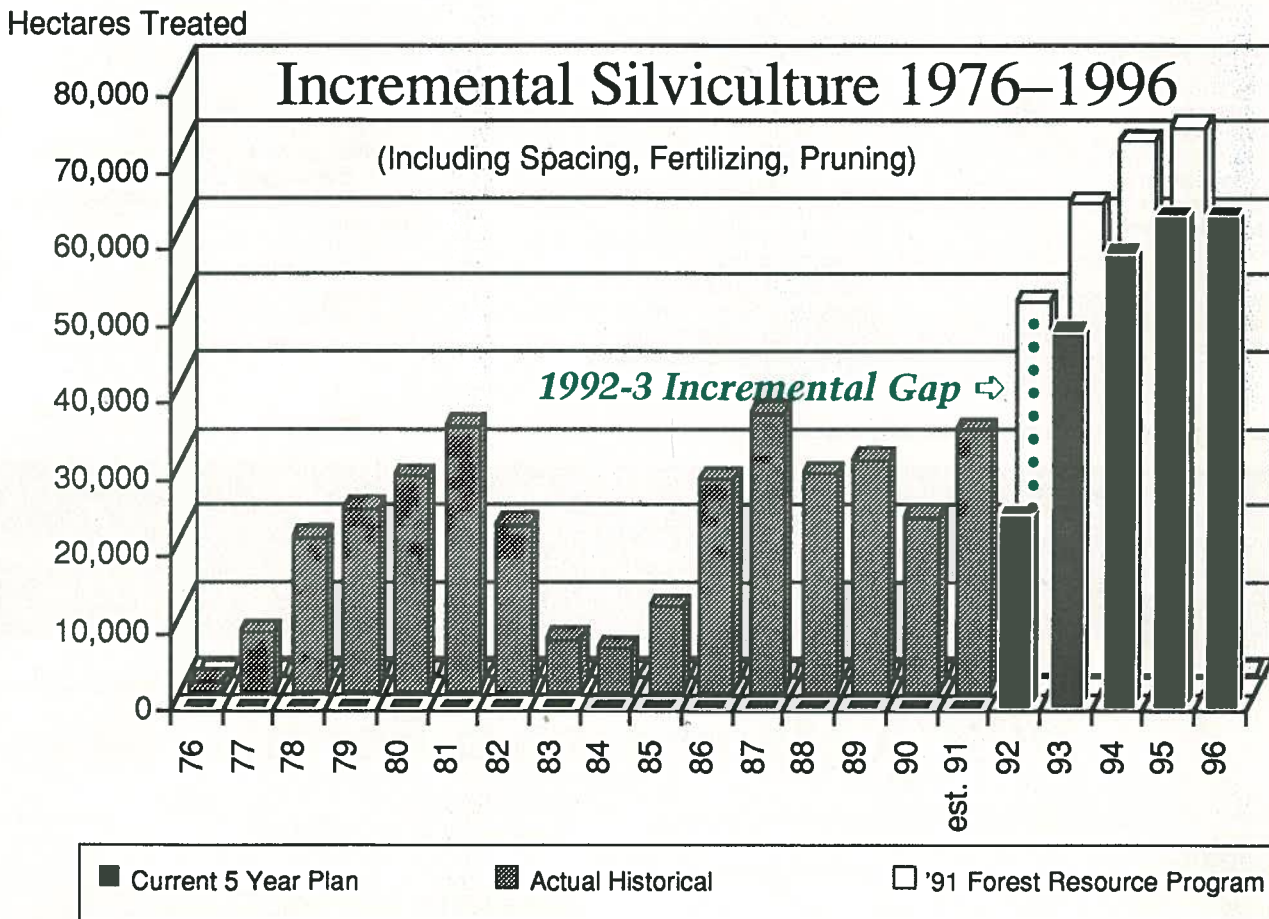


WSCA

Summer 1992

NEWSLETTER

MOF's Five Year Plan Tabled



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Incremental Silviculture Delayed but Not Denied

PLUS: Wildlife Trees • Ontario MNR Cutbacks • New Fire & Road Regulations

WSCA MEMBERS - 1992

The following are members of the Western Silvicultural Contractors' Association
(A indicates Associate Member)

Coastal Region

- Battle Mountain Development Corp.
- Brinkman & Assoc. Reforestation Ltd.
- * Cascade Resources Ltd.
- * Coast Range Contracting Ltd.
- Deverell Contracting
- * Green Mountain Services Ltd.
- * Hill Side Building Group Inc. (A)
- * Island Green Forestry Services Ltd.
- Loki Reforestation Ltd.
- * Loxton Sheep Vegetation Management
- Mountain Reforestation Ltd.
- * MU Services Ltd.
- Oliver & Giltrap Reforestation Ltd.
- Outland Reforestation Inc.
- TIBE Enterprises Inc.
- * West Coast Browsing
- * Whiskeyjack Reforestation Ltd.
- Zanzibar Holdings

Northern Region

- Apex Reforestation
- * Avison Management Services Ltd.
- Backwoods Contracting Ltd. (A)
- * Blue Collar Silviculture Ltd.
- Bruin Reforestation Ltd.
- * Celtic Reforestation
- * D. Fraser Reforestation Inc.
- * Folklore Ent. Ltd./Hawk Forest Ent.
- GTG Contracting Ltd.
- * Highrigger Forest Management Co.
- I & I Construction Ltd.
- Kuwani Consulting Ltd.

- * Lid's Reforestation Ltd.
- Lloyd Reforestation Ltd.
- * Mountain Top Reforestation
- Mountain View Silviculture Ltd. (A)
- Mudslide Contracting Ltd.
- * National Silviculture Inc.
- * Next Generation Reforestation Ltd.
- * Pacific Regeneration Technology Inc.
- Roots Reforestation Ltd.
- * SBS Forestry Inc.
- Seneca Enterprises Ltd.
- * Shannon Silviculture
- Silvaram Holdings Ltd.
- Singletree Ventures Ltd.
- * Spraywell Ltd.
- Summit Reforestation Ltd.
- Tawa Reforestation Enterprises
- * Triple A Enterprises Ltd.
- Tsuga Forestry Contractors Ltd.
- * Twig Contracting Ltd.
- Unique Silviculture Ltd.
- * VinLaw Resources Ltd.
- * Waterside Ventures Ltd.

Southern Region

- * Appletree Industries
- Arland Reforestation Services Ltd.
- * Caliburn Forestry Ltd.
- * Crow Point Enterprises Ltd.
- * Cutler Contracting
- * Dark Star Forestry Ltd.
- * Evergreen Tree Planting Co-Op
- Forsite Consultants Ltd.
- Golden Raven Cooperative

- * Grandy Reforestation Service
- Greenpeaks Holdings Ltd.
- Intertribal Forestry Assoc. of B.C. (A)
- Jansma Reforestation Ltd.
- MacLennan Contracting
- * Nu Growth Industries Ltd.
- Quastuco Silviculture
- Rainbow Resources Ltd.
- * RS Lott Contracting
- Sanders & Company Contracting Ltd.
- * Southern Okanagan Silviculture

Ontario Region

- * Plenty Canada

Associate Supplier Members

- * Ancient Mariner Products Ltd.
- Bush Pro Supplies Inc.
- * Central Tent & Awning Ltd.
- Horizon Fibreglass Products Ltd.
- Howat Insurance Brokers Ltd.
- * Lorax Forestry
- Mardon & Campbell Insurance
- * Ocean Park Ford Sales Ltd.
- Pacific Equipment Co. Ltd.
- Pride Beverages Ltd.
- PSD Trauma Tech International Inc.
- Rentway Inc.
- Richport Ford
- RPM Communications Inc.
- Stihl Ltd.
- The Vancouver Tree People
- Weatherhaven Resources Ltd.

* Indicates membership dues are outstanding or partially outstanding - please call Karline at 736-8660

WSCA Subscription Notice

Mailing of free newsletters has become a financial hardship which the WSCA can no longer afford to continue. If you want to be sure of receiving it, please become a subscriber or a member.

WSCA Membership Form

Name _____
 Company _____
 Address _____

 Post Code _____
 Telephone _____ Fax _____

Please send to:

WSCA
 #310 - 1070 West Broadway
 Vancouver, B.C. V6H 1E7
 Telephone: (604) 736-8660

Membership \$ 500 _____
 (includes subscription)

New Active Member \$ 250 _____
 (first time membership only)
 (includes subscription)

Subscription \$ 25 _____

Donation \$ _____

7% GST
 (WSCA GST# 127795946)

Total Enclosed: _____

Western Silviculture Contractors Association

NEWSLETTER SUMMER 1992

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EDITORIAL NEWS BRIEFS

Dirk Brinkman

August 1992, another silviculture vehicle rolls. Eight planters in one crewcab with not enough seatbelts to go around. Another planter is killed.

In 1990, eleven tree planters were killed in two vehicle accidents.

Each of these fatalities weighs irrepressibly on WSCA efforts to establish a mechanism to enforce uniform standards and regulations for silviculture transportation. Each new fatality makes it clearer that better regulations more effectively enforced will prevent more deaths in the future.

Responsible contractors resent the few contractors that cut corners and set the low bid market prices. While most forest companies simply work with responsible contractors who operate safely, the Ministry of Forests low bid auction creates a fractured market in which more irresponsible contractors can flourish.

We need vehicle regulations for all contractors requiring that basic WSCA recommendations be enforced:

- a seat and seat belt for each worker
- Minimum liability insurance of \$1 million (1-3 people), \$2 million (4-9 people), \$5 million (10+ people)
- Certified safety checks
- Trained experienced drivers required

The WSCA has waited through over two years of meetings and inter-ministerial wrangling since our original request for improved standards for silviculture transportation. The complications include: forest service roads fall outside of Ministry of Transport jurisdiction; WCB inspectors cannot keep track of the isolated highly mobile tree planting camps; WCB regulations do not include all of our recommendations and are not easy to amend.

We call on the new-to-the-issue Minister of Forests to address all of the silviculture safety issues: Transportation, Bears, WCB regulations, Camp Standards, Pesticides & Herbicides.

Treeplanter Dies as Truck Tips

One treeplanter was killed and several others were injured in a single vehicle accident south of Port Hardy. The RCMP reported that the crewcab, designed to carry six, was carrying eight people and that the person killed was not wearing a seatbelt.

The Little Giant Treeplanters Ltd. crew was returning from work in the Queen Charlotte Islands when the truck failed to make a corner, crossed the centre line, hit a ditch, and overturned.

WSCA Reduces Fees for Small Contractors

Realizing that regular membership fees of \$500/year may discourage smaller contractors from gaining a voice in the WSCA, the Association passed a resolution in January to create a new category of membership.

Effective January 1 1992, contractors who have gross receipts of \$500,000 or less will pay a membership fee of only \$250/year. This will encourage more small contractors to get the benefits of being a member of the WSCA.

If you have already paid your fees, but now qualify for this lower rate, please contact Karline at the WSCA office. She will arrange to credit any overpayment toward your next years fees.

Silviculture Branch Director Leaves

Peter Ackhurst left his job as Director of Silviculture Branch at the end of June. He was a staunch defender of reforestation budgets and under his tenure the \$1.4 Billion Forest Resource Program was announced. A new Director is still being sought.

Even greater challenges lie ahead for Peter as administrator of a CIDA project to assist the Malaysian government in establishing a silviculture program. We wish him luck.

Silvi-dollars Sprayed Over Vancouver

Under an emergency declared by the provincial cabinet, Vancouver has received aerial and ground spraying of to eradicate the Asian Gypsy Moth. As a result of finding several Asian Gypsy Moths in traps in 1991, the government initiated a program of spraying Bkt a "natural" insecticide. According to BC Environment Minister John Cashore, the moth is "considered to be one of the most serious insect pests known if it becomes established in our province... we can expect extensive defoliation within 10-20 years."

Funds for the spraying are coming from the current silviculture budget, which remains at the same level as 1991-92. As a result, previously projected funding is being "temporarily" shifted away from other programs such as incremental silviculture (see page 5 for more details).

Speeding Tickets for Highballers?

Forest Service and Conservation officers now have the authority to issue tickets to individuals or companies who violate provisions of the *Forest Act* or other regulations. Fines will range from \$50 to \$500 for offenses such as unsafe campfires. Forest Minister Dan Miller said "we believe this approach will be more effective than formally prosecuting offenders." MOF still plans to prosecute serious offenses in court.

Heavy Duty on Softwood

The US International Trade Commission has levied a 6.5% tariff on Canadian softwood lumber entering the US, although their own analysis showed that Canadian lumber did not undercut American lumber prices. The provincial government estimates that the tariff will cost the BC lumber industry \$150 million annually.

NEWS BRIEFS

Recreation Pays

A recently completed Forest Service outdoor recreation survey was conducted through the mail-out of 10,000 questionnaires. Responses indicate that the average BC household spends \$1,450 annually for recreations activities in provincial forests, a provincial total of more than \$1.5 billion annually for 40 million visits. The survey also indicated that each adult was prepared, on average, to voluntarily contribute \$53.62 per year to protect the recreation resources of BC's provincial forests, putting the total annual "preservation value" at more than \$113 million.

Tree Plan Canada

The federal government is contributing \$75 million to Tree Plan Canada (a federal Green Plan initiative) This national community tree planting program will be administered by a non-profit organization—the National Community Tree Foundation—which will solicit public contributions, private donations and corporate sponsorships to supplement the federal funding. Community groups are invited to submit tree planting proposals and Tree Plan Canada will provide technical advice, and in some instances, financial support for certain planting costs. For more information or an application kit, contact Tree Plan Canada at 1-800-563-0202.

Fraser Basin Management Program Agreement

Federal, provincial and local governments recently signed a five year Fraser Basin Management Program Agreement. An initial focus of the program will be on cleaning up and preventing pollution, restoring productivity of the natural environment, conserving natural areas, returning salmon stocks to historic levels, and monitoring and reporting on the state of the river. The agreement features a 19-member management board with representatives from the three levels of government, Aboriginal peoples, environmental groups, industry, labour and other interested parties, to assist in developing and implementing an integrated management program for long-term sustainability in the basin.

The Fraser Basin Management Program will include the previously announced (June 1991) Fraser River Action Plan, a \$100 million federal Green Plan initiative to clean up the Fraser River. The province is also allocating funds to a Fraser basin integrated resource management program which includes upgrading sewage treatment, eliminating toxics from pulp mill effluents and improving air quality. Together, the three levels of government will spend in excess of \$1 billion during the five year agreement.

Avoiding Lyme Disease

A BC silviculture worker is suffering with Lyme disease, although it is not known if they contracted the disease while working on a silviculture contract. In order to help prevent others falling prey to this misery we present the following Lyme disease information from the US Public Health Service, courtesy of Ann Landers.

90% of all Lyme disease cases (in the US) have been reported in the Northeast, upper Midwest and Pacific Coast regions. The bacterium that causes Lyme disease is transmitted by infected deer ticks and black legged ticks, which are smaller than common dog and cattle ticks and harder to spot.

In suspected tick infested areas, take precautions: use insect repellents containing the chemical DEET, (sprayed on the skin or clothing). Wear light coloured clothing so you can spot ticks more easily. Tuck pant legs into socks or boot and shirts into pants. Tape the area where pants and socks meet to prevent ticks from crawling in. Check yourself daily for ticks and remove them promptly with tweezers.

Herbicide Report

The Canadian Forestry Association has published a special issue of "Forestry on the Hill" on the subject of herbicide use in the forests. The issue reflects the positions of over 20 groups and individuals from government, industry, organizations and academia across the country. You can order copies by calling (613) 232-1815.

SILVI-CONFERENCE CALENDAR

Canadian Pulp & Paper Association DEMO '92

World's largest display of woodlands technology held only once every four years.

September 17-20, 1992

Kelowna, BC

Contact: Wayne Novak (514) 866-6621

Forest Summit Conference 1992

The conference will examine where the forest sector is now in relation to emerging trends in global fibre supply and demand.

September 22-24, 1992

Vancouver, BC

Contact: Registration Coordinator (604) 688-0188

Forest Nursery Association of BC Annual Conference

September 28 - October 1, 1992

Penticton Trade and Convention Centre

Contact: Tom Hamilton (604) 675-4838

Silviculture: On track or Derailed?

Recent lobbying efforts by Dirk Brinkman, President of the WSCA

Note: The following letters were written to the Minister of Forests Dan Miller on March 18, 1992.

Steady State Reduction needs an Explanation

At our Annual General Meeting in January 1992, the members passed a resolution expressing concern about the reduction of the Steady State reforestation seedling estimate. In 1987, it was 220 million seedlings, and in 1992 it is 175 million seedlings. The WSCA members demand that the Ministry of Forests explain the 45 million tree reduction in the Steady State figure.

We are aware that there have been reductions in the Ministry of Forests' minimum stocking standards. These reductions have not been justified to our members, nor has the public been advised of the rationale for this process. There is a cynical view which needs to be addressed, that this was for the benefit of reducing regeneration costs and decreasing the previous NSR by a book entry.

We are also aware that the survival percentages have increased during this period. However, the survival percentage data has not been well documented. Most critically, we have never had reliable data for the percentage of seedlings reaching free growing. Before 1987, free growing was not a goal and 'survival' was adequate, it may be that more trees are needed today to meet the new free growing standards.

We are aware that the annual area logged fluctuates with the forest products market, and that AAC withdrawals are reducing the area logged. On the other hand, the area logged is also increasing as we move to higher elevations, further up valleys, farther north and onto poorer quality sites, while still maintaining our AAC. What is the balance of the effect on the Steady State number? In our members view, this should increase the number of trees planted.

How are biodiversity demands affecting the Steady State number? Is there an increase in species mixing? Are there specific goals for more diverse forest stands? To what degree have changes in the acceptable species affected the Steady State number?

Some WSCA members have reported that some species seem to be harvested merely to include them among the acceptable species and reduce the cost of reaching a free growing state. While this is viewed very cynically by some members, it may be an acceptable licensee strategy and one which meets the public's goals for increasing forest utilization, maximizing social benefits (although not for our members). What is the Ministry of Forests' view on this?

The above reflects some of the discussions held at our Annual General Meeting. There may be other factors that have influenced the MOF decision. The WSCA members' resolution challenges this dramatic reduction in our business prospects and the potential compromise of the public's interests. We expect an explanation be presented to our members.

The members also encourage you to accelerate the setting of maximum stocking standards for all ecosystems. Minimum stocking standards without a maximum permit stand densities which are stagnant from the perspective of industrial wood growth and yield. Since many of these areas are in our working forests— whose first use is industrial forest products— losing growth and yield due to high densities is undesirable. Lower stand densities are most readily achievable either by planting immediately or spacing after natural regeneration.

Freegrowing Audit Process needs reform

At our Annual General Meeting, members passed a unanimous resolution expressing "alarm at the apathy of the free growing audit process". This requires some explanation.

The Ministry of Forests plans to audit themselves on their District Small Business PSHPs. This leaves the rookie field forester (who does the data collection and audit report) in direct conflict of interest with his boss, who probably signed the PSHP and will be signing his employee's performance and promotion review.

While we generally maintain a high opinion of the integrity of Ministry of Forests' staff, no matter how well intentioned a forester is, the public's interests are trapped in an unnecessary ethical dilemma and are being compromised. Industry Licences are watching this audit process closely. There is a loosely expressed industry opinion that the quality of performance of some of the District PSHPs is not up to the standard that the severe consequence of failure has forced industry to set.

Any lack of rigor in the District PSHP audit, and acceptances of compromises in the free growing standards will immediately become grounds for industry to ease up on silviculture expenditures that are hard to carry.

Uncompromising rigor is only possible with an outside audit. The integrity of the Silviculture Regulations and the public's interests are at stake here. The WSCA recommends that the audits be contracted out (not to the lowest bidder, but through a RFP).

I look forward to an appropriate response safeguarding the public's interest in this delicate matter.

The Ministers Response to Steady State and Audit Issues

Dan Miller, BC Minister of Forests

Note: This response was received from the Minister on July 22, 1992

Thank you for your letters of March 18, 1992, which deal with several issues of concern to members of the WSCA. I would like to address each of the concerns independently.

Steady State Seedling Estimates

The most recent estimates for seedling requirements for the next five years are as follows:

1992	216 million
1993	212 million
1994	196 million
1995	188 million
1996	183 million

There are several reasons why the demand for seedlings is decreasing. Fewer seedlings will need to be planted in the coming years because of significant gains in survival rates that have resulted from superior nursery technology, better planting techniques, improved site preparation, and advances in forestry research. Current seedling survival rates are frequently as high as 85%.

In addition, there has been a marked improvement in the success of natural regeneration in recent years. This will lead to a reduction in the number of areas requiring planting, and may also reduce planting densities as the management of natural fill-in becomes more reliable.

Furthermore, FRDA I (1985-90) was very successful in reforesting high priority backlog NSR (the backlog was reduced by approximately 42%), and the demand for seedlings for this purpose will continue to decline as the backlog is eliminated. The current goal is to eliminate treatable backlog NSR by the year 2000.

With regard to your reference to minimum stocking standards, these have only been reduced for areas that are greater than 12 years old. The primary reason for this is to avoid planting small seedlings among trees that are already five or ten metres tall.

To answer your questions on survival percentage data, the MOF primarily collects first and second year data because most plantation mortality occurs in the first two years. Some five year data is also collected, however, the current standard focuses on seedling survival after two years in the field.

It is too early in the regeneration cycle to obtain accurate data on long term survival on areas logged after October 1987. As more plantations reach the required free growing state, information relating planting density to free growing target will become available.

The seedling requirement estimate provided above are based on the best data available at this time in the planning process. The actual number of seedlings required is based on sowing requests originating from approved pre-harvest silviculture prescriptions (PHSPs), and these levels can fluctuate from the projected levels for a number of reasons (ie. a reduction in AAC, plantation failure, increased natural regeneration, etc.). Depending on the circumstance, these fluctuations may result in an increase or reduction in the demand for seedlings.

Biodiversity is a very important consideration in reforestation, and often several different tree species are planted on the same site. However, the number of seedlings planted is primarily affected by the number of acceptable naturals on the site and the required stocking standards, not by the prescribed tree species mix.

Changes in acceptable species are based on research into tree silvics and the ecological characteristics of various forest ecosystems. As more research is conducted, the designation of preferred and acceptable species will be refined. These changes generally have very little impact on stocking standards or the number of seedlings planted.

Your membership's encouragement in setting maximum stocking standards for all forest ecosystems is appreciated and acknowledged. Maximum densities have already been set for lodgepole pine and dry-belt douglas fir. The current level for these species has been established at 5,000 stems per hectare, however, this figure may be subject to revision depending on the results of ongoing research. Maximum stocking standards will be set for other species once the required research has been completed.

Silviculture Auditing

You are correct in that the MOF is currently responsible for auditing all Small Business Forest Enterprise Program (SBFEP) PHSPs. However, the responsibility rests with the Regional Manager and not, as you stated in your letter, with the District Audit Forester. Therefore, district staff are removed from the audit process.

The Ministry is concerned over the perception that the SPFEP audit is an "internal" process and therefore lacks objectivity. We are investigating the use of external agencies in the silviculture audit process, both to assist in managing the workload and to inject a level of independence into the audit program.

I would like to emphasize that the ultimate responsibility for forest management resides with the MOF and that, regardless of who does the auditing, the Ministry will make the final assessment on the success or failure of each PHSP in the province.

I trust this discussion has satisfactorily addressed the issues you raised in your letters. Thank you again for taking the time to bring these matters to my attention.

Silviculture Derailed? continued...

Silviculture Commitment Questioned

Dirk Brinkman

Note: This letter was written to the Minister on April 2, 1992

WSCA Members are disappointed that BC's 1992-3 budget slashes the scheduled Silviculture Program by \$15,000,000. This includes:

- Forest Renewal Program Cut by \$6 million!
- Provincial FRDA contribution Cut by \$9 million!

The Silviculture Industry was geared up for more spacing, pruning, fertilizing and research. The industry already found it difficult to accept that in 1992, over 80 million seedlings less will be planted than in 1990. (See *previous letter*). Increases in the brushing and weeding programs were expected to extend the extremely short planting seasons for reforestation crews. This is sad news for silviculture workers and university students.

I know you are aware that "Silviculture Today creates Forest Industry & Recreational Jobs the Same Day".

Your government has committed to Sustainable Development more authentically than any previous government. Current harvests are based on careful forecasts for growth and yield in the working forest. This cut requires the planned harvest to be adjusted down with a parallel reduction in forest industry jobs this year— not eighty years from now. These scheduled improvements of the working forest could relieve industry pressure to log heritage reserves that have the potential to create tourism/recreation jobs.

B.C.'s AAC on Crown lands may be reduced by 15% as the Owen Commission resolves land disputes. Private land harvests are also scheduled to reduce from the peak 14 million cubic meters of 1989 to 3-5 million cubic meters annually.

The resulting 25% decline in BC's AAC translates into the loss of at least 22,000

direct and 44,000 indirect forest industry jobs. The planned Federal & Provincial programs would have softened these extreme social costs.

While we are grateful that these cut-backs are not as bad as in some other provinces, but it nevertheless weakens our case for BC's international environmental consumers. Is this a robust effort to develop the forest resource for future generations? This compromises Premier Harcourt's assurances in Britain that the new B.C. Government has a greater commitment to Forest Renewal.

Conspicuous absence of a 5 Year Plan!

This is the first year in fourteen without a Five Year Plan. Silviculture cannot be budgeted annually. It requires long term planning and long term funding commitments. Foresters and nurseries do not know how many seedlings to sow for planting in 1993 and 1994 and surveys and prescriptions for intensive treatments are in suspense.

We are looking for your assurance that the invisible Five Year Plan is not hidden because the governments commitment to forest renewal is reversing.

Rumours of economic consultants and staff economists using their parsimonious tools (which usually ignore social, ecosystem and natural capital) to criticize the adequacy of return on intensive silviculture investments concern us. Financial wizards in Victoria have always tried to lure those who are responsible for caretaking our forests to the gambling table of high technology rather than the slow but steady growth of forest management investments.

As watchdogs of the publics silviculture interests, the WSCA asks you to recommit to the Forest Renewal Agreement and FRDA II.

We will be bringing our concerns to public attention so that these decisions can receive the debate they deserve.

Silviculture delayed not denied

Dan Miller Minister of Forests

Note: This response was received from the Minister on April 29, 1992

Thank you for your letter of April 2, expressing concern over the funding level of the Silviculture Program.

I can assure you that this government is committed to forest renewal. Total funding for the 1992/93 Silviculture Program is at the same level as 1991/92, with some minor changes within the program to ensure that the highest priorities are addressed.

Provincial funding for the Forest Resource Development Agreement (FRDA II) for 1992/93 will proceed at the 1991/92 funding level. This is lower than planned, however, the government remains committed to fulfilling its obligations under the Agreement. The Province is exploring the possibility of extending the Agreement into a fifth year in order to meet our commitments.

Under the 1992/93 Silviculture Program, some subprograms have been reduced to help offset increases in others. Basic silviculture obligations will be fully funded, including the brushing and weeding programs your members were concerned about. Reforestation of treatable not satisfactorily restocked (NSR) land will continue, with the goal of completing the backlog program by the year 2000.

Forest Health funding for bark beetle control, spruce budworm and Asian gypsy moth spraying, and other forest health activities has increased significantly over last year. To accommodate these increases, planned increases for incremental silviculture expenditures have been reduced and will be picked up in future years when the inventory has been updated and silvicultural goals and benefits are rationalized.

With regard to your comments on the silviculture five-year plan, it can be found in the recently-released *Five Year Forest and Range Resource Program* (see facing page). During the 1992/93 fiscal year, the Silviculture Five-year Plan will be updated as part of the annual planning process.

Thank you once again for writing to express your concerns regarding these important matters.

5 Year Forest Resource Program

Dan Miller, Minister of Forests

Note: The following excerpts are from *The Five Year Forest and Range Resource Program 1992-1997* recently tabled by the Forests Minister. Copies of the full document are available from the MOF.

Forest Minister's Message

As we enter the nineties, it is increasingly clear that there are limits to our vast forest resources.

Population growth and new expectations for our forest require us to harmonize seemingly contradictory uses.

We must adapt our forest management to reflect current expectations of all British Columbians.

To adapt our forest management, the government is undertaking initiatives on three key fronts.

The first initiative is a major update of our inventories.

Through work with all other resource agencies, inventory information is being updated to reflect all forest values. It will be capable of effectively sup-

porting local land use planning. In addition, the information will be more detailed for selected areas of intensive resource conflict and will be readily accessible at the local level.

The second initiative is a re-examination of where and how much we harvest. Most of our harvest levels were set during the early '80s and do not reflect subsequent changes in management practices. The public also expects better conservation and management of our biologically diverse forests and old-growth ecosystems. These pressures require a review of our harvest to ensure sustainability.

Thirdly, the Forest Service is developing a Forest Practices Code to ensure that our forest practices are sustain-

able. The objective is ensure that the management our forest is based on sound ecological practices and reaches the highest stewardship standards.

These initiatives will complement the efforts of the Commission on Resources and Environment to develop a land-use plan for the province.

This plan will enable us, through public input, to achieve a balance that preserves our environmental heritage and ensures a sustainable forest to maintain our economy.

The commission's first priority is to develop a land-use plan for the most controversial area of the province: Vancouver Island.

Basic Silviculture

Basic silviculture includes all activities that ensure reforestation of recently denuded areas.

Responsibility for funding basic silviculture activities was shifted to major licensees and the Small Business Forestry Enterprise Program (SBFEP) in 1987. The Forest Services role is to monitor and audit major licensees' performance.

The basic silviculture component also provides funds for all the remaining basic silviculture requirements on:

- land harvested by major licensees between January 1, 1982 and September 30, 1987;
- land harvested under the SBFEP and other minor tenures up to September 30, 1987;
- land denude by fire and pests; and, the remaining backlog of not-satisfactorily-restocked plantations on land harvested before January 1, 1982.

The Forest Renewal Plan initiated in 1991 will continue to fund basic silviculture at the planned level.

Goals for Basic Silviculture funded by the Forest Service (Hectares)

	1992-3	1993-4	1994-5	1995-6	1996-7
Surveys	590,000	454,625	400,731	374,697	299,868
Site Prep	47,000	38,000	38,000	28,000	23,000
Planting	62,000	57,000	41,000	34,000	28,000
Brushing	70,000	62,000	52,000	43,000	38,000
Spacing	23,000	53,000	60,000	59,000	10,000
Audits (#)	4,200	4,200	4,400	4,500	4,500

Incremental Silviculture

The incremental silviculture component includes activities to improve the value and growth of immature forests. Activities include surveys, spacing, fertilizing and pruning.

To ensure effective targeting, some incremental silviculture objectives have been deferred while the inventory is updated and silviculture goals are better identified.

FRDA II, signed in 1991, will fund two-thirds of incremental silviculture activities over the next tree years, with the remainder provided by regular provincial funds. Approximately 10,000 additional hectares will be treated under the South Moresby Forest Replacement Account and the Forest Enhancement program.

The South Moresby account was established in 1988 to help offset the timber harvests and jobs lost by the creation of the South Moresby National Park Reserve.

The Forest Enhancement Program provides employment and training opportunities. Its goals reflect funding by the Ministry of Social Services.

Goals for Incremental Silviculture funded by the Forest Service (Hectares)

	1992-3	1993-4	1994-5	1995-6	1996-7
Surveys	50,000	107,000	120,000	127,000	127,000
Spacing	16,000	28,000	34,000	37,000	37,000
Fertilizing	7,000	15,000	18,000	19,000	19,000
Pruning	2,000	6,000	7,000	8,000	8,000

EMPLOYMENT & TRAINING REPORTS

Prioritizing Training for Committed Practitioners

Dirk Brinkman

Note: Letters sent to Dan Miller on March 18, 1992.

WSCA members have expressed a lot of concern about the Ministry of Forests and Forestry Canada's initiatives to train "new contractors", "new workers", and "natives". All of our members have lost work volume and have had to bite the bullet to survive the reduced amount of work. Historically, scarce training funding has been "wasted" on those who did not stay in the industry.

At our 1992 Annual General Meeting, we passed a unanimous resolution: "the WSCA members insist that the proposed training funds and programs be dedicated primarily to upgrading the skills of the committed contractors and practitioners, with a special focus on administration and training trainers".

WSCA members prefer the term "Silviculture Practitioners" to "Silviculture Workers" in order to further emphasize silviculture as a skilled craft which requires exceptional dedication, training and experience. The public deserves to have high standards in our industry. The WSCA supports the emergence of training programs and is encouraged by the interest taken in our human resources.

One of the principals we expect to have endorsed in our new code of practices is "a commitment to life long learning". We hope that the training programs support those whose lives are committed to the industry. The members are not encouraged by any plans to replace them with newly trained, untried recruits.

WSCA response to Native Forestry Task Force

At our recent AGM, the WSCA passed an unanimous resolution "supporting the objective of increasing native participation in the silviculture sector to a significant percent in the province, provided that the same pricing and quality standards are met."

We would want to substitute the task force recommendation of "20%" with "a significant percent". The members would not like to see 20% of our work allocated wholesale to native groups who have not proven themselves capable of meeting the quality and price standards. Both "quality" and "price" are fair measures of the public interest in forest renewal and enhancement work.

We recognize that providing training and experience for native entrants to our industry requires some training funding support. The WSCA supports the creation and funding of training programs to facilitate this change.

I look forward to arranging an opportunity to discuss your Ministry's plans directly in order to allow for good input from our industry.

Training and Native Forestry Reply

Dan Miller, Minister of Forests

Note: This response was received on July 22, 1992

I am pleased to hear that the WSCA will endorse a "commitment to life-long learning in your new code of practices. Under the FRDA II agreement, MOF, in collaboration with Forestry Canada, is current developing strategies that focus on meeting the training needs of silviculture contractors and their crews.

One key initiative is to "develop and secure funding for an accredited training program for semi-skilled or unskilled forestry workers" (FRDA II 1991/92 Annual Plan). This program is expected to improve forestry practices by encouraging companies to hire trained and experienced individuals. One of the results would be to keep the quality of work high in the forest industry.

The first step in developing this program is to establish the immediate training needs of the workforce. This is being accomplished by by conducting several different social surveys directed at existing contractors, their employees, Forest Service personnel, training institution representatives, and others connected with forestry training in BC. Preliminary results indicate that initial training efforts should aim at retraining workers to develop different skills to reflect the shift in silviculture activities from planting to brushing, weeding and spacing.

In the second year of the Agreement, the results from these surveys will be communicated to those organizations and agencies involved in forestry. It will be up to individual training organizations to determine how to translate these training needs into training opportunities.

At the present time, our efforts to encourage new opportunities in silviculture are focused on Aboriginal people. Brinkman and Associates were involved in one of the projects the Forest Service co-sponsored—the training of Native inmates of the Ferndale Correctional Institute. As you will probably agree, Aboriginal people require a special effort to involve them in forest activities. The benefits from their involvement will go far beyond that of employment, and will contribute significantly to forest management in BC.

I appreciate the WSCA's concern over the the term "silviculture worker." The Ministry will discuss alternatives with other organizations, such as the PRWA, to determine a suitable alternative that distinguishes these dedicated forestry practitioners.

Native Forestry Task Force

Thank you for your support of the Ministry's objective of increasing the participation of Aboriginal peoples in the silviculture sector. In particular, WSCA support for the creation and funding of training programs is appreciated.

...continued next page

EMPLOYMENT & TRAINING REPORTS

Miller Training Response continued...

With the development of proper training programs, I am sure that the quality and price standards currently in place can be maintained.

Your concern with the Native Forestry Task Force recommendation of increasing the participation of Aboriginal people to 20 percent of the total silviculture activities in the province will be taken into consideration as the Ministry reviews the Task Force report. Once the review process is complete, the Government's response to the report's recommendation will be announced.

The goal on increasing aboriginal participation in the forest sector will require the assistance and full cooperation of the forest industry, the contracting community, Aboriginal people, and the Government. In this manner, we can ensure that new initiatives are fair, achievable, practical and economically sound for all parties involved.

The silviculture industry's input into this process is both welcomed and appreciated. Thank you for your support and for expressing your concerns with regard to this matter.

IWA not Greening Its Image

by Tony Harrison

Note: This is a letter sent to Jack Munro of the IWA on March 9, 1992.

During the month of February, 1992 there has been a dispute between IWA local 1-80 and Fletcher Challenge. This dispute has resulted in Fletcher Challenge selling 950,000 seedlings in anticipation of missing the silviculture window of mid-February to mid-April. During this dispute the IWA has shown little regard for the urgency of planting the seedlings or any appreciation for the importance of regenerating what IWA loggers have harvested. The impression left by this is "if we can't log, you can't plant"—hardly a slogan for the green '90s.

Zanzibar is a non-union treeplanting company that has worked in the area for the past 8 years. Every year we have paid dues for our non-union workers who get no benefits, along with the Licensee hiring a small union forestry crew comprised of loggers who couldn't find logging work and were only interested in planting trees as a last possible choice. With the prospect of losing our early spring work, I suggested that we could work together and get people working with the prospect of certifying our crew and getting some of the IWA forestry crew back to work. The proposal fell on deaf ears. No one seemed to see the benefit in the IWA taking a leadership role of championing silviculture, thereby greening the tarnished environmental image of loggers.

I would like to request the presence of someone from the IWA to address contractors concerns at the upcoming WSCA coast regional meeting.

Cooperation Needed For Healthy Working Forests

by Tony Harrison

Note: This letter was sent to Roger Stanyer of the IWA on March 13. He had telephoned the March 12 Coast Regional Meeting to present the IWA's position.

I appreciate that given the short notice, you were unable to attend our WSCA coastal meeting. We did, however, have some useful discussion in your absence, which I will report to you.

During the last ten years, most of the silviculture work on the Southern End of Vancouver Island has been done by non-union workers abiding by the **Coast Master Agreement**. During this time a skilled work force has been created that does a cost-effective, high quality job. The IWA has tried unsuccessfully to voluntarily sign-up this workforce with two separate organizing drives. The treeplanting program has become large and the IWA workers in harvesting and mills are not in a position to plant a large volume of trees with current members. This spring, IWA local 1-80 had the option of either allowing non-union planters in the woods while union loggers were laid off or letting 950,000 seedlings go unplanted. Unfortunately, the seedlings were sacrificed—bringing into question the IWA's commitment to forest renewal.

A major factor in the misunderstanding is the IWA's misconception that silviculture work is **unskilled** or entry-level. In fact, it takes three to four seasons for a coastal planter to become proficient and attain a reasonable production level. It is not simply a job that can be used as a two-week fill-in for an unemployed grader operator. Failure to acknowledge the professional nature of this job and the existence of an established industry will only repeat the past experience of designating jobs to people that are not suited for or interested in the work. The result will be a cost of two to three times of existing contracting services and the displacement of the current trained silviculture workforce.

Our Association is compiling an analysis of average costs for silviculture work over the last few years (comparing IWA hourly crews with WSCA contract crews) and we invite your input. We also want to build a dialogue on cooperating to keep our working forests healthy by using the appropriate workers for the task. Without healthy growing forests, healthy jobs and job security are put at risk.

Wildlife Trees: Their role in BC Forests

Note: This was the Wildlife Tree Committee's submission to the Forest Resources Commission. WTC have recently been lobbying WCB to change their snag regulations in order to preserve more wildlife trees.

The Wildlife Tree Committee (WTC) was formed in 1985 for the purpose of finding ways to protect wildlife trees, particularly in the context of forestry operations. The Committee draws most of its members from the provincial Ministries of Forests and Environment. The Canadian Wildlife Service, and MacMillan Bloedel (representing the forest industry), each have one member on the Committee. Representatives from the Workers' Compensation Board (WCB), Western Canada Wilderness Committee, and IWA have also participated.

The term "snag" is commonly used to describe all dead or deteriorating trees. The WTC uses the term "wildlife

tree" because it specifies those snags that are valuable to wildlife. Of course, healthy, living trees are also important to many wildlife species. The WTC focuses on dead and deteriorating wildlife trees because these constitute a unique type of habitat which has great ecological significance and is particularly threatened.

Ecological Importance of Wildlife Trees

Wildlife trees are used by a wide variety of birds, mammals and amphibians, for purposes that include nesting, feeding, roosting and overwintering.

- The largest group of wildlife tree users are cavity-nesting birds, much as owls, woodpeckers, and some ducks. Over 15 percent of the bird species known to breed in BC are cavity nesters.
- A number of mammal species are

also cavity users: martens often raise their young in tree cavities; many black bears hibernate in hollow trees; and several kinds of bats roost in tree cavities or behind the loose bark of dead trees.

- Bald eagles and ospreys often build their nests in dead or broken-topped trees, and use the branches of these trees as perches.

Altogether, there are more than 90 animal species in BC that depend on dead or deteriorating trees. The long list of wildlife tree users includes some rare and endangered birds and mammals. Failure to protect wildlife trees is already resulting in decreased abundance and diversity of wildlife at local, regional and provincial levels, and may contribute to the eventual loss of some species.

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All Snags Are Not Equal

In very general terms, there are two things that happen to a tree after death: it becomes smaller as pieces of the trunk and branches break off, and it becomes softer as the wood rots. Decomposition is caused by the effects of insects, fungi, bacteria and weather. The rate of decay depends primarily on the species and size of the tree. Time, combined with all these other factors, makes each snag an ever-changing entity.

Dead trees are often divided into two broad categories: soft snags and hard snags. Soft snags make the best wildlife trees for cavity users, because they are the easiest in which to excavate or enlarge holes. Hard snags, which usually still have branches, provide good hunting perches for predatory birds. Hard snags also have great future value: most of them, except for fire-hardened snags will eventually become soft snags.

Height and diameter also influence the importance of a snag to wildlife. Most wildlife tree users require tall

trees with large boles. Large-diameter snags allow enough room for excavating cavities that are spacious, strong walled and well insulated. Tall snags provide security for wildlife species that make their homes in or on dead trees, and are high enough to be useful for hunting perches. Furthermore, because large snags deteriorate slowly, they meet the needs of many different wildlife species over a long period of time. Small snags are generally of only marginal value to wildlife.

Wildlife Trees & Managed Forests

Forest management, as it is currently practised in BC, impacts negatively on the abundance, density and distribution of wildlife trees in all forest ecosystems.

The greatest loss of wildlife trees occurs during timber harvesting, mainly because all snags must be felled to comply with safety regulations. Another reason is that

WSCA supports WTC goals

Note: From letter sent to WTC on Oct. 7/91 by Dirk Brinkman

As a representative of the WSCA I would like to express my support for your submission to WCB. Our motives are different, while our goals are the same. For many years it has been an aggravation to our members that WCB regulations require all snags to be on the ground to avoid hazards to our workers.

If WCB were to check their records they would find a high incidence of silviculture worker injuries arise from slipping and falling on the resulting slash.

Your recommendations will make the workplace safer for silviculture workers, who are the primary workers exposed to post-logging conditions.

Workers are aware of wind conditions. We have recommended that WCB regulations restrict access to work areas with snag hazards based on wind speed This would also create a safer work place.

Your defense of the wildlife tree values has the full support of our association.

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WILDLIFE TREES continued...

higher utilization standards have increased the cutting of deteriorating live trees, which previously would have been left standing.

However, the loss of wildlife tree habitat is not confined to the harvesting phase. Current safety standards also require snags to be felled prior to silviculture operations, such as planting, spacing and fertilization. This situation is aggravated by management practices like thinning and short rotations, which do not allow trees to mature, die and serve as wildlife trees. Neither the retention nor the recruitment of wildlife trees are favoured by even-age management.

The timber harvesting system that has the most severe impact on wildlife tree habitat is clearcutting, since no trees — dead or alive — are left standing.

With shelterwood systems, and single tree or group selection cutting, there is at least the possibility of new wildlife trees later being created from standing live trees, naturally or through artificial processes. But creation of new snags after harvesting is not an adequate solution to the problem. The protection of wildlife trees must be an integral part of all stages of forest management, otherwise large portions of the province will eventually be devoid of the many animal species that depend on this type of habitat.

Control of Forest Pests

Dead and dying trees have traditionally been seen by foresters as either being of no value or being harmful elements in managed forests. Now foresters are beginning to recognize the advantages of retaining snags to provide wildlife habitat.

Most cavity-nesting birds are insectivorous. When maintained at sufficient population densities, they help keep insect pest numbers low. This decreases the frequency and impact of insect epidemics.

Owls that nest in tree cavities, and other raptors that use wildlife trees for hunting perches, are also beneficial. They contribute to forest health by preying on small mammals that often damage regenerating trees.

Wildlife Trees and Worker Safety

There are a number of obstacles hindering the modification of forestry practices to better reflect contemporary understanding of the importance of wildlife trees. One of the greatest obstacles is concern for the safety of forestry workers. Views currently held by the WCB — for example, that clearcutting with progressive felling of snags is the safest way to harvest timber — leave no room for maintaining wildlife trees. The WTC agrees that human safety is of utmost importance

...a wildlife tree is a dead or deteriorating tree that provides essential habitat for any animal species...

and has no desire to protect wildlife trees at the expense of workers.

The worker safety issue has been one of the WTC's top priorities since its inception. In April 1990, the Committee made a submission to the WCB recommending specific changes to WCB safety regulations. The changes are intended to contribute to the maintenance of wildlife tree habitat, while offering equal or better protection for workers. Before submitting the proposal, each recommendation was carefully scrutinized to ensure that it did not compromise worker safety.

The changes recommended by the WTC are based on the understanding that there are three types of safety risk posed by snags:

- One is the felling of unsound snags, which is considered by many to be the most hazardous aspect of a faller's job.
- A second type of risk occurs during harvesting, when standing snags may fall unexpectedly because of ground vibrations caused by heavy machinery or

the impact of trees hitting the ground, or may be knocked over by cables, equipment or other falling trees.

- The third type of risk is most significant in silviculture work areas, where snags that have been felled are often left lying on the ground. These downed snags are responsible for many leg injuries and puncture wounds.

The WTC proposed that safety regulations should differentiate between sound and unsound snags, and should take into consideration the type of forestry operation being carried out (ie. harvesting versus silviculture activities).

The WTC also recommended introducing the concept of a "wildlife tree hazardous area", which it defined as a

no-work zone around one or more unsound snags or danger trees that have been designated as wildlife trees.

This is an acknowledgement of existing legislation in the Wildlife Act that prohibits the felling of any tree being used by nesting birds. Although technically the Wildlife Act could be used to protect all bird nests, it is usually applied only to more sensitive species such as bald eagles and ospreys.

If these proposed changes to the WCB regulations are accepted, wildlife trees will have to be identified prior to commencement of harvesting or silviculture activities. Snag assessment and wildlife tree designation could be easily introduced as part of the pre-harvest silviculture prescription.

The WTC realizes that the current safety regulations are administratively convenient for the WCB, and that the success of the WTC proposal depends on whether the changed regulations are easy to understand and to enforce. Therefore, training and pre-job planning were incited into the proposed regulations.

Future Directions of the WTC

The WTC is currently working towards incorporating an educational component about wildlife trees into a faller training program being produced by the WCB.

In the coming months the WTC will be formulating plans for future undertakings. These are likely to include outlining a provincial policy for the protection of wildlife trees, development of guidelines for the number and types of snags to be retained during harvesting, creation of wildlife tree extension programs for use both within and outside the government, signage to identify designated wildlife trees, and further research into wildlife tree users and their requirements.

Conclusion

There is a growing awareness among biologists, foresters and the general public that dead and deteriorating trees are a vital component of forest ecosystems. However, the cumulative effect of forestry practices in this province has been the systematic removal of wildlife trees from entire ecosystems. As old-growth forests are cut and replaced with even-aged stands, the birds, mammals and amphibians that depend on wildlife trees continue to disappear. Losses at the local and regional levels are the first steps that may lead to extinction of some species. The WTC believes that it is possible to have managed forests, worker safety and wildlife trees, but only if action is taken immediately to integrate these goals.

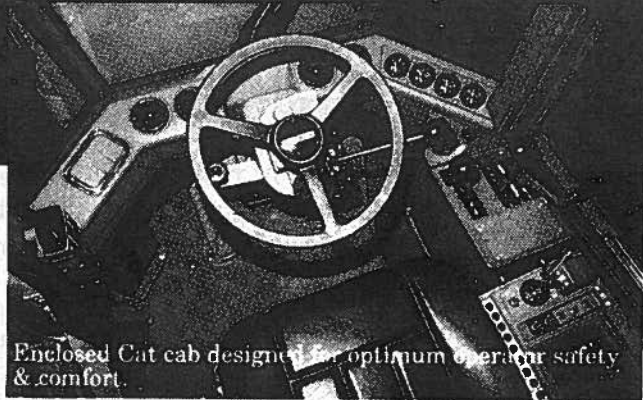
Wildlife Tree Update

A Memorandum of Understanding (MOU) on wildlife trees was signed in June 1992 by MOF, Ministry of Environment & WCB.

The MOU defines roles and responsibilities in managing natural wildlife tree habitat in forestry operations. In this context, worker safety will not be compromised and management guidelines for wildlife trees will have due regard for operational efficiency in forestry operations. The MOU also recognizes the Wildlife Tree Committee (WTC) as the advisory body on all wildlife tree matters. The *Wildlife Tree Assessors' Course*, developed by the WTC, will train assessors to become qualified to evaluate wildlife tree habitat and ensure worker safety by marking danger trees for removal or marking out no-work area prior to workers being onsite in silviculture, roadside, and harvest area activities.

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W S C A C O N F E R E N C E R E P O R T S

Reform of Forest Management Policy

WSCA Convention Keynote Address

by Dr. Clark Binkley, Dean of Forestry, UBC

Silviculture contractors are where the rubber meets the road on intensive forestry in BC, and so I am particularly happy to come here and talk to you. The first question is, why is there a need for intensive management? Second, I want to talk about the need for intensive management in terms of the declines in economic productivity that are associated with the transition from exploiting an old growth forest to exploiting a second growth forest—the transition we are in the middle of right now. Can we do it? That is, can we apply intensive management in a way that's going to achieve this policy objective, and offset the declines that are typically associated with this transition. Finally, I will talk about what it is going to take to get the job done, and particularly about policy reform.

Why intensive management?

It's good to get our own thinking straight on that topic, particularly as we try to convince others who may not be as committed to this problem as we are. I look at this as an economist does, because that's my basic training. I believe that what we're trying to do with all our actions is enhance productivity—economic productivity—because that means we can have higher standards of living.

In a recent study done for the Business Council and the Government of Canada, about Canada at the crossroads and the reality of a new competitive environment, Michael Porter, the author, makes some interesting comments about our industry. He says, "Canada's economy, and especially its export economy, is basically heavily based on natural resources. Some argue that resource industries are inherently less desirable than high-tech industries."

He claims this logic is flawed.

"There's nothing inherently undesirable about resource-based industries, provided they support high levels of productivity and productivity growth. Such industries can make a country wealthy if it's resource position is highly favourable, as has been the case for Canada throughout most its history. If resource based industries continually upgrade their sophistication, through improvements in their processes and products, competitive positions can be sustained and productivity growth assured. In many resource based economies, however, resource abundance contributes to a set of policies, attitudes, and institutions, that reduce incentives to upgrade, and make it difficult to move beyond the resource driven stage of development. This can leave resource based economies vulnerable to adverse shifts in technology, markets and international competition. The key test we must apply in appraising Canada's resource based industries is their record on upgrading competitive advantage and their capacity for upgrading it in the future."

Now, Professor Porter is clearly an expert on this business of competitive advantage. First he wrote a book, *The Competitive Advantage of Nations* (which I bought on the remainder table for \$19.95) and then he sold a thin study to the Canadian government for a million dollars, so I think he's probably somebody we ought at least to listen to.

Productivity, the way an economist defines it, is really pretty simple. It's the ratio of the value of outputs to the cost of inputs. So the question is why do we want productivity growth? Because that means we can pay more for inputs and one of the key inputs in an economy is labour. We all want to

be richer, and the only way we can be richer is to have productivity growth—that's why I focus on productivity growth as an issue. I want to examine the larger economic context within which productivity growth must occur in the forest sector. And particularly talk here about the transition from an old-growth economy to a second-growth economy, which I think is really the key element of your business.

Transition to a Second Growth Economy

This transition has been repeated throughout history. You can find examples of it in the classical civilizations of the Mediterranean, you can read about it in the Bible, it occurred in Central Europe about a thousand years ago, it occurred in Sweden at the end of the last century and now they have a fine forest sector based on their investments. And of course, its occurring right now in the Pacific Northwest of the U.S. So what we're going through here is not something new, it's something which has been associated with human activities within forests for quite a long period of time.

In the beginning of this exploitation, or the development of a forest sector, the forest doesn't grow. In an old-growth forest (to a first approximation) growth is balanced by mortality so net growth is zero. Any kind of harvest level exceeds the growth and the inventory has to decline over time. As the inventory declines, of course, timber becomes more scarce. That is, you have to go further from the mill sites to get it, you have to go higher in the mountains, and, in fact, the prices rise as well.

So this increase in scarcity to an economist means an increase in costs which has two important implications

for us here. The first one is: the old growth timber in other countries can compete with us. For example, old growth resources in places like Malaysia and Indonesia compete with us, and I think timber from the Russian far east—the part of the former Soviet Union that is on the Pacific ocean—is going to be competing with us in a lot of our markets. Plantations become economic in the best growing sites—places like New Zealand, and Chile, and the southern U.S., and they compete with us.

The second implication is that BC's competitiveness, as measured by productivity, will decline. Remember I said productivity is the value of the outputs divided by the cost of the inputs. In this transition from old growth to second growth timber, it means the cost of one of the key inputs to the forest sector—that is, timber—goes up. And as that cost goes up, that means our productivity goes down and we'll lose international competitiveness, unless we do something. BC is left with two choices: one is to get out of the forest sector businesses altogether, the other is to increase productivity.

As for the former choice, I don't think any silviculture contractor would think that's a very good alternative, but I think we have to examine it carefully. What else would we do if we weren't involved in the forest sector—how would we replace those sets of economic activities? That's a tough question, and I have yet to see any good answers, although it's been a favourite topic in BC for a long time. Do we replace a thirty-five-dollar-an-hour job in logging with a seven-dollar-an-hour job in MacDonalds? It just doesn't add up! It's particularly problematic in rural areas where there may not be other kinds of economic development available. Although in the Lower Mainland there may be some possibilities, in places like Quesnel and Williams Lake and

Terrace and so on, it's a wholly different story.

Let's examine the possibilities for increasing productivity in the forest sector. Of course, in the tree growing part of the forest sector, increasing productivity means intensive management. Is it technically feasible, in particular, to increase the growth rate on a smaller, more compact, lower cost, more efficient land base and, at the same time, maintain something like current levels of output? I read recently that an estimate of the long-run sustained yield of BC's forests was about fifty-five to sixty million cubic metres annually, as opposed to peak harvest levels in the nineteen-eighties, of ninety million cubic metres annually. If you put those figures together, it's a tremendous shrinking of the forest sector. So the

...there's nothing inherently undesirable about resource-based industries, provided they support high levels of productivity and growth...

question here is: can we maintain long run sustained yield of some ninety million cubic metres annually and, particularly, can we do it on a smaller more efficient land base. I believe the answer is yes, although the empirical evidence is thin.

Let me just give you a couple of points of reference. In the 1970s, Weyerhaeuser in the U.S. did some interesting studies (published in a prestigious scientific journal called *Science*) looking at the theoretical yield of forest trees. They said, let's look at the sunlight coming in and let's find the biochemical efficiency of a tree in turning that sunlight into wood. Then they took this theoretical model and applied it to two places where they practised some of the most intensive forestry known in the world: in the southeastern U.S. and the Pacific northwest.

Knowing the weather and other conditions, they predicted the

theoretical yields, and then they went out and measured the actual yield on these intensively managed sites. (These sites were prepared, planted with second-generation tree-improved seedlings, fertilized, repeatedly thinned with fairly intensive management regimes.) They also measured the yield of natural stands in those same areas. Well, if the theoretical yield was a hundred, the best yields they got on any of these plantations was about forty-five to fifty percent of the theoretical yield, and natural stands grew at something like ten to twenty-five percent of the theoretical yield. The conclusion they drew was that even in their intensive management regimes, there was a long way that they could go to increasing yields. The conclusion I draw from this, since most of BC's

forests are managed at more like the natural stand stage, is that with known technologies, we can probably improve growth rates of BC forests fairly substantially.

A factor of two to three is not out of the question.

If in the long run we have the capacity to grow more wood, the question is: do we have enough timber to get between here and there. That is, to get between the current harvest levels and the long run harvest levels. Well, I think there's some hope here too. If you conservatively estimate the working forest in BC at about twenty million hectares (right now about twenty-eight million hectares are considered operable and productive) and suppose that the harvest levels of the 1980s continue into the indefinite future (about 200,000 hectares at peak harvest levels), it would take about a hundred years to have the first pass through the working forest. Logging in BC really began in earnest only about 1950—the period before World War II really weren't very high levels of harvest. Effectively, we've been at it about forty years, and so we have about sixty years left to make this

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transition, on average, for the province as a whole. That's probably enough time to do it, but barely so.

Of course, the province's forests aren't managed on some theoretical aggregate like that, for the province as a whole, but on much smaller regional bases. And even here, there's still some hope. I was interested in Steve Tolnai's analysis of TFL35 where they looked at the possibilities of increasing harvest levels on a non-declining even-flow basis by improving management of the lands. And they concluded, that through intensive management—technology they know how to do right now—that they can increase the allowable cut by about two-thirds on a non-declining even-flow basis on that one TFL. In fact, the Ministry of Forests has recently approved a fifty-percent increase in the cut, based on those same calculations. (See Summer '91 WSCA Newsletter for more info — Ed.)

It seems technically feasible to offset the reductions that come with this transition from an old-growth to a second-growth economy, in an aggregate sense. What would this cost and how would we pay for it? Well again, imagine a working forest of some twenty to thirty million hectares. I estimate the cost, for managing this forest in the way needed, would be some \$600-800 million per year. This is based on some studies that Dave Hayley and Marty Luker did of management costs on private lands in BC, and Steve Tolnai's analysis of the management costs in the example just cited. That's a rough, rough estimate. We currently spend some \$300-400 million annually on silviculture activities in BC on public lands and private lands. So we need to spend much more, maybe twice as much as we are spending right now. However, I would not regard that as an outrageous increase.

One question that gets posed frequently is: can the resource pay for its own management. During an interview published in the recent issue of the Truck Loggers' magazine, Dan Miller, the Minister of Forests, commented on the need for the resource to pay for its own management. I'm not sure that's a good standard, but let's apply it. In 1989/90, stumpage receipts from the Ministry of Forests were \$651 million. So, stumpage receipts were roughly in the range of what the proposed silviculture costs would be. Total governmental revenues from the forest sector according to the Price Waterhouse studies, was about \$2.9 billion. Of that, some \$1.7 billion was employee contributions, that is, the taxes that employees at work in the forest sector pay.

Excluding that, about \$1.2 billion is the contribution of the forest sector to governmental revenues. It seems that there's adequate rent out there, if you will, to pay for the management of the resource. But the net return to the province is apt to decline. This isn't surprising; we have been out there exploiting a forest that we didn't have to grow and so resource rents, or the payments to the province, have been quite high. When we have to start growing it, the costs inevitably are going to go up, and the net that's available to the province has to shrink. And that's just part of the dynamics of

...we need to spend much more, maybe twice as much as we are spending right now on managing the forests...

the sector. If we don't want that, as I said, the choice is to go out of business.

Now, one of the interesting points is: if we apply silviculture in the way I've described, a side benefit is that we can create a system of parks and natural areas of some fifty to sixty million hectares. There would be a large area

of land no longer a part of the working forest. That's not the way you'd want to create parks of course, you want to look at the system of parks and preserves needed to preserve the province's biological diversity. My point is there's an awful lot of land there that becomes available for those kinds of efforts. Some fifty to sixty million hectares. As a point of reference, France is fifty-five million hectares. So there's an area in BC the size of France that isn't needed for the working forest; that would be a set of parks and preserves second to none in the world.

Developing New Forest Policy Options

I have tried to indicate that there's an economic necessity to invest in intensive management, that it's technically feasible to achieve what we want to achieve with it, and it's within our budget, our capacity to pay. Let's turn to the question of policy options—what would it take to get the job done. We need changes on several fronts. The first is that our R & D experience is forestry in poor. We spend about 0.3% of gross sales, in BC on R & D versus about 1.7 or 1.8% in Sweden. That's too low. We need better training for all phases of the forest sector, that is, for forestry workers, and for forestry professionals. We need to settle the land use debate. The approach proposed on Vancouver Island, I believe, is quite promising. It's a regional approach that focuses on regional stakeholders, and I think that makes a lot of sense in BC. I'm optimistic about that. I've talked about these fronts a lot elsewhere so I want to leave them and move on to talk about policy reform, and what are the needed policy reforms.

Current policies with respect to intensive management are internally

contradictory. That is, I think BC as a whole wants more intensive management of its forest lands. At the same time, there have been two other important policy changes. One is the government's wanting more rent captured from the forest (rent capture is an economists way of saying higher stumpage fees). So, we want to have higher timber fees and collect more money out of the forest as a society. For example, stumpage receipts have gone from about a \$100 million in 1982 to about \$650 million recently. The BC Forest Resources Commission said these stumpage payments can be increased even further. I wonder about that, but increasing rent capture is surely a policy objective.

At the same time, the certainty of tenure has been decreased. There was the 5% so-called "claw back" in 1988, the controversy over the renewal of TFLs, and the BC Forest Resources Commission proposals for tenure change—surely these moves increase uncertainty. And the recent reductions of the AAC on Vancouver Island clearly work towards increasing uncertainty. I think the best way to proceed right now is going slowly and thinking out very clearly what we want to do.

The problem is that these policies—wanting to increase management intensity, increase rent capture, and decrease the certainty of tenure—don't fit together. Let me give you a couple of examples. If we have a 100% rent capture, that is if stumpage payments extract all the value of the wood, then there's no incentive for a leaseholder to invest in forest management. That means the deal we're offering is this: you pay for intensive management, spacing and fertilization, and when the trees are grown, we want to make sure that all the value of the tree, (although not the lumber and so on) will be taken away from you in the form of stumpage

payments. So you pay, we get the benefit. That's not a terribly good deal and so nobody likes it.

I think you'll see a decline in the level of investment by most of the industrial firms because of that. At Fletcher Challenge, Ian Donald has commented that intensive management doesn't pay under these circumstances, and he's right. It can never pay if we have 100% rent capture. That means if we follow that

...current policies with respect to intensive management are internally contradictory...

rule of a 100% rent capture, or trying to make sure that we get the last dollar of value out of the timber, we have to have government control and government management of forest lands.

There's nothing wrong with government control and management of forest lands if we're willing to pony up the money to have the government do it in the proper way. Peter Pearce in his 1976 Royal Commission Report, commented that "the enthusiasm of British Columbians for public ownership of forest lands is not matched by a desire to support the large public agencies that are needed to manage them." I think that's the crux of the problem.

Alternatively, we could say: let's reduce the per unit rent capture (stumpage fees) and make use of private incentives and capital to get more intensive management. Let me give you an example of how this might work. We could establish a ground rent for those areas of the working forest that we were going to manage, and we could bonus bid the tenures. For example, if there is 100,000 hectares of land available, then there's a ground rent of so many dollars per hectare per year and the tenure is put up for auction. The highest bidder who meets other qualifications wins a

perpetual lease on the land. That is, they don't own the land, but they get the right to use it for growing trees. Zero payment of stumpage, once the bonus bid and the ground rent is paid. Then of course there's a much greater incentive for intensive management of the lands. This is something like the system that New Zealand has put in place for some of their properties.

I don't want to say that's the only way to do it. My main point is that we as a society can't complain about poor company performance, but at the same time, cancel private property rights, or we can't complain about poor governmental performance, but at the same time, not be willing to fund the agency properly to do its duty. We need to have a consistent set of policies related to intensive management. Right now, our policies are inconsistent and, in fact, contradictory.

Conclusion

In summary, the transition from old growth to second growth means a decline in productivity and a loss of international competitiveness. And the choices we face are: go out of the forestry business, or improve productivity, principally through intensive management. It seems to be technically feasible to do the latter. I believe the resource can pay for the management as long as we don't expect so much net return from the resource, and I think there's a side benefit in that we free up a lot of land that can be used for other activities. This requires some changes in the way we do business; it requires, as I mentioned, better training, more R & D, resolution of the land use debate, and most centrally, it requires policy reform. There are several policy reform options here. I've outlined two briefly. The public control, public management option, and more of a private control, private management option. And there are of course a lot of

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ranges in between. But they have to be consistent.

There are examples from throughout the world of forests managed well in different systems. If we're looking across to other provinces in Canada, we see much higher levels of private ownership and good management. In the U.S. we see some excellently managed public lands and private lands, and the same goes for Sweden. There is no one right way to do this, but there are packages of policies that make sense, and ones that don't. The problem in packaging these policies, is to match the responsibility with the financial return. And if you're going to make somebody responsible, they have to get the return out of it, and that goes for public agencies as well as private agencies. If we do that, we'll solve these problems. It's time to get on with it, because we don't have much time to wait to complete this transition between the old growth and second growth forests.

Questions and Answers

BECK (BC Forestry Association): People seem to be having a difficult time making the decisions that you're

asking them to make— choosing either to increase funding for public officials to manage our forests or providing industry the incentives. Do you have any suggestions on how to create a public that understands these issues, and feels comfortable in making their own decisions about them.

BINKLEY: That's a terrific question. I think the first problem is that people don't understand that the sector is changing. I mean, it's always gone up and down, there have been good times and bad times, but people don't understand that we're in the middle of a structural shift in the sector right now. They think business as usual is possible. My point is, business as usual is not possible. Another opinion out there is that the forest sector is one of those resource based industries that we ought to get out of.

One of the interesting messages of Porter's study is that he says something I think we've all known: that it's not a question of resource based or non-resource based, it's a question of whether you're productive and competitive in an industry or not. It doesn't make any difference if it's computer chips or sawlogs. If you have a comparative advantage and know how to do it, you can make your way in the world with that. So we also need

to dispel the second myth of a "sunset industry".

How do you educate the public about that? I think there are a whole range of things. I am pleased that the public is more concerned about forestry questions. If you'd gone to the Ministry of Forests ten or fifteen years ago, they would have said that **the public just isn't interested. Well they're interested now, and** I think the level of public interest gives us a rare opportunity to be able to say things and convey information that we haven't had in the past. It requires every person involved with the forestry enterprise, whether it's land preservation or timber production, to get out and say what's going on.


Finally, there's a real need for better education in the public schools. I know everybody says that— if you talk about any profession, they say yeah, there needs to be more of this in the public schools, whether it's scientists or whatever. But forestry really is a central feature of the BC landscape, the economic base, the cultural heritage. We at UBC have been trying to improve that, we're putting on a course next summer for public school teachers to teach them about forestry and the forest sector, and maybe improve the information that gets out in that setting. But I don't think there's any easy answers.

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Balancing Brush Control Standards & Costs

Dave Kohlen, Bell Pole Co. Ltd.

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My talk will be about brushing and weeding in herbaceous complexes in particular. I will avoid the complexes with deciduous components, because it's somewhat more complicated, and is a different issue.

In 1990 when I started with Bell Pole, myself and other people working there believed that the use of herbicides was endangered—the opportunities to use them were becoming increasingly restricted. Although there was discussion through out the forestry community about the potential of manual brushing, the costs attached to manual opportunities were incredibly high. A cost of \$800–900 a hectare was quite common, \$1000 wasn't unheard of— even higher in some cases.

None of us having a lot of prior experience, we thought we would start by establishing a couple of trials to get some firsthand information on the responses of various species to manual brushing. I went out and I bought a number of hand tools and started playing around a little bit. We decided that we wanted to stick with the hand tools because we wanted to be able to move through areas fairly quickly and avoid the maintenance problems with machinery and power tools.

Field Trials and Lessons

We set up a trial on an area that had been logged in 1984, broadcast burnt the same year, and planted two years later. When we entered the area four years later, it was fairly clear on the site where vegetation press had exerted its

influence. There was marginal stocking on the wetter ground, on the drier ground stocking was fairly high and on the ground in between, it was variable. We did our trials and came out with a general understanding of how various species responded to being cut. They were primarily: thimbleberry, fireweed, and lady fern. The trials were in the ICHB, which is towards the wet end of the spectrum as far as cedar hemlock goes. (Bell Pole's operations do tend to follow the cedar hemlock zone, being a pole producer; cedar is the preferred product.)

The previous projects that we'd heard about were typically carried out fairly late in the season with the intent of

...probably the biggest factor incurring high costs of past manual brushing projects is having unrealistic standards...

eliminating vegetation press in combination with snow. We decided to back it up a little bit and try an earlier entry hoping to provide better light conditions for the seedling during the growing season.

I will talk about one species at a time, citing what happened and how that gave us a perspective on how to go about instituting a logical program of manual brushing. Our trial had a series of units within it: we did single pass brushing in the middle of the summer, and then in some areas we went back a second time to see if it was necessary to re-establish the patches that we had cleared.

Fireweed responded by sprouting again from the remaining stub at joints where remaining leaves were attached to the stem. A cut stem produced anywhere from a few to a dozen or more new stems, all of fairly small caliper. Height development depended on the moisture regime, the

point at which they had been cut, and the amount of light available after they were cut.

We had no trouble cutting the mature canes of thimbleberry with the hand tools. We modified some tools to be more lethal and the knockback on thimbleberry was relatively effective. There was regrowth inward from the mature canes around the edge of the cleared patch and new shoots came up but they never really constituted a major threat.

Lady fern came up in basically the same form as originally, although somewhat stunted in high moisture conditions it did provide enough cover that the seedlings were somewhat at risk again.

The observations that we made at the end of the 1990 trials

included factors that we thought would lead to a successful manual brushing prescription.

- It was clear to us that not every tree on the block needed brushing— only certain ones on certain microsites needed it. We could see where press had already occurred.
- We learned a bit about the regrowth pattern of herbs and what effect the regrowth could have on a tree. Thimbleberry had very little effect; fireweed had some potential; lady fern had perhaps the most potential.
- Two passes of treatment appeared to be necessary in only five to ten percent of the cases; it certainly wasn't needed throughout the whole block.
- We realized that a treatment program would require a work force that could be trained to recognize which situations should be brushed and which

Brushing & Weeding cont...

ones shouldn't. We needed that flexibility to be able to have them move around to portions of the block that really needed it.

- It was also clear that manual brushing didn't have a lasting value beyond the season of treatment. Consequently, if it was going to be cost effective, we had to be able to treat areas fairly quickly in order to afford a series of treatments.
- We learned that proper timing was essential; if we could get in early enough, so that the trees were visible, we could move through an area quite quickly, resulting in high productivity and lower costs. The herbs were particularly succulent early in the year, so the amount of effort that had to be expended by the people carrying out the work was reduced.
- It was necessary to approach the sites on an association basis: deal with the moist areas where brush was more prolific, move into the areas of lower need and then stop where we hit areas where there was no need at all.
- By and large, the fireweed that gets left around the periphery of the treatment area falls downhill most of the time. This can be allowed for by changing the shape of the clear patch to alleviate that problem.
- We found that the resprouting on fireweed deteriorated and fell to the ground as soon as the frost hit it, and that it had no potential to exert press on the trees— it's the mature, dry, standing fireweed that comes down in a blanket under the snow that results in press. The likelihood of the fireweed from the perimeter

hitting the tree from a distance of half a metre, seventy centimetres, or a metre away is very small. On one thirty hectare block I did an extensive walk-through after the first snowfall; there was just a light skiff of snow and all the fireweed was on the ground. I found only one instance where a stem of fireweed had hit a tree and was potentially going to exert press. And that was after a fairly rough and ready treatment.

where brush is a factor and most of them escape being seriously affected by the brush except on certain microsites. Therefore, we need not do a high degree of intervention. Our trials suggested that we be selective—and that's where the real potential savings are.

Addressing Seedling Needs

Manual brushing can really only address two factors in the needs of seedlings on sites: one is alleviating potential vegetation press and the other is providing adequate light levels to the tree. It is established that caliper development in trees is a function of the amount of light coming to the trees. With spruce

...critical in this process is taking the time to become familiar with the site and what's happening on the ground...

Diminishing Returns on Treatment Costs

We saw clearly that the law of diminishing returns were at play. If we did very thorough treatments and paid a good dollar for them, we would likely be overtreating areas. If we could reduce treatments down to a fast and dirty approach we would be able to deal with a large percentage of need on the site at an optimum cost. So, the idea was to develop a treatment which was of a high standard but a low degree of treatment. I think it's important to note that this approach wasn't an attempt to reduce standards, it was an attempt to reduce the level of the treatment.

Probably the most important thing in coming to these understandings was that we took the time to go out and look quite a few times during the season at each project. We could see how the brush was evolving, especially after frost kill and after the first snow. This led us to an appreciation of the needs of these particular seedlings. We got an idea of how to put together a prescription for manual brushing that would allow us to move quickly through an area. Clearly seedlings have always developed and evolved in situations

seedlings in a lower light situation, the caliper is very small, the stem remains spindly, and it has sparse foliage. Caliper development is an important factor— if seedlings are going to have the ability to stand up to any kind of press, they have to develop caliper. The impact on moisture availability from clearing brush away from seedlings is an unknown quantity at this time. There may be potential for a bit of a benefit from a little soil warming, but I'm not aware of any.

Developing a Prescription and a Treatment Approach

The prescription that we developed was to treat at about the point of bud burst on the trees. That allows us to see the trees readily and move quickly through the site. In addition, the seedling growth for that year would be open to full sunlight, or improved sunlight conditions. Where necessary, we'd go back and do a second pass to alleviate press concern. It happens that bud burst is also about the point when herbs put on the most of their growth. You can go back day after day and almost see the height change on species like fireweed, and lady fern, because as the soil warms up their growth accelerates. By selecting this time for brushing, we would be

debilitating those herbaceous species just prior to their strongest growth (and at a time when they have already partially spent their carbohydrate reserves).

We chose to brush out woody shrubs the least amount possible because, using hand tools, we wanted the benefit of moving quickly through an area and addressing the largest percentage of the problem at the lowest possible cost. In a situation where a small percentage of the stems were encumbered by woody brush, we didn't want to have to change treatment techniques in order to address that problem. We found that by properly filing the grasswhips we were using we could remove enough of the brush to improve light conditions to the trees.

We wanted to encourage fast treatment so we chose not to cut woody brush back to a metre away from the tree. Although we had an agreement with MOF to go to a full metre on our industry outstanding areas, we modified that by mutual agreement. Clearing to seventy centimetres is about what an average worker can reach without having to move around the tree. Workers can walk up to it, deal with seventy centimetres around within their range of motion, and move off.

It became clear to us that this is only an establishment technique. It tilts the scale slightly in favour of the target seedling and allows it to develop some caliper and some height in the first couple of years after planting. Once it reaches sufficient development, it can be left alone because it will have the ability to withstand any future encroachments of brush. We believe that over several seasons, we can foster the height growth of these seedlings something in the range of 50-70 centimetres, depending on the density and height of the brush complex on site. However, it's not a technique to promote increased general

productivity on the site. It doesn't address underground competition to my knowledge.

Flexible Optimized Approach

Rather than inflicting a broadcast treatment on an area we're allowed to be very selective and improve only the microsites around individual trees, according to how we perceive the need. A side benefit of this approach is that it allows us to maintain a diversity of naturally occurring species on site— that goes over well with the public.

We developed a flexible approach within a season of treating by ecological stratum on the site— dealing with the most brush prone areas first. We would go in and do a few hectares on a block, and then we'd move over and do a few hectares on another block, trying to hit the high priority areas. Then the crew would progress within that season as the need arose on each block.

Every site has its differences and decisions have to be very site specific. The only way to incur low overall costs is to spend a few extra dollars assessing the sites. Throughout the year of your first treatment, and the year of your second treatment, you have to visit the site several times, and see how things are going. Then, you mobilize forces to counteract a problem as it comes

...a strategy of fairly intensive monitoring and tending actually results in lower costs in the end...

up. A great degree of flexibility is needed, but in the end the cost of the resulting overall treatment is significantly lower.

Supervision is critical in this approach. We had to have a knowledgeable person on site all of the time to train workers and develop their understanding of what they were trying to do. So we hired a foreman to run a crew on a full time basis in 1991.

The Competition Index

Phil Como published a FRDA paper a few years ago in which he formulated a competition index. In simple terms, it is a measure of the height of herbaceous competition multiplied by its density in percent cover, and then divided by the height of the seedling. Our approach fits well with his competition index. On the drier sites, where percent cover is lower and brush heights are typically lower, the competition index is definitely lower. And as we brush areas and the trees grow taller, they're higher up in the crown of the brush, and the lower part of the fraction of competition index is the height of the seedling, as it grows taller, the index reduces.

He's developed some graphs which indicate where the thresholds are. We estimate that with two to three years, and there may be odd occasions where you have to go beyond three years, but commonly, two to three years of intensive, but selective, brushing on blocks will bring trees to a point where they are on the right side of the threshold of competition index.

Field Experiences

Let me give a brief estimation of the production rates we achieved in 1991, the first year that we actually established an in-house crew to carry out this kind of work. The scale of our program is fairly small— we did about 250 hectares during 1991. We needed immediate response to the problems that were evolving on the sites, so we decided that we would try an in-house crew to give us the needed flexibility.

Let's look at a couple of examples. One of the blocks we treated had been logged in 1987, broadcast burnt the same year and planted in 1988. It was allowed to sit for two years and there was a fair bit of press damage during that time. We treated 100% of the

Brushing & Weeding cont...

block. Our average productivity overall (strictly on-site time) was 9.4 man/hours per hectare— around a hectare a man-day. Remember, we were selectively dealing with the trees that needed treatment, which on that particular block was almost all of them. Probably our worst block was in the ICHB, at low elevation, which had a particularly well developed brush complex on it. It needed 20 man/hours per hectare.

We had one area at the very favourable end: it was an area logged in 1989 and planted in 1991. So, we did our first brushing in the year of planting. It's a north facing slope with lots of moisture and the brush was ready to explode, but only on portions of the block. In this case, it took only 2.8 man/hours per hectare. Because we were dealing with a developing complex, it was quite obvious where the treatments were needed. There were large areas that didn't need it at all, other areas where the brush complex was coming on very quickly and threatening to exert some press damage and reduce light levels. So we chose to go in during the year of planting, and as the production rate indicates, we covered the ground quickly by addressing the portions of the block that needed it.

The last situation represents what we consider to be the eventual niche of manual brushing— dealing with current blocks. Obviously, going into backlog blocks with a developed complex means costs are going to be higher. It's also highly likely that the planted trees on such sites will have already suffered some damage from being pressed and have smaller calipers from low light levels.

Our overall approach will be to have a relatively constant presence on blocks and become very familiar with each block that we're dealing with. We will type them so that in the year of

planting we can go in and address the brush problems on portions of the block as the brush complex develops. In an average situation in the ESSF or in the ICH, that may represent 10–30% percent of the block when we deal with the problem in the first year. In the second year it's expected to increase slightly. But by the third year, it should start to taper off. By then some of the trees should be performing well and should have enough height and a caliper to thrive without more brushing.

Our projected costs over a two to three year period appear to be very competitive with any other method of brush control that's on the market today. There's always going to be failures on plantations due to other factors. Our approach to this will be a standard fill plant and then tending

...the crux of it is contractors need people with the ability and training to make intelligent choices in the field...

those replants. When we get into those situations we will have varying heights, so we will just set the criteria accordingly. The people carrying out the work will avoid the established trees and treat only the fill-planted trees.

Jumpstarting the Seedlings

I think we can realize the fullest potential of manual brushing if we plant stock that's evolved (has been grown in optimum nursery conditions with full sunlight). Then we maintain those conditions on the sites by cutting as much of the brush as is necessary to maintain relatively high light levels and allow the seedlings to develop in preferred conditions. They'll put on the caliper and the height quickly. Height isn't really a function of the amount of light, but seedling height won't be encumbered by physical damage, by herbs falling across them.

Go for that quick jump start and allow the seedlings to establish. We see very

little point in waiting for damage occur and then trying a band aid approach. Once a tree gets behind in its development or suffers some physiological damage associated with vegetation press, they don't respond very quickly. We found that two years after doing that first trial area, we are getting a recovery of trees that were previously damaged, but it's very slow. It becomes a choice between spending on rehabilitation or replanting— starting from scratch and maintaining the healthy new seedlings from square one. A strategy of fairly intensive monitoring and selective manual tending actually results in lower costs in the end. When you allow vegetation growth to get away on you, you start to incur costs— unacceptable costs!

Developing Optimal Standards

I think, this is an issue where it's very difficult to define a standard of how to carry out these treatments.

The people doing it need a fair bit of knowledge in the development of brush complexes and how to treat them. And I think the Forest Service and Licensees who are interested in this kind of approach have a responsibility to limit the risk to whoever is carrying out the work. We could do the work with a contract crew equally as well as with an in-house crew, if we have control over the situations where brushing occurs. As long as we define the situations for workers and train them, it really doesn't matter whether they're an employee or a contractor. I think there are some progressive, innovative ways to deal with contracts in this endeavour.

Probably the biggest factor incurring high costs in past projects is having unrealistic standards— that is, unrealistic expectations of what the needs of seedlings are. As I mentioned before, they've done okay in establishing themselves in natural occurrences of fire. What we're trying

to do is just tilt the balance, and you don't have to go in and totally eradicate the herbaceous complex in order to get good performance. You just have to modify it enough to give that advantage. That becomes very difficult to apply a standard to.

Tilting the Balance

A standard has been evolving in the Arrow District, where Tom Johnston works, and he can take a large part of the credit for writing that standard. Some of you are probably going to be working with it this year. It allows a measurable amount of crown cover or crown closure afterwards from the brush at a certain height, and it allows a certain amount of peripheral risk from press. This is a right step toward optimizing the amount of effort needed to brush a tree adequately for its needs.

On our appraisal areas we choose to use a slightly more relaxed standard because, after seeing what happens after frost kill and the first snowfall, I'm fairly confident that a low degree of treatment is all that's necessary. What is critical in this whole process is taking the time to become familiar with the site and what's happening on the ground. The Ministry as well as a lot of Licensees find it difficult to afford the time, but when one starts crunching the numbers one realizes that one can't afford not to if you're going to carry out manual brushing. It will pay back fairly good dividends to those who take the time to stratify and be selective in their treatments.

I believe there is a rather large opportunity out there for contractors to get involved with this kind of thing. If I was operating a contracting company I would go to Licensees who— under the new legislation and regulations— have a substantial degree of latitude in effecting treatments. I would feel fairly confident in offering a service to those Licensees, where I could train my workers to go beyond being workers to become practitioners.

That is the crux of it— contractors need people with the ability and training to make intelligent choices in the field, the same way a tree planter makes a lot of very important choices when doing selective microsite planting. In fact, very similar to that, it takes a person with a particular mental set and an ability to understand what's going on. The return to those people should be commensurate with the knowledge and ability they have.

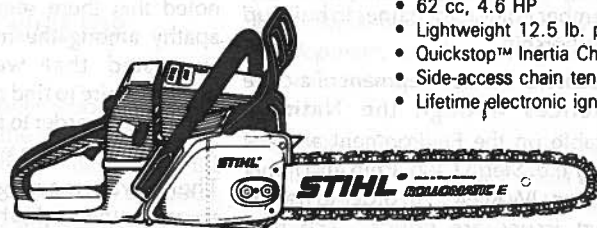
Even though prices per hectare should drop dramatically with this kind of an approach, the opportunity for profit is fairly high because the availability of such a service is not very abundant. With good on-site supervision and people who are aware of how herbaceous complexes in the ICH and ESF work, a contractor could offer selective treatments. With this kind of service he could tell a Licensee: I can give you what's needed for \$300 per hectare in year one, \$300 per hectare in year two, and deliver site conditions that will promote relatively well developed seedlings and good light levels. I think that would be attractive to Licensees. Of course, there's a steep side to the learning curve, but the potential is there to come up with numbers in that range.

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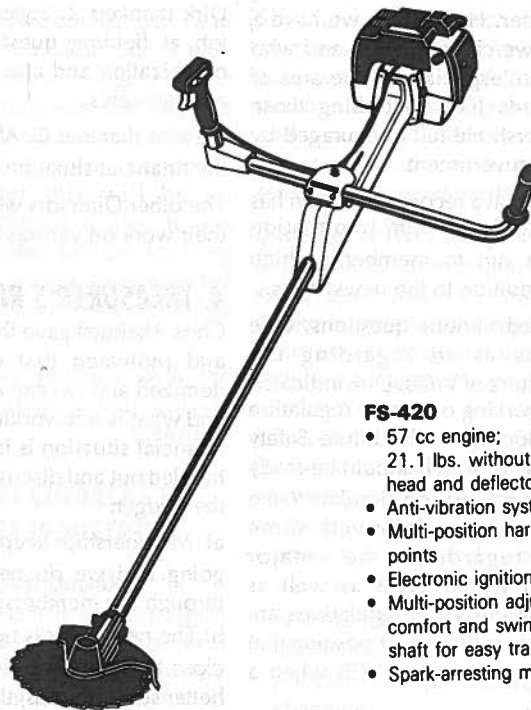
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W S C A C O N F E R E N C E R E P O R T S

ANNUAL GENERAL MEETING MINUTES

Note: These are selections from the full AGM minutes which are available from the WSCA office.

3. PRESIDENT'S REPORT

Dirk Brinkman reported that while it appears that we have fewer members this year (i.e. 55), the figure is more realistic, due to the fact that C. Akehurst and K. Mark-Eng have been looking after who is paying and who isn't. Dirk felt that there is still a solid membership. He further reported that R. Styles has again been appointed in the capacity of Executive Director. Ross will chase down the 450 non-member contractor names to build up our membership.

Dirk discussed the development of a code of practices through the National Roundtable on the Environment and the Economy (i.e. Sierra Club, Pulp and Paper Association, IWA, etc..) in order to decide on what issues are critical. The new national forest strategy is also being developed, with a view to what is the national vision for the next five years. This has been a politically quieter year than last year. Regarding funding, D. Brinkman indicated that he is pleased with the representation in Cabinet of Dan Miller, the new Minister. He felt that we have a minister who we can approach and who will take action, especially in the area of labour standards (i.e. controlling those who cut corners). He felt encouraged by the change in government.

Dirk indicated that a recommendation has been made to have mini-information packages sent out to members, which would be in addition to the newsletters.

He then fielded various questions. One question was asked regarding the changing structure of WCB. Dirk indicated that WCB is working on a new regulation and are developing a Silviculture Safety Manual, a copy of which should be ready soon for him to review and circulate to the membership. There followed some discussion regarding the major reorganization within WCB as well as whether or not the WCB regulations are enforceable. It was the WSCA position that companies have to notify WCB when a contract starts.

It was also questioned whether or not WCB will still be dealing with the "Camp" Standards and it was noted that they will be enforced by the Ministry of Health. The regulations would be interpreted to make things work in the province and it was responded that discussions are ongoing in

this area. It was felt that the Employee Standards Act is being violated, and Dirk Brinkman would like to see it enforced.

The 1992 WSCA conference was also discussed in depth, and it was felt that it was not as good a conference as the previous year, partially due to the first National Silviculture Conference held in November which was very successful (over 400 registrants).

During the following discussion, it was noted that there seems to be a general apathy among the members and it was suggested that we should send a questionnaire to find out what the relevant issues are, in order to get a feel for what the whole membership wants and expects.

There was more general discussion regarding the work which needs to be done for the survival of our industry; the need to increase our membership; location of the next Conference (i.e. in the North). It was suggested that we reduce the amount of mailouts to the Directors, and instead send out information in a mini newsletter format to all the members.

Dirk thanked R. Styles for his wonderful job at fielding questions regarding the organization and also for the Conference arrangements.

He also thanked C. Akehurst for bringing the financial situation in order.

The other Directors were also thanked for their work on various issues and jobs.

4. TREASURER'S REPORT

Chris Akehurst gave the Treasurer's report and indicated that everything is now itemized and we can see what is working and what is not working. He feels that the financial situation is in good shape. Chris handed out and discussed a set of notes on the budget.

a) Membership keeps the whole thing going and we do need someone to go through the membership

b) The newsletter is needed and is getting close to breaking even. We already have better subscriptions, thanks to Ross Styles; and we already have better advertising, thanks to Karlne Mark-Eng.

c) Government of Canada grant— We applied for \$16,000. Discretionary spending has now been frozen and the prospect of having our request approved is lower.

d) Accounting Expenditures— We will

have a resolution later, to forgo an audit.

e) Executive Management increase— Ross Styles' new position.

f) Offices expenses used to be shown in a lump sum, but the costs are shown now in a better breakdown, so that we can keep better track of costs and expenses.

g) Notes to financial audit—it was pointed out that there was a mistake by the previous accountant.

h) Further cost-cutting would be made by having a bi-monthly Info-bulletin instead of the usual Directors' packages, and no information would be sent to overseas students.

i) Attract new and old members by sending out a survey (D. Hearn) and making telephone calls

MOTION: That the 1991 Treasurer's report and the unaudited financial statements adopted. CARRIED

Membership Fees

There was general discussion regarding a motion to keep the fee structure the same or whether we should increase the revenue fees gradually (i.e. \$250 for first year; \$650 for second and subsequent years; plus the cost of the AGM). Should we go to a different fee structure? If so, upon what basis? (i.e. number of employees; special rate for really small operators). Is there a realistic dollar level for small operators? Should we focus on small operators, or look at the following three categories:

Less than \$300,000— \$300 fee

\$300,000—\$1.5 million— \$500 fee

Greater than \$1.5 million— \$750 fee

Various points were discussed: Are the small companies getting representation? Does the organization truly represent all of the contractors? We have lost some critical groups of contractors. The change must be made today or else we shall have to wait another year, until the next AGM.

- Is \$300,000 too small or should it be set at \$500,000 (is this a more reasonable level)?

- According to the bylaws, a returning member must pay their back fees in order to remain in good standing.

- Should we be contacting those members who are not in good standing?

- Should we change the constitution?

- Should it be left to the discretion of the Directors?

MOTION: That the 1992 fee structure be

the same as 1991, with the exception that we create a new category for contractors under \$500,000 gross, who would pay \$250; with the balance paying an annual fee of \$500.

CARRIED

MOTION: That the provision for new active members fee at \$250 be cancelled.
NOT CARRIED

Therefore, the 1992 fee structure is as follows:

New member:	\$250.00
Under \$500,000 gross:	\$250.00
Over \$500,000 gross and previous members:	\$500.00

MOTION: The fee structure should be reviewed by the Directors, with two to three options presented to the next Annual General Meeting.
CARRIED

6. EMPLOYEE INSURANCE BENEFITS PACKAGE

A. Bahen gave a brief history and discussion regarding "Benefits North". He covered the benefits of going with a brand new company versus "piggy-backing" with the Truck Loggers Association (TLA) plan. If we went with the TLA plan, then consideration would have to be given to taking out a membership with the TLA. It was noted that the question is not whether we should go with either plan, but rather should the Association even have a plan. It was agreed that bringing in a plan would help to increase the membership numbers and we need a lot more information before we can present this to the membership.

Regarding the "True Group Plan" it was noted that a company can choose whether or not to join the plan, but if a company chooses to join, then each full-time employee must be part of it. The comment was made that some members of our Association are already planning independently to join the TLA plan. We could, as an Association, join the TLA. Both Boards of Directors would have to approve this. A company's membership with the WSCA would have to be in good order (i.e. paid in full).

MOTION: The Directors are authorized to commit the Association to a benefit program.
CARRIED

Thanks were given to Al Bahen for all the work he did in this regard.

7. ETHICS COMMITTEE

a) Discussion of Code of Practices

Discussions ensued pursuant to a new code of practices, and in reference to the article in the WSCA Newsletter, it was agreed that the Directors will bring a

finalized form to the next AGM. The question was raised regarding whether or not the association is environmentally active enough.

MOTION: That the Directors create a process which will develop a Code of Practices which will be significant to our Association. The process should include non-member contractors which the membership wish to see involved in the Association.
CARRIED

b) Renaming Committee to Ethics and Practices Committee

It was decided to table this item for the next AGM Agenda.

8. LEAFLET/BROCHURE FOR EMPLOYEES

Ross Styles gave a brief report. He noted that the purpose of the leaflet/brochure is so that we can inform our members of the state of silviculture (i.e. what it is all about), and would be fairly brief. Such a leaflet would raise the profile of the industry. A "green gold grant" would take care of the costs. The leaflet would be for the tree planters. Ross reminded those present that a motion was put on the floor a couple of years ago and he would like us to address it and vote on it at this point in time.

It was suggested that we contact COFI and NILA in order to formulate our leaflet. Discussions then followed regarding the content, and it was suggested that it should contain some education about silviculture. There were concerns regarding whether this will be an informational or training leaflet. It was decided that all planters will be receiving this leaflet and it would be circulated through the contractors as well as through the Association.

MOTION: That we proceed with the leaflet/brochure provided that outside funding is secured.
CARRIED

10. GOVERNMENT CUTBACKS IN THE SILVICULTURE INDUSTRY

a) Proposed Government Cutbacks

Dirk Brinkman presented a short report and there followed some general discussions regarding the appropriate action as well as Cuthbert's presentation yesterday. It was felt that silviculture is being used as a bargaining point and that cutting silviculture is a retrograde move at this point.

It was agreed that Dirk Brinkman will write a letter to Mr. Miller and/or set up a meeting with Glen Clark.

There were also discussions regarding a possible resolution so that we can get something to the press and make it a public issue.

The ability of our industry to deliver a high-quality program depends on a stable budget and funding.

There was some discussion that local people could also follow-up on this if we could each receive a copy of Dirk Brinkman's letter.

RESOLUTION: WSCA members resolve to advise the MOF that it remains our collective field experience that our needs for silviculture continues to grow. Cutting the silviculture budget will undermine B.C.'s forest-based economy, jobs, forest development, local communities and the environmental integrity of forest eco systems.
CARRIED

MOTION: The president meet with the Ministries of Finance and Forests to express alarm at the prospect of a reduction in the silviculture budget.
CARRIED

b) FRDA

There was concern expressed at a rumour that the Federal government may try to withdraw from FRDA. B. Williams gave a brief presentation on this item.

RESOLUTION: That the Western Silviculture Contractor' Association membership continue to hold the federal government responsible for the welfare of the economy, including the forest industry, and regard any cutbacks in FRDA as directly undermining to the environmentally sensitive European market.
CARRIED

c) Number of Trees Being Down

Bill Williams reported that the new steady state figure was 175 million trees. D. Brinkman gave a brief report. One of the questions raised was: Is there a method of getting the maximum stocking standards extended to other eco systems? There followed a discussion by B. Williams and D. Brinkman touching briefly upon the following reasons that the number of trees for steady state were down:

- amount of land that is being logged is reduced
- funding levels, private and public, are constrained
- policies and procedures have been changing
- cost of site preparation results in postponements
- biodiversity reduces artificial stocking density
- inclusion of other self re-generating species like aspen and cottonwood reduces need for conifers

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AGM Minutes cont...

- minimum stocking standards have been reduced 10%
- survival rates are 85%, (up from 69%)

RESOLUTION: *That the members demand the Ministry of Forest explain the reduction in the steady-state figure and that we are alarmed at the apathy of the free-growing audit processes* **CARRIED**

There was some discussion regarding the maximum density for pine ecosystems and it was noted that it is an inducement to plant promptly. It was felt maximum densities are an urgent issue and it was suggested that a Director should take this on.

11. RECOMMENDATION FROM TASK FORCE ON NATIVE INVOLVEMENT IN THE FOREST SECTOR

There followed some general discussion, with the following comments being made. It was felt that there should be some free enterprise process in place. Dirk Brinkman reported on his presentation to the Native Task Force. The deadline for submissions to the Task Force is February 28, 1992.

RESOLUTION: *That the Association support the objective to increase native participation to a significant percent in the province provided that the same pricing and quality standards be met. Allocation should not be wholesale and without consideration for our industry.* **CARRIED**

5. ELECTIONS

a) Election of Directors

R. Styles explained that, per the Association Bylaws, the Past President is an ex-officio member of the Board of Directors, in addition to the six Directors. Last year the Past-President was elected President.

It was agreed that Dirk Brinkman will be put down in the records as Past President.

Declared elected after the counting of ballots: Ross Styles, Chris Akehurst, Dennis Graham, Alan Bahen, Bill Williams, Doug Hearn

During the time the ballots were being counted, Merl Gordon suggested a WSCA planting project which could be done in one day, in order to generate P.R. for the Association. The planters would donate their day. There would be incentives (i.e. teeshirts/beer). The proceeds would be donated to a specific cause, i.e. third-world country (Chile?). This could be coordinated through the bi-monthly mini newsletters. Funds should go towards our industry. A show of hands indicated that some work is to be done in this context.

b) Election of Ethics Committee

Ross Styles indicated the need to elect three members to this committee. These people would be available to deal with any complaints that may arise.

The following were duly nominated and elected by acclamation: Peter Gommerud, Tony Harrison, Tony Greenfield

c) Coordinators

A discussion then ensued regarding coordinators, and it was noted that there have been changes to the Cariboo chapter. It was suggested that the Cariboo chapter dissolve and ally itself with another chapter. Al Bahen advised that discussions regarding this were already under way.

MOTION: *That the WSCA reduce the regional chapters to three, with the following proposed names: Southern Interior, Coastal, and Northern.* **CARRIED**

It was further agreed that elections for coordinators can be dealt with at the regional meetings. If they don't take place, then the President can appoint them.

13. STANDARDS IN TRAINING

Dirk Brinkman gave a brief presentation and made note of his comments in his editorial in the newsletter. He indicated that there should be more than one contractor on the Provincial Committee. One question asked was whether or not we need more standardization in the industry. General discussion then followed, regarding training needs and at what levels (i.e. supervisory level, field/planter level, train-the-trainers?). Discussion also included the availability of CEIC monies. It was agreed that we need someone who is willing to stand on this Committee and that we probably need at least two or three people to go to the meeting in March.

RESOLUTION: *That the WSCA members insist that the proposed training funds and programs be dedicated primarily to upgrading the skills of the committed contractors and practitioners with a special focus on administration and on training trainers.* **CARRIED**

14. SAFETY/MINISTRY OF HEALTH/WCB/EMPLOYMENT STANDARDS

There was some general discussion regarding enforcement of the regulations, so that we can go after the contractors who are abusing their employees; as well as discussions regarding the regulations which are often ignored in order to cut costs. It was asked whether or not we want to go after our negligent contractors, with discussions about the Alberta situation. It was noted that there are long and complicated legal issues here. Do we force our contractors to comply regarding notification of the WCB regulations? It is difficult to maintain standards in addition to meeting prices. It was asked if we can have the members' approval to go ahead and "create some flak".

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MINISTRY REPORTS

New Fire Regulation Strengthens Protection

A new forest fire prevention regulation (incorporating previous campfire, railway, slash regulations) is in effect.

The new regulation addresses public and industry concerns that were voiced in response to a discussion paper produced by the Forest Service. Changes include:

- Now only applies to persons and operations that are within 300 metres of a forest, rather than the previous one kilometre.
- Prohibits discharge of fireworks when campfire bans are in effect.
- More clearly defines responsibility for providing fire equipment and complying with fire prevention measures.
- Sets out necessary fire precautions for industrial operations—based on how likely an activity is to cause fires. For example, on days of high-extreme fire danger rating, moderate risk activities, such as log loading and hauling, will be allowed to continue.
- Gives industrial operators more flexibility in choosing their fire-fighting water-delivery systems, provided they meet standards.

Copies of the new regulation can be obtained from Forest Service offices.

Insurance & ATVs on Forest Service Roads

All vehicles using Forest Service roads in the province must now carry at least \$200,000 of third-party liability insurance. Vehicles using FS roads only must be insured through private insurers, while vehicles using provincial highways as well must obtain insurance through ICBC.

The amendment to the *Forest Service Right-of-way and Recreational Trail Regulation* to removes the risk of off-highway vehicles being operated without third-party insurance on the nearly 35,000 kilometres of Forest Service roads.

WSCA asks if ATVs are Included

Note: This letter was sent to Dan Miller on March 19.

Thank you for enforcing insurance protection on Forest Service and Recreation roads. This further levels the playing field for silviculture contractors and is a refreshing regulation for WSCA members. Does this also apply to ATVs, ATCs and other off-road vehicles?

Dirk Brinkman

Miller Clarifies ATV Exclusion

Note: This letter was sent on April 15

Thank you for your letter concerning the amendment to the Forest Service Road Right of Way Regulation.

The amended insurance provisions of the Regulation do not apply to all-terrain vehicles (ATVs) and other similar vehicles. These vehicles are prohibited from use on Forest Service roads for safety reasons. The Regulation redefined an all-terrain vehicle to mean "a wheeled or tracked vehicle designed primarily for recreational use or for the transportation of property or equipment exclusively in marshland, open country or other unprepared surfaces and includes any trailer attached to the vehicle." If any of the vehicles referred to in your letter meet this definition, they are prohibited from use on a Forest Service road.

However, a forest district manager may exempt a person from the Regulation 278/81 and impose other conditions of use. By such exemption, ATVs could be allowed to use a Forest Service road when no other vehicles are operating on that particular Forest Service road.

Dan Miller, Minister

Resource Compensation Commission

*Dr. Richard Schwindt,
Commissioner*

I wish to inform you that the government has established a Commission of Inquiry into compensation for holders of mineral and forest interests on Crown land in B.C.

As the Commissioner, I will be reviewing the principles to be used in determining compensation when mining or logging rights are reduced or cancelled by the Provincial Government. I will also examine processes by which the amount of compensation is estab-

lished. I will not deal with the specifics of individual cases.

Terms of Reference include: The Commissioner should endeavour to balance the public interest with the interests of the holders of resource interests, and have regard for

a) the manner and costs to the holders of having acquired and maintained the resource interests

b) other values and other uses for the resources including but not limited to recreational and heritage values.

In the types of cases in which it recommends that compensation be paid, the

Commissioner should make recommendations regarding:

- dispute resolution processes that are fair, timely and cost effective,
- methodology and criteria for use in valuing and determining fair compensation, and
- the adequacy of existing Provincial legislation, considered on its own merits and compared with relevant legislation of other jurisdictions.

I expect to present my final report in the summer of 1992. If you wish to contribute to this review, I encourage you to make a written submission to: 201—815 Hornby Street, Vancouver, V6Z-2E6 or Fax: 856-1833

W S C A R E P O R T S

Excerpts from the Minutes of recent WSCA Directors Meetings

Secretarial Services

Chris Akehurst explained that the Association pays an average of \$1,000 per month to My Private Secretary (MPS) for labour and that Ross Styles would require \$1,500 per month under his "Proposal A". There was discussion as to whether the Association could afford an extra \$6,000 annually.

It was felt that the work would be split with MPS handling the secretarial, mailings, telephone answering and other routine office duties, and that Ross would take on the responsibility of preparing a "mini" newsletter to be sent to members between the regular newsletter, and contacting non-members by telephone to see if he could get them to join the Association.

Ross would also be responsible for implementing any efficiencies which may save the Association money, as well as reviewing the non-member mailing list and eliminating any names which are definitely not prospects for membership, thereby reducing our mailing costs.

Annual Conference

There were some general discussions regarding the Annual Conference, in terms of attendance. It was felt that the smaller turnout this year was attributed to the National Meeting held here in November, 1991.

Questionnaire

It was agreed that a questionnaire would be sent out in the near future, to both the current membership and potential members asking them what they would like to see at the next Annual General Meeting. The results could be collated and presented at our next meeting. It was felt that it would be good to involve people and would probably generate more support.

Jim Verboom (a guest from the Nova Scotia Silviculture Contractors' Association) reported that they have had great success with their questionnaire in Nova Scotia. Each year they have a larger turnout at their conference.

Directors' Packages

Can we look at the radius of the Directors' packages— i.e. send the Directors the important or pertinent mailings, but, send only a list of other correspondence.

Newsletter

The question was raised as to whether or not we should have a bit of a "gossip" column. It was felt that our members would be interested in knowing which companies have been sold, etc. It was suggested that perhaps we should get some contributions from the Ministry of Forests.

Bear Safety

Ross Styles raised the topic of bear safety. During the following discussion, it was questioned whether MOF or the Ministry of Health could order the Ministry of Environment to pay for this. How can we get this information out to the planters? April should be coordinating this and putting it all together.

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Red tide swamps Greening of Ontario

MNR Restructures Nursery Program

Note: From the Ontario Silviculture Contractors Association Newsletter

The Ministry of Natural Resources will restructure its nursery program by stopping production of bareroot seedlings at its Chapleau & Gogama nurseries in 1992 and its Thunder Bay & Midhurst nurseries no later than 1993.

The Minister, Bud Wildman, said "We remain committed to pursuing our sustainable forestry program and to forest renewal that includes artificial and natural regeneration, as well as tending programs to improve survival rates, good growth and the quality of forest stands."

The restructuring will affect at least 50 permanent staff and about 180 temporary positions. Permanent staff at the affected nurseries will be reassigned to other frontline positions within MNR as part of the ministry's reorganization.

MNR nurseries mainly grow bareroot stock, as opposed to the container stock produced by private growers. Both types are used for planting, but container stock costs less to produce and is more easily handled and planted. Ontario's private growers currently produce about 85 million container seedlings per year and have the capacity to grow more.

MNR's existing nursery system grows about 45 million bareroot seedlings per year. Without stopping at the four nurseries, operating efficiency would drop to about 45 per cent given the forecasted demand for bareroot stock. The remaining six nurseries will operate at about 75 per cent efficiency, which will allow for expansion if demand for bareroot stock increases in the future.

Public can Buy Trees Government can't Plant

Note: From an article in the Thunder Bay Times (Feb. 13, 1992).

The Ontario government will plant fewer spruce and jackpine trees this year because the province can't afford the cost. The surplus trees slated for planting next summer will be sold to the public.

The province usually plants about 165 million seedlings each year but will reduce that number by 23 million because of the "difficult fiscal situation," according to Natural Resources Minister Bud Wildman.

"We would prefer to be planting them, there's no question," Wildman told a news conference at the Ontario legislature. "As we come out of the recession, we will be returning to the levels that we had in the past."

It costs the province about \$1 to plant a tree.

The ministry will offer the surplus seedlings to the public at nominal cost to help ensure the "long-term health of Ontario forests," he said.

To qualify, customers must buy a minimum of 300 seedlings at a cost of about 15¢ each including tax, for a minimum total of \$45. The ministry will pro-

vide additional seedlings at no extra cost.

The program is aimed at municipalities, cottage associations and community groups. MNR district offices will provide complete details on how to select appropriate sites and species,

how to plant, how to order trees, and the available Crown land planting areas.

The Ontario Forestry Association

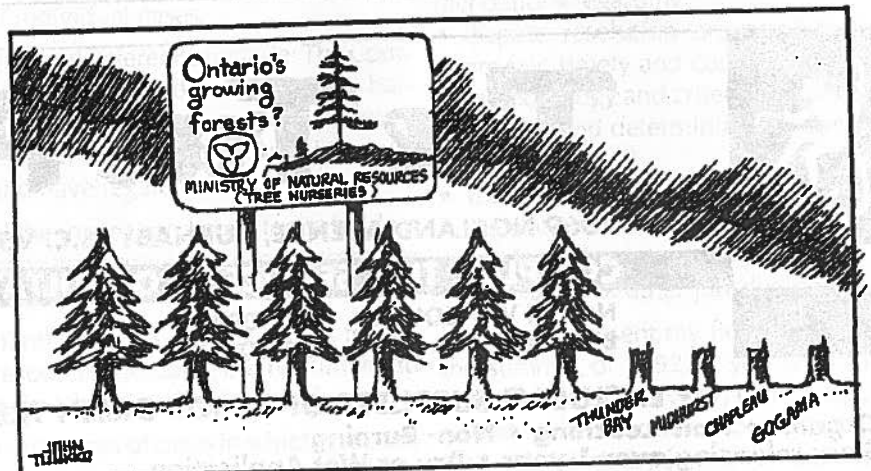
endorses the idea. However, some environmental groups and Ontario Silviculture Contractors are skeptical about the government announcement.

David Bruer, of Earthroots, said Wildman has reneged on the NDP's election commitment to reforestation. He said there are currently 3,000 square kilometers in Ontario that are insufficiently reforested.

"We're saving money now and we're short forests in the future," said Bruer at the news conference. "He's saying we don't have enough money. I'd say we can't afford not to plant these trees."

"Eventually that will mean mills face wood shortages, increasing the pressure to cut old-growth forests and other forests that should be preserved," he said.

...eventually this means mills will face wood shortages, increasing the pressure to cut old-growth forests...



From the Ontario Silviculture Contractors Association Newsletter

MAIL OUT

WSCA Holds Feds responsible for Forests

Note: This letter was sent to Federal Minister of Forests Frank Oberle on March 18, 1992.

The WSCA holds the federal government responsible for the welfare of the economy, including the forest sector.

Any cutback in FRDA funding is a withdrawal of desperately needed "ghost town insurance" from isolated forest communities when times are cyclically tough and the need for this insurance most urgent.

In that light the WSCA passed an unanimous resolution expressing "grave concern at the rumours that federal funding may be cut for the FRDA program."

Level Playing Field for Vegetation Management

Note: This letter was sent to Forest Minister Dan Miller on May 21, 1992.

On behalf of the silviculture industry, which has a widely diversified range of services to offer the Ministry of Forests, the WSCA again requests that the MOF end its subsidy of herbicide treatments.

Contractors who offer sheep browsing, power scalping, manual brushing, girding and other alternative treatments deserve a level playing field with contractor who apply herbicides. Given growing public disenchantment with herbicides, a herbicide subsidy is inappropriate.

For three years the WSCA has asked that the 1986 MOF decision to indemnify herbicide contractors liability insurance be reversed. The WSCA believes that decision was an inappropriate government response to insurance costs that were mounting due to increasing public anxiety and concern.

Pesticide liability insurance is a real cost and the Ministry's decision to self-insure constitutes a direct subsidy for herbicide application, creating a disincentive to develop or use alternative treatments. Requiring herbicides contractors to provide their own insurance will encourage the responsible contractors who already supply services to industry.

In addition, the unique administrative costs of processing herbicide applications, posting and hearing has been internalized and is not quantified in contract award decisions when herbicide and non-herbicide options are competing to produce the same intervention.

Assurances from the previous Minister (in 1990 and 1991) that these matters would be redressed never materialized, although in most cases the actual cost of the herbicide has been added to the cost of the contract.

Dirk Brinkman

MAIL IN

Rumour of FRDA Cuts Unfounded

Note: This reply was received April 10, 1992.

Thank you for your letter regarding the Canada-B.C. Agreement on Forest Resource Development (FRDA II).

I assure you that the rumour of funding cuts is unfounded. The federal government has no intention of cutting funding for FRDA II.

The new Partnership Agreement takes into account that many issues are of vital concern to foresters and to the people of BC. Primary objectives of the new agreement are to improve the value, quality and health of our young stands through tending; and to improve our current forest management practices on federal, provincial and private forest lands. At the same time, we want to improve the integrated management of the full range of the province's forest resources.

As you are probably aware, the majority of agreement funds will be invested in the Sustainable Forest Development Program. This program includes funding for silviculture activities, such as spacing, fertilizing and pruning, managing the forests for all resources, managing hardwood stands, studying and developing various harvesting methods, and designing and implementing an integrated forest resource inventory.

This new Agreement, with other initiatives of the federal government such as the "Partners in Sustainable Development" and community tree planting program included in the Green Plan, clearly demonstrate the commitment of the federal government to forestry in Canada. They will go a long way toward improving Canadians' knowledge and understanding of their country's forest management.

I appreciate your concerns and your continued support of federal forestry initiatives. Please be assured of my commitment to sustained development and management of Canada's forests.

Frank Oberle, Minister of Forests Canada

National Silviculture Conference II

Following the Silviculture Conference of November 1991, the Canadian Institute of Forestry (CIF/IFC) and the Canadian Silviculture Association (CSA) agreed that they would like to organize a follow-up conference in 1993.

With Silvilog in September 1993, the CIF/IFC and CSA saw this as an ideal opportunity to link a follow-up conference focusing on Silviculture in the context of smaller sized holdings and woodlots with the planned events of Silvilog.

The CIF/IFC and the CSA plan to organize this conference for Sept. 13-15, 1993 in the Toronto area and include Silvilog as the field tour portion of the event. We have discussed this with the Silvilog organizers and have their full support. We are currently discussing our plans with MacLean Hunter (sponsors of the 1991 Silviculture Conference) and Southam to determine if one of these organizations wishes to assist us with this effort.

A. Whidden, President CIF/IFC

M A I L I N**Cancellation of WSCA Membership**

We regretfully must advise we will not be renewing our membership for the 1992 year with the WSCA.

We believe the amount of the fee payable should reflect the ratio of participation the member has in the industry and the service provided in return for the invested fee. The present fee payable by our company is \$500. By comparison, I pay less than \$500 in total to be a member of three similar organizations: ABCPF, CIF & CFBC.

When the fee is graduated to allow the 2-10 person shop affordable participation, say around \$200, then we may consider renewing our membership.

A. Todd, RPF, Manager Integrated Silviculture Services Ltd.

BC Forest Industry Must Benefit from Pruning

Note: This is a reply to the facing letter.

To answer your question briefly: Yes, the BC forest industry will capture the benefits produced by pruning.

The world demand for commodity wood products is not increasing, however, supply is. Competition is growing from Chile, New Zealand and other areas. For BC companies to become profitable, they will have to extract more value from their resource base, not produce more commodity products at a lower cost. The capture value of clear and near clear will certainly grow.

R. Holm, BC Wood Specialties Group

Tact & Training Insignificant

I can only assume that the WSCA Newsletter was lacking appropriate material for the the Winter 1992 issue. "Tact and Training in the Forest Industry" was shallow and lacking any significance.

I would like to believe that Mr. Loland would be as tolerant of inexperienced field staff as they are of inexperienced planters. Problem solving skills, as well as communication skills, are developed throughout post secondary training. These form essential parts of ALL courses and are a necessary part of any school curriculum.

It is insignificant to assume that "bad experiences" with a very small number of checkers can lead to an improvement in our forest industry's tarnished image. It should be a priority to focus our collective energies on proper forestry practises and policies which will guarantee forests for future generations. It is my belief that Mr. Loland's article is merely a frustration release of perhaps some unacceptable planting and the resulting penalties.

To conclude, The forest industry will never alienate tree planters. It is these people that we depend on to begin the process of regenerating tomorrows forests.

Byron Gardner

M A I L O U T**New Fee Structure for WSCA**

Note: This is a reply to the facing letter.

I am pleased to advise you that a resolution was passed at our 1992 AGM regarding a new membership fee structure.

The new fee structure is designed to provide for your exact circumstance. If your gross revenues in contract silviculture (from which I would exclude revenues from consulting which are represented by the Consulting Foresters of BC) are less than \$500,000, then your membership fee is \$250 (plus 7% GST). If your contract gross revenues are greater than \$500,000 then your membership is \$500 (plus GST).

Al, you are a highly valued member of the WSCA. Please continue to share your good council with the Association.

Dirk Brinkman, President WSCA

Who Benefits from Pruning?

Note: This letter was sent to the BC Wood Specialties Group

Over \$20 million is expected to be invested in the MOF pruning program over the next five years and the future of this program is very exciting to our members. Pruning costs about \$1-4 per tree and 30-50 years later produces clear wood on trees. MOF researchers and consultants have developed several models to guide the pricing of contracts, site selection and other decisions for pruning interventions.

The question I pose is: Will the BC forest industry capture these benefits or will it be mixed in with standard runs of dimension lumber to be sorted and captured by brokers and secondary industries in the countries we export to?

The question rests on the ability of current or planned marketing and sorting practices of the industry to capture the investment in pruning. The percentage that cannot be captured would have to be factored into any calculations.

Dirk Brinkman

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