast Plaza Hotel**

**1733 Comox St.,**

**Vancouver**

Green Timbers, the first choice, was already booked during this time.

## Conference Introduction

This year's conference looks at how our regulatory environment is changing, how it is often misunderstood and how malleable it is. As our industry matures, it increasingly develops its own set of specific regulations. The WCB Silviculture Subcommittee will add a new component of regulations designed for our industry.

This is the conference for contract managers, coordinators, field supervisors, crew leaders and owners— it is practical, current, informative and naturally controversial.

Your input is essential to ensure that the changes are appropriate.

## **Theme: Profits & Regulations**

Profit is the advantage we seek for the work we do. Regulations are government's legal controls on how we work.

On the one side our revenues are driven by the silviculture regulations and the economic development relations that create FRDA. These regulations create costs for the forest industry and Ministry for the harvesting of public lands. These industry and government costs are our revenues.

On the other side our costs are driven by the regulations that define how we meet the goals of tending and refor-

estation. Camp Standards, Fire Regulations, Safety Regulations, Employment Standards and Vehicle Regulations all contribute to our costs.

Between these two types of regulation, the contractor tries to find a profit.

## WSCA Conference Workshops

The workshops will be held on Monday, February 8; Tuesday, February 9; and Wednesday, February 10.

The list of workshops will be sent to the membership and any that are under-subscribed seven days prior to the conference will be cancelled.

### Workshops

#### **Block Layout and Traversing**

*Stirling Angus*

#### **Silvicultural Pruning**

*Frank Barber*

#### **Reforestation Recommendations**

*Bryce Bancroft*

#### **Wildlife/Danger Tree**

*Todd Manning*

#### **Contract Administration**

*Frank Kickbush*

#### **Bear Hazards**

*James Shelton*

#### **Learning How Adults Learn**

*John Baker*

#### **Occupational Health & Safety**

*WCB Representative*

*It was decided that this last workshop would be a good (albeit very dry) topic, because hefty fines will be levied against contractors that don't have an approved safety plan.*

### **Workshop Costs**

The Association is considering charging a registration fee of \$65-\$90 per day, per person. The costs of all the workshops will be averaged, so that each registration fee will be identical. Chris Akehurst will contact Brandon Hughes, of CEIC, regarding the possibility that they would fund 80% of the courses.

## Conference Topics

### **WCB Regulations**

**(Silviculture Sub-Committee)**

Rex Eaton, chair of the ongoing review of WCB Regulations, will speak about their newly formed Silviculture Subcommittee. It will be propose new Silviculture Health & Safety Regulations to WCB.

### **Fire Regulations (Panel)**

Dave Hanes (MOF, Protection Branch) will outline Fire Regulations (including recent changes and then a brief discussion, followed by questions & answers. Archie MacConichie (MOF, Revelstoke) will provide an Interior perspective and we plan to have an industry representative as well. Jim Starr will chair the panel and represent contractors.

### **Silviculture Regulations**

These regulations drive the funding in the industry. The stronger they are, the better the funding (there are those that create revenue and those that create costs). The NDP has said that they will make companies responsible all the way to the harvest and maximum density standard.

Carrier Lumber are currently in the midst of a controversy regarding maximum density in the pine eco-system. They might challenge the Ministry standards. Mike Wyeth (MOF), who is leading the battle on the Ministry side, will present their case. Steve Northwood, of MacMillan Bloedel, also has an interesting perspective regarding maximum stocking standards, that he will present.

### **The Future of Silviculture**

Sandy Peel, Commissioner of the recently dissolved Forest Resources Commission as the keynote speaker at lunch. He will speak about the need for stronger silviculture).

Dan Miller, who will be back in office as Minister of Forests in December, will be the after-dinner speaker.

## Mail Out

### **WSCA Requests Information on MOF Changes**

*Note: This letter was written to the Minister of Forests, Sept. 3, 1992*

It is our view that the WSCA has a vital and legitimate role to play in having the developing silviculture industry be the best possible service to the public.

The Ministry of Forests is rapidly changing its administrative regulations and legislation in response to overtures from a wide range of independent contractors, forest industry representatives and public input, as well as presentations from our Association.

In order to better coordinate these proposed changes with the interests of our members, we request that the MOF forward copies of all public presentations and Ministry responses, which affect the administrative, regulatory or legislative policies and their interpretation.

This would include issues confronting Regional Silvicultural Officers or District Resource Officers. At the very least, the correspondence will form a vital information link to the body of the silviculture industry which reads our newsletter. It is our hope however, to become more interactive in the ongoing changes facing the Ministry.

*Dirk Brinkman*

### **Interaction to Increase**

*Note: This letter was written to Brian Storey, Nov. 26, 1992*

Further to the letter from the Minister, I am writing to confirm the focus which we developed during our conversation. Basically, the MOF. would renew its efforts to consult with WSCA before proceeding with contemplated changes in policy, regulations or administrative procedure by notifying us and inviting our input.

We recognize that neither of us have the time or patience for WSCA involvement in all Silviculture Branch's activities and we trust you to select those items meriting our input. At the same time, we look forward to your increased consultation with the WSCA Executive.

*Dirk Brinkman*

### **First Nations Forestry Council**

*Note: This letter was written to the Minister of Forests, Oct. 15, 1992*

Our President, Dirk Brinkman, feels that the First Nations Forestry Council is an important initiative, and has enthusiastically volunteered for the council. The directors of the Association have unanimously voted in support of this involvement. Therefore, please accept this letter of nomination for Dirk Brinkman as a representative on the First Nations Forestry Council.

*Karline Mark-Eng, Administrative Secretary*

## Mail In

### **WSCA Will Be Consulted on Changes**

*Note: This letter was received on Nov. 17, 1992.*

Thank you for your letter of Sept. 3, 1992, in which you express interest in providing input into the development of procedures and policies regarding silviculture contracting. I understand that Brian Storey of the Silviculture Branch has discussed this issue with you at some length.

As you are aware, the MOF does its best to collect input from all interested parties when considering changes to existing procedures, or when developing new procedures. In the past there has been considerable interaction between the WSCA and the Ministry. This association has proven to be valuable and I can assure you that we will continue to consult with the WSCA when contemplating future changes that will directly affect the silviculture contracting industry.

*Art Charbonneau, Minister of Forests*

### **WSCA Northern Coordinator Resigns**

*Note: This letter was received on Aug. 13, 1992.*

I regret to inform the Association of my decision to submit my resignation from the position of Northern Co-ordinator. I feel that other priorities need my full attention at this time.

Silvaram continues to support the WSCA in its endeavours. Thank you for the opportunity to serve with you.

*Merl Gordon, Silvaram Holdings*

### **Forest Summit Contribution Appreciated**

*Note: This letter was received on Oct. 23, 1992.*

This is just a brief note of thanks for Dirk Brinkman's contribution to the "tertiary" component of the *Forest Summit 92* Conference. The work of this particular group has ensured that the definition of "forest industry" will in future be broadened to reflect the true contribution of allied industries and professionals.

*Peter Fisher, Manager,  
Economics & Trade Branch, MOF*

### **Council Nomination Noted**

*Note: This letter was received from the Minister of Forests on Nov. 17, 1992.*

Thank you for your letter of Oct. 15, 1992 on behalf of the WSCA, in which you nominated Dirk Brinkman to serve on the First Nations Forestry Council.

You have my assurance that his nomination will receive thorough consideration. I appreciate your interest in this important initiative.

*Art Charbonneau, Minister of Forests*