

The Canadian Ecology Centre Forestry Research Partnership

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Manager's Message

The Forestry Research Partnership is now just over 6 months old, and prospering. As with any new initiative involving many people from a number of different organizations, it has taken longer to get things moving than was originally expected, but the wheels are turning now, and the various components are active. The FRP has attracted considerable interest across the province, and is a good example of an effective mechanism for advancing the science agenda both for industry and for government.

The emphasis in this the first year has been to collect information and data from pertinent existing studies as a first step to identifying knowledge gaps that would impede the FRP from delivering on its objective of a sustainable 10% increase in 10 years. Projects consequently are looking at where IFM can be practiced, what yield curves are out there now and what can be expected, which practices work where and which don't, how do we protect what we've done, and perhaps most important, how do we tell people what we're doing and how they can use it.

All projects for Tembec's September 30 fiscal year end were on or below budget, and the program as a whole has so far met its financial targets. Funding for some projects will require tinkering in light of the Legacy Trust grant, but all are expected to stay on schedule through to the end of the FRP fiscal year on March 31, 2001.

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Living Legacy Trust Grant

The Board of Directors of the Living Legacy Trust announced a grant to the Forestry Research Partnership of \$389,000 at their Board meeting in November. The Trust grant will be twinned with Tembec funding, and allocated to the 19 projects in this year's program that are eligible for LLT funding. "The firm support of the Legacy Trust is essential to helping the Forest Research Partnership get established, and we are delighted (and relieved) with this announcement," said George Bruemmer, manager of the FRP. FRP staff will continue to work closely with the Legacy Trust as projects are carried out to ensure that the outcomes meet the expectations not only of the FRP, but also of the Trust. "This is the first science grant the Trust has awarded," says Karan Aquino, Executive Director of the LLT. "We welcome the opportunity to be a part of this new and positive partnership between industry, government, and the academic community."

IFM Impacts on Allowable Cut Workshop

The Canadian Ecology Centre in Mattawa, Ontario was the site of a workshop on November 1st and 2nd, focusing on Intensive Forest Management (IFM) and its impacts on annual allowable cut (AAC). The workshop emphasized a primary target of the Forestry Research Partnership – the identification of specific technology and forest management methods that will allow Tembec to increase AAC throughout its Forest Management Agreement and License areas by 10% within 10 years, while ensuring sustainability and future fiber quality.

Several presentations were made by foresters and research scientists from the Ontario Ministry of Natural Resources, the Canadian Forest Service, the University of New Brunswick, and MITIG. Among the topics brought forward:

- Allowable Cut Effect
- Tembec's available landscape and resources

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The Management Team and the Secaretriariat will be meeting in December to do a thorough evaluation of the performance of the FRP so far, and to use any recommended adjustments to develop the program for next year. An increasing emphasis will be placed in the next year on protection projects, on economics, and on *“turning activities into results”*.

George Bruemmer R.P.F.

Tree Improvement: 1st Generation Gurd Research Area

White Pine Tree Improvement Strategy

Plans are being developed and implemented for the First Generation Tree Improvement Program for white pine at the Gurd Research area. Cones were collected this fall from white pine clonal orchards at Conger near Parry Sound, at Gratton near Pembroke, and at the Gurd Clonal Seed Orchard. Arrangements have been made with the Angus Tree Seed Plant to extract, test, and manage the seed on a clone by clone basis. The resulting seed will be used to implement Ontario's first white pine progeny test. The test is tentatively scheduled to be up and running in the spring of 2002, with site selection taking place this fall. Progeny from approximately 400 representatives will be included in the test.

Maintenance of Existing Clonal Orchards and Seed Production Areas

Maintenance work was undertaken and completed recently in the white pine clonal orchard, and the red pine seed production area at Gurd. These efforts included manual tending in both areas, thinning of the red pine portion to ensure branch retention, and mapping and re-tagging the white pine within the clonal orchard. Lower branch pruning was also undertaken in the white pine area.

Plenty of Seed Collection

Cone collection was conducted this past September in cooperation with Nipissing Forest Resource Inc. This included collection in the Beachburg White Spruce Seed Production Area, the Red Pine Seed Production Area, and the White Pine Clonal Orchard. The white pine collection is intended to support First Generation Tree Improvement activities, while the remaining collections are slated for operational planting.

Triclopyr Basal Bark Treatment Experiment

Dow Chemicals joined with the Forestry Research Partnership in an experiment aimed at assessing the efficacy of Triclopyr as a basal bark treatment in the pre-commercial

thinning of red pine. This project was initiated in July, and results are pending.



Beachburg White Spruce Seed Production Area

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Maximizing the Value of Jack Pine

A long-term goal of this project is to define optimal forest management, and end-use strategies available to maximize jack pine stand value. Other objectives include the following:

- . Improving lumber value recovery
- . Exploring value-added opportunities
- . Developing a product parameters-based decision-support tool. for jack pine stand management
- . Training graduate students and post-doctoral fellows

The oldest known jack pine pre-commercial thinning trial, located near Miramichi, New Brunswick was visited, and permission was obtained to collect sample trees for this study. Sample trees were selected from each thinning intensity (4'X4'; 5'X5'; 7'X7', and control) based on diameter class (from merchantable diameter class to the largest diameter class in the stand). The sample trees were felled and measured for various characteristics. Each stem was bucked into 8 foot-long logs for lumber conversion. All logs were converted into lumber and boards, with chip samples collected from each stand.

In the third quarter, each piece of lumber will be graded at the green condition based only on knots and all defects. Lumber will be dried and each piece planed. Re-grading of the lumber will be carried-out after drying, and will again be based on knots and all defects. The lumber will be graded for MSR.

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FRP Display & Growth and Yield Trail are Ready...

The Forestry Research Partnership display has been set up in a cabin at the Canadian Ecology Centre, and is open for the public. The display consists of colourful panels depicting the objectives of the partnership, as well as individual partner posters. Continuous access to the FRP website is also provided by a computer that has been placed in the cabin. Visitors can view various forestry videos, and are also able to pick up literature pertaining to the partnership and its members.

The Forestry Research Partnership Growth and Yield Trail was constructed this past summer with the help of the Stewardship Rangers of North Bay. It is a self guided interpretive trail established within Samuel de Champlain Provincial Park, and is intended to provide first-hand educational information about forest science and forest management. The trail includes an active permanent sample plot established, and periodically measured by the Ontario Ministry of Natural Resources. A virtual representation of this trail is planned for the website, depicting the same information in an exciting interactive, online format.

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FRP Website – Up and Running...

The Internet is a primary vehicle for information distribution. The FRP Technology Transfer Team aims to promote effective use of the Internet to deliver timely and relevant information to clients.

The Technology Transfer Team has overseen the development of the FRP Website. Jessica Johnston, FRP Intern at the Canadian Ecology Centre, has done much of the work on this project, demonstrating her ingenuity and creativity in the process. Thanks to the staff at CEC for supporting this work and providing server space.

We encourage FRP clients and project leaders to spend some time in the site and consider how it may work to help provide useful information. The site URL is <http://forestresearch.canadianecology.ca/>.

Your comments are welcome, and should be directed to Technology Transfer Team leader Guy Smith at gusmith@nrcan.gc.ca.

- . Policy implications
- . Vegetation management
- . SFMM implications
- . Density management

Both Boreal and Great Lakes-St. Lawrence Forest regions were discussed, and recommendations were made for a more in-depth review of 'best bet' techniques that will lead to an increase in AAC. Preparation for potential implementation and associated monitoring was also examined. In addition, knowledge gaps that will need to be addressed through the implementation of an IFM program were identified.

Information generated from all presentations will be used in the production of a summary of the workshop, including background, recommendations, and procedures for implementation and monitoring. This summary document will be available by March 31, 2001.

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Biodiversity Assessment Project

The objectives of this 3 day Modeling Biodiversity Responses to Forest Management workshop sponsored by the Sustainable Forest Management Network and Tembec were to:

- . Transfer knowledge to potential users.
- . Foster synergy among researchers.
- . Evaluate utility of bio-modeling research in forest management applications.
- . Identify key areas of uncertainty and develop cooperative research strategies.

The speakers at this workshop included:

BAP - Biodiversity Assessment Project: John Pineau, Frederik Doyon, Laird Van Damme, Arnold Rudy, Peter Duinker

BEEST - Boreal Ecology and Economics Synthesis Team: Fiona Schmiegelow and Steve Cummings

Quebec Integration Project: Christian Messier, Marie-Josée Fortin, Dave Coates

This workshop was designed to be a forum for knowledge transfer on the application of biodiversity assessment tools for forest management. The workshop focused on the examination of existing biodiversity assessment tools developed in Ontario, Alberta, and Quebec. The workshop proved to be an excellent chance to foster synergies and interactions among research projects. Further projects will develop cooperative research strategies for reducing information gaps and uncertainties (including model validation exercises).

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Strategic Plan for Fibre Farming

A small group of industry and government people spent a week in October visiting hybrid poplar operations in eastern Ontario and central Quebec to evaluate the potential for using hybrid poplar as a piece of the puzzle in achieving Tembec's objective of increasing its allowable cut by 10% in 10 years. MNR and Domtar staff in the Cornwall area prepared an excellent tour, hosted by Stewardship Coordinator Jim Hendry. Domtar is one of the few companies in Eastern Canada with an active hybrid poplar program, and the lessons learned from their experience will be invaluable in the planning of a program for Tembec.

Pierre Perinet and Serge Morin of the Forestry Research Management branch of the Quebec Ministry of Natural Resources led an impressive tour through Central Quebec, beginning with the production of rooted stecklings at the Berthierville nursery. These clones, planted in spring, were being lifted during our visit, and had already attained a height of 1.5 metres, a growth rate that is expected to continue after field outplanting next spring. The yields anticipated from these clones at 15 years are between 100-150 m³ per hectare.

The Quebec part of the tour underscored the need to maintain a vibrant clonal testing and development program as the foundation of a successful hybrid poplar operation. Ongoing efforts in Quebec over the past 20 years have resulted in the development of a selection of fast growing, climate hardy and disease resistant clones for use throughout the southern and central latitudes of the province.

Dennis Joyce, Provincial Tree Improvement Coordinator for Ontario, and Case van Oosten, hybrid poplar consultant with Silvi-Consult from Nanaimo, B.C., provided additional expertise and guidance on what was a very useful and informative tour.

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FRP Welcomes John Pineau...

The Forestry Research Partnership welcomed John Pineau to his new position this month, as Technology Transfer Professional. John brings almost 20 years of experience in forestry and natural resource management to his new and challenging role. Most recently, John worked as Biologist/G.I.S. Specialist for Millar Western Forest Products Ltd. in Whitecourt, Alberta.

"I'm very happy to be working in technology transfer", said John. "The Forestry Research Partnership is an exciting and unique opportunity for me personally, and also for communicating and helping to implement forestry research and new technology with front-line forest managers and practitioners."

John will be working at the Great Lakes Forestry Centre in Sault Ste. Marie for the next few months, and can be reached at (705) 759-5740 ext. 2205. His interim e-mail is pinpoint_inc@hotmail.com.

Merry
Christmas
And
Happy
2001 !

For newsletter questions and comments contact:

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