



timberlines

Forestry Canada, Northwest Region

Third Quarter 1992



J. Baker

The staff of the Northern Forestry Centre celebrated Canada's 125th birthday with a maple leaf photo session.

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Forestry Canada Forêts Canada

Canada

Forestry partnership agreements encourage research

Forestry partnership agreements in the Northwest Region will be directing millions of dollars into forestry research over the next 3 years. Although many research projects are already under way, funding is still available for new research proposals.

In **Manitoba**, for instance, some of the research activities include investigating how forestry affects biodiversity, the interaction of forest practices and management of wildlife populations, and improved jack pine propagation. Total agreement expenditures for technology transfer, forestry research, development, and demonstration will be \$6.0 million over 5 years on a cost-shared basis.

As well, "the agreement has stimulated the local universities and other nonprofit organizations, which has resulted in considerable employment opportunities," says Richard Westwood, provincial Chief of Forest Protection.

Examples of new research in **Alberta** include using soil properties to hazard rate sites for Armillaria root rot, site preparation studies using new techniques, and



Canada-Manitoba Partnership Agreement in Forestry

development of decision support systems.

Some Alberta agreement projects are building on past experience. "Trials in harvesting aspen while protecting the white spruce understory have been a huge success," noted Marjorie Stephen, Alberta agreement Implementation Officer. "The research was funded under the last agreement, and with this new agreement we are able to transfer the technology out into the field."



Partnership Agreement in Forestry
Entente d'Association en foresterie

The Alberta agreement's research and technology transfer program will spend \$12.05 million over the next 3 years for integrated forestry-wildlife management research and technology transfer and wood/fiber utilization-related research and development.

Research activities in **Saskatchewan** are providing advances in fire management and linkages between forest management and wildlife habitat. Also under way is an economics project with Mistik Management that examines the costs and benefits of environmental improvements. The agreement will be funding a total of

\$6.25 million over the full implementation period for applied forest research, technology transfer, and forest products research and marketing.

Canada-Saskatchewan Partnership Agreement in Forestry



Entente d'association
Canada-Saskatchewan
en foresterie

In the **Northwest Territories**, Foundations for the Future, the Canada-Northwest Territories Cooperation Agreement in Forestry, has allocated \$1.15 million cost-shared for technology transfer, forestry research, development, and demonstration over the next 4 years.

Projects will focus on research and technology transfer related to forest management, forest protection, environment, forest products, marketing, and development of operational decision-support systems. Initiating development in the Liard Valley is a key activity.

If you have an idea for an innovative research proposal, contact the Northern Forestry Centre in Edmonton or our district offices in Prince Albert and Winnipeg.

New report published on the wonders of aspen

Announcing a new publication: *Ecology, management, and use of aspen and balsam poplar in the prairie provinces*, Special Report 1. The first of the Northwest Region's new Special Report series, this 250-page publication provides an up-to-date review for managers and field foresters involved with the management and use of aspen and balsam poplar.

The focus is Alberta, Saskatchewan, and Manitoba, although information is also drawn from other areas where these species are managed. The emphasis is on aspen because it is the dominant of

the two species and balsam poplar has been studied in less detail. Ecology, management, and use are the three main subsections in the text. A summary of knowledge gaps and research needs is presented in the conclusion, and there is an extensive list of references.

This report was produced and printed with funding from the Canada-Alberta, the Canada-Saskatchewan, and the Canada-Manitoba partnership agreements in forestry. Copies are available from all three Northwest Region offices.

-B. Laishley



Issue 19 Third Quarter 1992

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Printed on Save-A-Tree Gloss recycled paper.

Rated among the top five . . .

Three model forests selected in Northwest Region

Three out of the 10 model forests announced in June by federal Forestry Minister Frank Oberle are located in the Forestry Canada's Northwest Region: Manitou Abi (north of Winnipeg, Manitoba), Prince Albert (north of Prince Albert, Saskatchewan), and Foothills (near Hinton, Alberta).

"We were pleasantly surprised that three sites were identified in our region and that all three were so highly recommended," said Dennis Dubé, the Program Director responsible for the model forests program in Forestry Canada's Northwest Region. "Fifty proposals were entered into the public competition, and the three in this region were among the top five."

The Manitoba and Saskatchewan sites are in the boreal forest region and the Alberta forest is in the subalpine forest region. Canada has eight principal forest regions, and one or more model forest sites have been selected in each, for a total of 10 in Canada.

Negotiations under way

Negotiations have begun with the successful proponents to define the scope of each project and draw up the contractual agreements. Each model forest group is working to complete 5-year work plans. Legal agreements will be signed later this year.

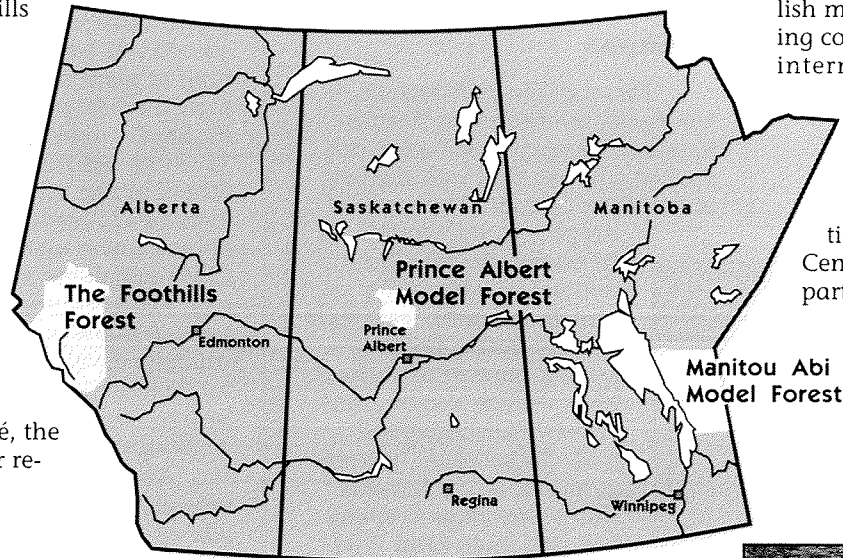
The model forests will be established as partnerships involving the federal government, industry, provincial governments, and others and will demonstrate sustainable forestry practices. The most ad-

vanced scientific techniques and procedures will be applied. Emphasis will be on integrating forestry practices with nonconsumptive forest uses such as recreation, watershed protection, and wildlife habitat.

forest. In addition, attention will also be given to presenting understandable information to the public on the progress being made toward achieving integrated resource management.

The federal government has also pledged \$10 million to establish model forests in three developing countries as part of an international network. Representatives from Forestry Canada, other federal departments, the Canadian International Development Agency, and the International Development Research Centre are cooperating on this part of the Model Forests Program. International response to the program has been positive, and it is hoped development of the sites will start in the next 2 years.

—R. Holehouse



A model forest network committee has been established to foster collaboration among the various proponents and work out details regarding technology transfer, joint communications activities, and other issues facing the program.

"We have a number of items that need to be dealt with over the next year," explained Mr. Dubé. "We need to discuss forest management planning, annual reporting, and cooperation between the model forest proponents and other research initiatives under the Partners in Sustainable Development of Forests Program of Canada's Green Plan."

Criteria to be developed

Two of the key issues involve developing criteria for defining sustainable development and the format of the annual reports. Traditionally, annual reports have focused on the timber inventory and timber management and have not included a balanced picture of how management is impacting on all the resources in the



The model forests will emphasize forestry practices and other uses such as recreation, watershed protection, and wildlife habitat.

J.D. Johnson

Tree planting program off to a good start

After just six months in operation, Tree Plan Canada has already seen the completion of many successful projects thanks to the enthusiasm and commitment of planting partners across the Northwest Region.

That success is measured not just by numbers of trees planted, but also by numbers of projects and the amount of community involvement and interest generated by the program. Over 40 projects have been approved in the region, which includes Manitoba, Saskatchewan, Alberta, and the Northwest Territories. This year, approximately



Young people across the region are learning the fine art of seedling planting through Tree Plan projects.

23,000 larger trees and 370,000 seedlings were planted under the program in this region. Next year, the regional goal is to plant 1.9 million more.

"People are coming to us to find out more about the program and how they can get involved," said Joe De Franceschi, Chief, Development Coordination, for Forestry Canada's Northwest Region. "That means the message is getting out."

Approved projects have ranged from small environmental groups planting 40 or 50 larger trees in a school or park to large projects on metis settlement lands, where more than 50,000 seedlings were planted for habitat enhancement. Some of the projects have been Canada 125 projects in recognition of Canada's 125th birthday in 1992.

Manitoba

For example, in Pine Falls, Manitoba, the Northeast Sustainable Development Association has opened a nature trail with the help of Tree Plan Canada. Phase one of the project, the planting of 12 ceremonial blue spruce and the opening of the trail, is complete. Next year the association hopes to plant a number of native trees, wildlife shrubs, and ornamentals along the trail. Other, larger, projects in Manitoba, such as the Habitat Heritage Corporation and Seine River Wildlife Corporation projects, will enhance wildlife areas through the planting of thousands of seedlings.

Saskatchewan

A memorable project in Saskatchewan was the Power 99 radio station's "bring the forest to the city" project, in which local school children and other volunteers planted 800 trees in a city park in Prince Albert. The local radio station organized the project and broadcast from

the location, providing information to the public on Tree Plan Canada and how important trees are to the environment.

As well, the newly opened Gabriel Dumont Park in Saskatoon was the site for another significant Tree Plan Canada project. Governor General Ramon Hnatyshyn, who is the Honorary Patron for the National Community Tree Foundation, was on hand to participate in the creation of a Governor General's

Peace Grove. Over 125 larger trees and many smaller seedlings were planted in celebration of Canada's 125th birthday.

Alberta

Alberta, too, had its share of interesting projects. School children from Ardrossen Elementary School planted over 600 trees in their schoolyard, took another 500 seedlings to plant at home, and helped their teachers put on an EnviroFair during Environment Week. Another 125 students from Win Ferguson School in Fort Saskatchewan planted 125 seedlings in a wildlife enhancement area around the Dow Chemical plant near their community. Planting projects on metis settlement lands in northern Alberta will help develop new wildlife habitat on land that has been destroyed by fire. Over 130,000 seedlings will be planted this fall.

Tree planting projects can take place along boulevards, in schoolyards, in parks, and in many other locations as long as they will not be used for commercial purposes in the future. The amount of community involvement generated as well as a commitment to care for the trees are factors looked at during the approval process. Groups can receive assistance of up to 50 cents per seedling or \$8 per larger tree.

"The environmental advantages of planting trees are quite well known," explained Mr. De Franceschi. "What we want to do now is call people to action—let's get out there and plant millions of trees and leave a legacy to our children that will show our commitment to improving our environment."

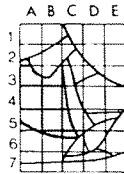
—R. Holehouse



CANADA'S GREEN PLAN
LE PLAN VERT DU CANADA

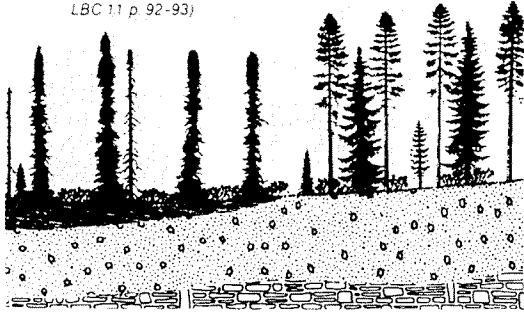
PI-Sb/Ledum/Pleurozium

(lodgepole pine—black spruce/Labrador tea/feather moss)



Sb/Ledum/Rubus chamaemorus
(Not described, see
LBC 11 p. 92-93)

PI-Sb/Ledum/Pleurozium
BMW 5



MANAGEMENT INTERPRETATIONS

CLASSIFICATION	LOGGING	SITE PREPARATION	SOIL COMPACTION	SOIL FLOODING	SOIL WATER	REFORESTATION			VEGETATIONAL COMPETITION		WINDBLOW	EMERSON HAZARD	DAMAGE HAZARD	
						SPECIES SELECTION	METHOD	LIMITATIONS	FROST HEAVY	HAZARD				TYPE
A	CC	L	M-H	L	M-H	PI	Sw	C, DS	L	L	M	L-M	L-M	L-M
MEDIUM TO COARSE TEXTURED, MODERATELY WELL TO RAPIDLY DRAINED, L-H GENERALLY <10 cm drought some sites <i>Elvirnus, Calamagrostis</i>														
A	CC	M	M-H	M-H	M-H	PI	Sw	C, DS	M	M	M	M	M	M
MODERATELY FINE TO FINE TEXTURED, IMPERFECTLY TO MODERATELY WELL DRAINED, L-H GENERALLY >10 cm excess moisture on some sites <i>Calamagrostis</i>														

A page from an Alberta field guide shows the type of information to be in the Manitoba guide.

Contract awarded to classify Manitoba's forest ecosystems

A *Field guide to forest ecosystems of Manitoba* is to be developed by Geomatics International of Burlington, Ontario. The 2-year, \$90,000 contract is funded by the Canada-Manitoba Partnership Agreement in Forestry.

A major goal of the project is to provide foresters with a common and simple language for understanding and describing forest sites. It is to be based on an ecological classification that includes features of the landscape, forest cover, soils, and understory vegetation.

"Most of the field guide will be based on existing information, including relevant information from site classifications done in northwestern Ontario, Saskatchewan, and Alberta. The guide will

cover the productive forest area of Manitoba," says Dr. Ian Corns, scientific authority at the Northern Forestry Centre in Edmonton along with Dr. Richard Sims at Forestry Canada's Ontario Region office in Sault Ste. Marie.

"By this winter we'll have a pretty good idea of what information is available and where the gaps are in terms of geographic areas where additional fieldwork needs to be done," notes Dr. Corns.

Dr. Sims explains the project's significance. "Forest site classifications can provide field foresters with tools to weigh a variety of management options and assess silviculture successes and failures. Users have a "holistic" capability so that many important site parameters are weighed and considered together. For example, the field guide can be an important base for integrated resource management and ecosystem mapping." The field guide is expected to be published in early 1994.

-D. Pronger

Northern launch of Tree Plan Canada a success

The importance of trees to the earth's ecosystem was stressed by federal Forestry Minister Frank Oberle during the northern launch of Tree Plan Canada in Yellowknife, NWT, on August 23, 1992.

Mr. Oberle commended members of the Yellowknife Main Street Society for their efforts to green up downtown Yellowknife, the Northwest Territories capital, and encouraged other groups to develop tree planting projects in the North.

"I am pleased to see such enthusiasm and commitment to the Tree Plan Canada program," said Mr. Oberle. "Planting and maintaining trees in this area can present special challenges because of the climate and soil conditions."

The Yellowknife Main Street Society project involved 100 white spruce, poplar, and green ash being planted in downtown Yellowknife and was the first Tree Plan Canada project north of the 60th parallel.

The tree planting ceremony included the planting of a jack pine, the Territorial tree, near the Sir John Franklin School, and the giving away of 200 white spruce trees. Mr. Oberle was joined by Titus Allooooloo, Territorial Minister of Renewable Resources, Jack Munro,



Forestry Minister Frank Oberle (left) and Northwest Territories Renewable Resources Minister Titus Allooooloo (right) handed out seedlings during Tree Plan's northern launch in Yellowknife.

J. De Franceschi

a Director of the National Community Tree Foundation, Patricia McMahon, Mayor of Yellowknife, and Alderman Bob Brooks. Local Scouts, Beavers, and Guides helped Mr. Oberle and Mr. Allooooloo hand out the spruce trees to local residents.

-R. Holehouse

Forestry education is taking root in our schools

"Peter, Tommy, and Janie enjoy playing in the sand box. But they like to do different things. Peter likes building sand castles. Tommy likes to play with his toys and trucks. Janie likes to cover herself with sand so that only her head and toes stick out.

One warm sunny day the three children decide to play in the sand box at the same time. But this creates a problem because they are each used to playing there by themselves. What can they do to solve this problem?"

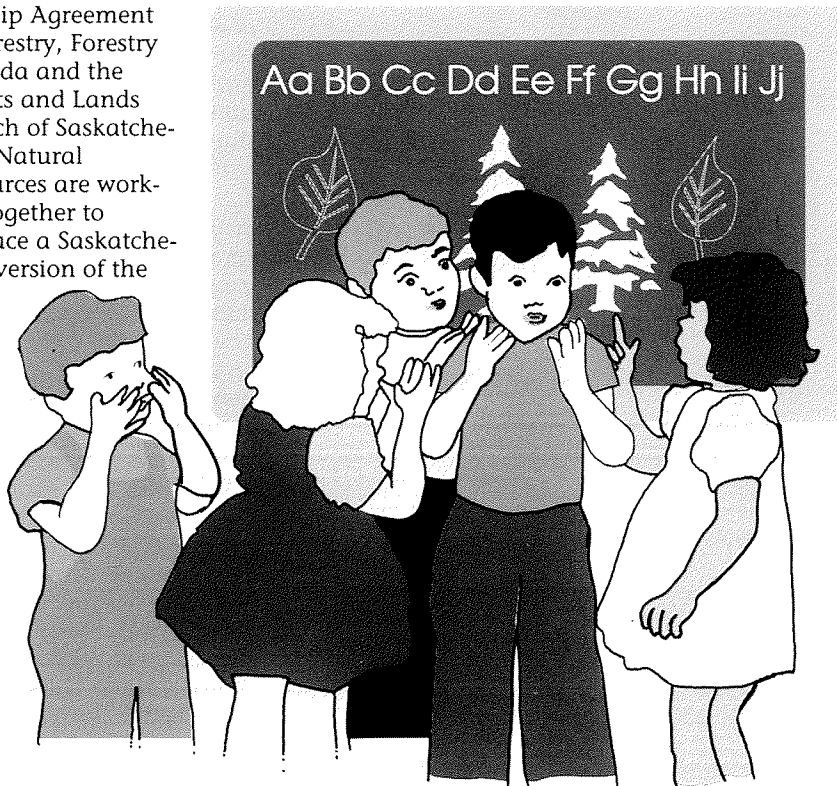
Sound familiar? Change a word here and there and you could be talking about integrated resource management.

The sand box scenario is one of several activities recently created for Focus on Forests Saskatchewan, a forestry education program taking shape in the province. Originally developed in Ontario by the Ontario Ministry of Natural Resources and Forestry Canada, Focus on Forests provides teachers with information, activities, and lesson plans designed to give young people an understanding of forests and forest management.

The program is chock full of activities for students who are curious and concerned about the forest. Hands-on activities such as field trips, role plays, experiments, and puppet shows encourage students to observe what's around them, ask

questions, take risks, and seek solutions. Activities point to the complex community of living and nonliving components of the forest.

With funds from the Canada-Saskatchewan Partnership Agreement in Forestry, Forestry Canada and the Forests and Lands Branch of Saskatchewan Natural Resources are working together to produce a Saskatchewan version of the



program. The project team is currently adapting the Ontario manual to Saskatchewan conditions and

with the help of a team of volunteer teachers and resource people is preparing a set of made-in-Saskatchewan activities.

"Our writing workshop with teachers this summer was very productive, and the results spoke volumes about the dedication and enthusiasm of the participants," says Val Nicholson, information officer with the province. "The workshop gave a real boost to forestry education in Saskatchewan."

Jon Williams, of Forestry Canada's Petawawa National Forestry Institute, is sometimes called "Father Focus" for his part in creating the Ontario program. He

is convinced of its success in Saskatchewan. "The program encourages critical, creative thinking, which is a skill vital to education in the 90s. And we are using forestry to do it."

Focus on Forests is well under way already in Alberta, with field testing of the upper elementary and junior high components completed during the 1991-92 school year in several school districts. Those materials are being fine-tuned in response to teachers' comments, and work is proceeding on preparing the lower elementary and senior high components. The Canada-Alberta Partnership Agreement in Forestry has committed funds for Focus on Forests over the next 3 years for development of materials and for teacher training.

The program is also under consideration in both Manitoba and the Northwest Territories.

—L. Worster

Regional agreements newsletter published

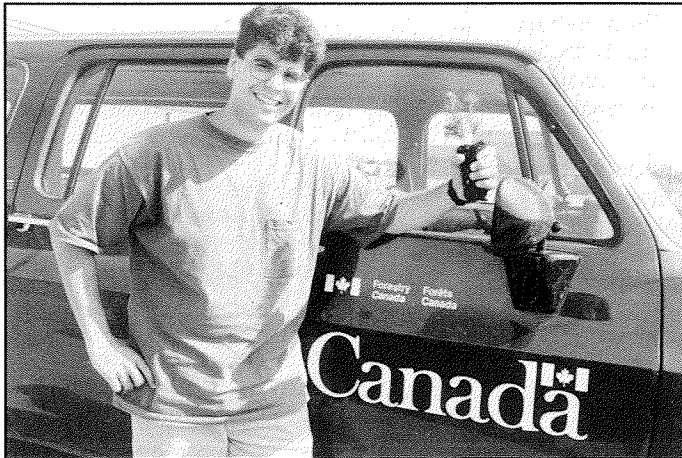
Four federal-provincial/territorial forestry agreements in the Northwest Region mean a lot of activity and information in each province. Helping to keep us informed about all this is a new newsletter, Partners in Forestry.

Published twice a year, this publication focuses on agreement accomplishments, projects, and events for the forestry partnership agreements in Alberta, Saskatchewan, and Manitoba and the cooperation agreement in the Northwest Territories.

If you would like to be on the mailing list for the Partners in forestry newsletter, please contact one of the Northwest Region's offices.

The traveling tree show: how I spent my . . .

Editor's note: Student Steve Arnovitch spent a good part of his summer taking the Manitoba District Office's display around on the "dog-and-pony show" circuit, spreading the word about Forestry Canada and the Manitoba partnership agreement.



D. Pronger

Traveling to the different Manitoba festivals sometimes gave me the feeling that I had joined the carnival. I didn't sell cotton candy, or tame tigers, but each time I drove into a new town I saw the ferris wheel turning and the same people selling cheap sunglasses and magic cloths.

Each town and exhibition had its own quality, which made the experience of travelling to different rural areas that much more enjoyable. You had to get used to the different extremes that each festival brought.

The best example of this was during a trip to Dauphin and Gimli. The weather in Dauphin at various times in one day was rainy, humid, sunny, and cold. The pace was slow, and even though it was a festival, no one seemed to be in a festive mood.

I drove from Dauphin to Gimli, and the entire Dauphin scenario did an entire about-face. The streets were jam-packed with people, as the mood of the festival reflected the town itself. People lined up to get seedlings, they stuffed the ballot box for the seed guessing contest, and the posters and boxes of literature that I took with me were scraps of paper and empty boxes when I left.

I had many people tell me how they came to the Forestry Canada booth each year to receive

their complimentary seedling. They talked of the seedlings that were growing in their yards as if they were their own children. The questions they asked showed the

Student Steve Arnovitch travelled with Forestry Canada's display throughout Manitoba.

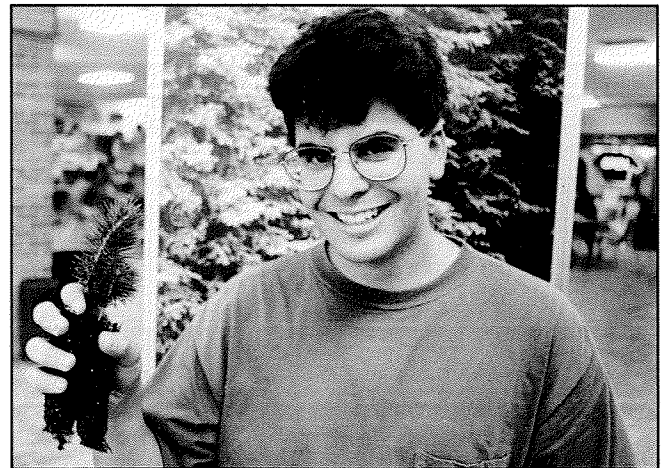
care and concern that they have for the trees. "When is the best time to transplant them, any special instructions on how to care for them, and how will my tree survive over the winter?"

Children enjoyed the display for various reasons. They liked the trees, and especially the Life of a Managed Forest poster. The caricatures and colors interested them the most in the poster. The one item

that kids really liked was the seed guessing contest. I had some kids standing at the display for 10 minutes, trying to get me to tell them how many seeds were in the bottle. I nearly gave in a few times but managed to keep the number a secret.

There are some things that next year's summer student can be sure to expect:

- Someone will ask of the seed guessing contest, "Did someone actually count these seeds?"
- Sunscreen and a hat are a prerequisite for the Gimli Icelandic Festival.



D. Pronger

- Sometimes a cow might like to wander in the middle of the highway.
- Peoples' jaws will drop when they find out that blue spruce trees can grow up to 25 m tall.

-S. Arnovitch

UPCOMING EVENTS

**Canadian Conference on GIS,
Fifth International Conference on Geographic Information Systems;**
March 23-25, 1993; Ottawa, Ontario; Energy, Mines, and Resources Canada,
Canadian Institute of Surveying and Mapping,
and Inter-agency Committee on Geomatics;
Lou Aubrey (613) 995-0266.

6th International Congress of Plant Pathology;
July 28 to August 6, 1993; Montreal, Quebec;
Canadian Phytopathological Society and National Research Council of Canada;
Doris Ruest (613) 993-9228.

\$1 million allocated for vegetation management planning

A \$1 million, 4-year project supporting vegetation management in Saskatchewan provincial parks was announced in August by Forestry Canada and Saskatchewan's Department of Natural Resources.

The vegetation management project will provide the Parks Branch with the capability to prepare, implement, monitor, and evaluate vegetation management plans. The province's goal is to complete vegetation management plans for all the forested parks in the province by 1995.

Under the Canada-Saskatchewan Partnership Agreement in Forestry each partner will contribute \$500,000 to the project. The federal government will provide funding to the provincial Parks Branch to hire a forest ecologist, vegetation management coordinator-educator, and Geographic Information System technician. The province's primary contribution will be coordination of

the project and implementation of the plans.

One of the tasks of the project will involve identifying the existing vegetation cover and the status of mature vegetation. The next step will be to develop specific objectives and to design the vegetation management plan itself. Public consultation will be a key component of the planning process.

Plans may recommend, for example, active management through controlled burns or small-scale forest harvesting, allowing an area to return to an earlier successional stage. Other plans may allow the forest to progress to a climax or old growth stage.

To date, the province has prepared vegetation management plans for three provincial parks: Cypress Hills, Rowan's Ravine, and Greenwater Lake. Two additional plans are under way for Douglas and Moose Mountain provincial parks, and plans will be prepared

for up to six more forested parks: Duck Mountain, Meadow Lake, Nipawin, Candle Lake, La Ronge and Clearwater River.

New publications

Bohning, R.A.; Rounds, R.C. 1992.

Directory of secondary wood-using industries in Manitoba-1991. For. Can., Manit. Dist. Off., Winnipeg, Manitoba, and Manit. Nat. Resour., Winnipeg, Manitoba.

Giles, D.R.; Bohning, R.A. 1992.

Directory of primary wood-using industries in Manitoba-1991. For. Can., Manit. Dist. Off., Winnipeg, Manitoba, and Manit. Nat. Resour., Winnipeg, Manitoba.

Kurz, W.A.; Apps, M.J.; Webb, T.M.;

McNamee, P.J. 1992. The carbon budget of the Canadian forest sector: Phase I. For. Can., Northwest Reg., North. For. Cent., Edmonton, Alberta. Inf. Rep. NOR-X-326.

Kalra, Y.P.; Maynard, D.G. 1992.

Méthodes d'analyse des sols forestiers et des tissus végétaux. For. Can., Rég. Nord-Ouest, Cent. for. Nord, Edmonton (Alberta). Rapp. inf. NOR-X-319F.

Mallett, K.I. 1991. Armillaria root

rot in the Canadian prairie provinces. For. Can., Northwest Reg., North. For. Cent., Edmonton, Alberta. Inf. Rep. NOR-X-329.

Peterson, E.B.; Peterson, N.M. 1992.

Ecology, management, and use of aspen and balsam poplar in the prairie provinces, Canada. For. Can., Northwest Reg., North. For. Cent., Edmonton, Alberta. Spec. Rep. 1.

Staff changes

Congratulations to a number of Northwest Region staff who recently were honored by Forestry Canada: Regional Director General **Dave Kiil**, Merit Award for Human Resource Management; fire researchers **Bryan Lee**, **Kerry Anderson**, **Richard Smith**, and **Scott Henderson**, Merit Award for Technology Transfer; and Alberta agreement Implementation Officer **Marjorie Stephen**, Commendation for Contribution to an Establishment.

Edmonton: After a challenging year and a half in Headquarters, **Steve Price** is back in his position as Program Director for Regional Development and is busy catching up on the intricacies of four federal-provincial/territorial

partnership agreements. **Marjorie Stephen** has been named Implementation Officer for the Alberta agreement. **Maren Kreter** is the new Secretary to Program Directors. The Forest Insect and Disease Survey Specialist position has been filled by **James Brandt**. Maintenance Engineer **Wayne Lybbert** has resigned and taken a job in Saskatchewan.

Ian Corns has been elected Chairman of the Rocky Mountain Section of the Canadian Institute of Forestry.

Prince Albert: **John Doornbos** has joined the office as Development Coordinator.

Winnipeg: The new District Office Administrator is **Betty Beaton**.

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