

*Biodiversity,  
Our Priority*

# Forests

*Newsletter from Québec*

## **QUÉBEC TAKES PART IN WORLD FORESTRY CONGRESS IN ANTALYA**



Ambassade de Turquie, Ottawa

### *Dolmabahçe Palace in Istanbul*

The Québec government was present, along with the Canadian delegation, at the **11th World Forestry Congress**, held in Antalya, Turkey, from October 13 to 22, 1997. The foremost international experts in forest issues spoke at this year's **Congress**, which delegations from over 180 countries attended. For the first time since the Earth Summit held in Rio in 1992, where the main forest challenges of today were defined (protection of the forest environment, sustainable forest development and so on), the **World Forestry Congress** in Antalya provided an opportunity to take stock of various initiatives adopted by the international forest community to preserve the planet's forests. On this occasion, Jacques Robitaille, Associate Deputy Minister for Forestry, for the ministère des Ressources naturelles du Québec, gave a talk on Québec's achievements in this field.

## **WASWANIFI CREE AND DOMTAR FORM PARTNERSHIP**

The Cree community of Waswanipi, a locality about 800 kilometres to the north of Montréal, and Domtar, one of Québec's largest pulp and paper companies, have formed an economic partnership to develop natural resources and the territory. The agreement to build a new sawmill complex will generate 70 jobs in forest operations and in the mill, most of which will be for members of the Cree community. The project is aimed at preserving this community's traditional trapping areas and encouraging its members to participate in the forestry planning process.

Among the partners supporting the project, the Société québécoise de développement de la main-d'oeuvre provided \$275 000 for the training of employees for the new enterprise and the ministère des Ressources naturelles awarded a timber supply and forest management agreement (TSFMA) for 80 000 cubic metres in Québec's public forest.

A TSFMA is a novel way for the Québec government to implement its forest policies, which are based on a method of management in accordance with the principle of sustained yield and with respect for the versatility of the forest environment. It is a contractual agreement between the government and the holder of a wood processing plant operating permit with a view to developing a forest area from which a forest enterprise is authorized to harvest a certain amount of timber to supply its mill. However, this volume must never exceed the annual allowable sustained yield harvest of the forest area, i.e. the volume of timber that can be perpetually logged without reducing the production capacity. Under such agreements, the government guarantees industrial operators long-term (25-year) supplies, but, in return, requires them to manage the forest so as to maintain, or even to increase its potential. A TSFMA is extended every five years, but only if the party has complied with its obligations.

*A group of Cree employees at the opening  
of the new Waswanipi mill*



Domtar

## ACI CREATED IN MONTRÉAL

Abitibi-Consolidated Inc. (ACI), the world's largest newsprint producer, was recently created in Montréal after the shareholders of its two constituent companies — Abitibi-Price, of Toronto, and Stone-Consolidated, of Montréal — approved the merger of the two groups and decided to establish their head office in this city.

It is not surprising that ACI shareholders chose Montréal as the site for the head office of the new firm. Montréal, a multi-ethnic city and financial crossroads, is the seat for the bulk of Québec's 43 public research centres and is the principal Canadian hub for R&D. But above all, this city has many universities and pulp and paper research institutes, and most of the consulting firms and equipment manufacturers for Eastern Canada in this field. Forty percent of the members of the Canadian Pulp and Paper Association (CPPA) have their head offices in Montréal.

Québec is the largest Canadian producer of newsprint, with 43.8% of national production, and the largest producer of pulp and paper in Canada, with 32.8% of Canadian production. In producing this newsprint, the Québec pulp and paper industry, like other wood product industries, must comply with the government's regulations and standards. These measures, which are constantly changing to reflect the needs of the Québec forest industry, are tools the government uses to manage the forest heritage of Quebecers.



Sun Life de Canada

*The Sun Life building,  
ACI's head office in Montréal*

## TOURS INTO THE HEART OF THE BOREAL FOREST

According to public opinion polls conducted regularly, the Québec people are increasingly concerned about the preservation of their forest heritage. Motivated by this conservation trend, the Chicoutimi region, which is two hours away from Québec City by car, is organizing, for the benefit of the public at large, guided tours into the very heart of the boreal forest. The tours are of a territory managed by the ministère des Ressources naturelles and developed by Abitibi-Consolidated. The goal of this initiative is to inform the public about the dynamics of the forest's ecosystem by explaining timber harvesting and forest development methods. Visitors can assess the various forest management strategies that the department advocates to protect the forest environment as a whole. **Information: Daniel Bolduc, tel. (418) 690-2100; fax (418) 690-3828; Internet: <http://www.atrsaglac.d4m.com>**

### Conservation

## THE FOREST INDUSTRY PROTECTS THE ENVIRONMENT

Over the last few years, the Québec forest products industry has taken major steps to protect the environment. Since 1993, pulp and paper firms have invested close to \$2 billion to improve their environmental performance, notably by completing the construction of secondary treatment systems for the water generated by their manufacturing processes. By diminishing their fossil-fuel consumption, Québec pulp and paper industries have, at the same time, reduced the emission of greenhouse gases into the atmosphere, carbon dioxide (CO<sub>2</sub>) in particular. In fact, greenhouse gas emissions by Québec pulp and paper producers were 11% lower in 1995 than in 1990.

Very strictly regulated by the government, the Québec forest products industry has completed a multitude of forest management projects to ensure the regeneration of cutting areas and the sustained yield of growing stock, and to maintain biodiversity and to protect other resources of the forest environment.

The forest products industry, which employs close to 76 000 people, is the sector that, in Québec, contributes the most to the trade balance. In 1996, exports by this industry totalled over \$10 billion, or 20.5% of the value of the province's exports. **Information: Paule Têtu; tel. (418) 651-9352; fax (418) 651-4622; Internet: [www.aifq.qc.ca](http://www.aifq.qc.ca)**

## **BIO THERMICA AWARDED ENVIRONMENT PRIZE**

The ministère de l'Environnement et de la Faune has singled out people and firms that have made a special effort to protect nature. This year, the department awarded 13 **PRIZES** in three categories: the environment, the conservation of flora and the conservation of fauna. One of them, the **ENVIRONMENT PRIZE**, was awarded to Biothermica, a Montréal firm, for its innovative applications of the Biotox™ regenerative oxidizer process. The process destroys volatile organic compounds (VOCs), condensable organic compounds (COCs) and total reduced sulphurs (TRSs) from various industrial emissions, especially those generated by the cooking of kraft paper pulp. The East-Angus kraft paper mill in Québec recently acquired a Biotox™ unit in order to conform to environmental standards and improve the quality of life of the public, in particular to reduce foul odours. A few years ago, the Québec government adopted the *Regulation respecting pulp and paper mills*, a very strict measure which made it mandatory for this industry to substantially reduce its discharge of contaminants into the water, air and soil.

**Information: Marie-Josée Leroux, tel. (514) 488-3881; fax (514) 488-3125; Internet: <http://www.biothermica.com>**



## **GREENHOUSE GAS EMISSIONS DOWN**

The Québec government has launched **ÉcoGeste**, a program that will have a positive impact on conservation of the forest environment. Voluntary measures in Québec to prevent climate change are registered under the program, which is an outgrowth of the action plan for the implementation of the United Nations Framework Convention on Climate Change. The objective of the program is to reduce greenhouse gas emissions, including carbon dioxide (CO<sub>2</sub>), to their 1990 level by the year 2000. In Canada, Québec has one of the lowest CO<sub>2</sub> emission rates, primarily because of the massive use of hydroelectric power.

## **DEPARTMENT IMPROVES ITS FOREST KNOWLEDGE**

The ministère des Ressources naturelles is stepping up efforts to improve its knowledge of Québec forests. One of the most recent efforts is without doubt the development of production tables, used in calculating, for each forest stratum, the volume of timber when harvested. This calculation is made on the basis of age, fertility class, composition and density of forest stands. Using these tables, which are now available for black spruce, balsam fir, grey pine, white birch and trembling aspen, Québec forest operators can develop their next general forest management plans (GFMPs) from parameters more closely reflecting the growth potential of pure stands of even-aged structure, which will have a positive impact on forest conservation.

GFMPs play a major role in forest conservation in Québec since they include long-term (25-year) action strategies for all the management activities that an operator envisions as part of its timber supply and forest management agreement (TSFMA). Moreover, every action strategy must be approved by the government and must never affect the allowable annual cut.

The old production tables for even-aged stands, in use since 1978, were drawn up from the analysis of data from approximately 9 000 temporary sample plots. To develop the new tables, some 42 000 sample plots were chosen according to criteria aimed at ensuring the validity of the data. With better knowledge about forests, the ministère des Ressources naturelles will be able to improve the management of this major renewable resource.

**Information: David Pothier, tel. (418) 643-7994 (ext. 394); fax (418) 643-2165.**

## **TREND TOWARDS BIODIVERSITY PROTECTION**

One year after the launching of the **Québec Strategy for the Implementation of the Convention on Biological Diversity** and the **Québec Action Plan on Biological Diversity**, the ministère des Ressources naturelles has met most of the commitments that it planned to fulfill in 1997. This strategy, which consists of some 200 measures, several of which have to do with the forest, covers three more years. The department has also met the commitments it made in June 1996, when it launched **Biodiversity of the Forest: Assessment and Commitments of the ministère des Ressources naturelles**, a paper drawn up in the wake of the Rio Earth Summit. The commitments then made by the department had three thrusts: 1. to improve knowledge about the biodiversity of Québec forests and about the impact of forest practices; 2. to develop a forest management method to maintain biodiversity in the developed areas; 3. to establish a preventive approach to certain rare, exceptional or fragile elements.



**EFFECTS OF HUMAN ACTIVITY AND ENVIRONMENTAL STRESS ON ECOSYSTEMS**

The ministère des Ressources naturelles is conducting two research projects to measure the effects of human activity and environmental stress on Québec forest ecosystems. The goal of one of the projects undertaken last year north of lac Saint-Jean is to gauge the impact of climatic changes on the boreal coniferous forest. The second project involves an area of 360 hectares in the department's research forest in Duchesnay, near Québec City. For some ten years, researchers have been conducting experiments there to measure the reaction of a sugar maple-yellow birch stand to acid rain, in particular to nitrogen and sulphur. In Canada, Québec is on the cutting edge of acid-rain research. It has set up a monitoring network in the forest with over 30 sites throughout the province. **Information: Raynald Paquin; tel. (418) 643-7994 (ext. 385); fax (418) 643-2165.**

**TO BETTER USE FOREST RESOURCES**

While, in Québec, the government and primary timber processing enterprises pay special attention to the protection of the forest, secondary processing enterprises are equally in tune with this widespread conservation trend. The Centre de recherche industrielle du Québec (CRIQ), in collaboration with the National Optics Institute (NOI), recently developed a colour grader for wood components, an innovation that will have a positive impact on the use of forest resources, notably the red oak. This variety often proves difficult to grade in the mill, since it has several natural colour shades. With CRIQ's innovation, the problem is solved. The new device distinguishes, with the help of machine vision, the different wood grades according to the colour spectrum. **Information: Pierre Plamondon; tel. (418) 652-2248; fax (418) 652-2231; Internet: <http://www.criq.qc.ca>**



*The colour grader for wood components, an innovation that makes better use of forest resources*

**NEW LIGHT TRAP CATCHES INSECTS**

The Canadian Forest Service has developed a small light trap to catch all kinds of insects making up forest biodiversity, including insect pests. The easy-to-use device is named Luminoc® because it uses light to attract insects. It can be suspended to catch samples of insects that fly in the plant cover or it can be used as a light pitfall trap to study insects that move above the surface of the ground. The invention was recently put to use in a sugar bush in the Beauce region and it caught over 500 species of lepidoptera. Other insects that play a major role in the balance of the forest



*Luminoc®, a small light trap that can be suspended to catch all kinds of insects*

ecosystem are frequently caught in this trap. The device can also be used to discover new species of insects in rare ecosystems. **Information: Christian Hébert; tel. (418) 648-5896; fax (418) 648-5849; Internet: <http://www.cfl.forestry.ca/710.htm>**



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