Forêts
lettre du Québec

The Ministère des Ressources naturelles, de la Faune et des Parcs publishes its quarterly *Newsletter From Québec – Forests* to inform the world community of its achievements in the forestry sector. The publication allows the MRNFP to remain in contact with its partners abroad, and deals with specific aspects of forest management in Québec.

Summary

March 2004

- Anticosti Island's General Integrated Forest Resource Management Plan
- Work Plan of the *Commission d'étude sur la gestion de la forêt publique québécoise*
- The Life Cycle of Forest Products

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Ministère des Ressources naturelles
Québec

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Anticosti Island's General Integrated Forest Resource Management Plan

(By Pierre Beaupré, F.Eng., Ministère de Ressources naturelles de la Faune et des Parcs; Christian Bédard, F.Eng., Anticosti Forest Products Inc.; Claude Dufour, F.Eng., Anticosti Forest Products Inc.; André Gingras, Biol., Société de la faune et des parcs du Québec; Chantal Malenfant, F.Eng., Anticosti Forest Products Inc.; François Potvin, F.Eng., Biol., Ph.D. Société de la faune et des parcs du Québec)

A management plan designed to restore white-tailed deer habitats on Anticosti Island has been drawn up jointly by the Ministère des Ressources naturelles de la Faune et des Parcs (MRNFP), the Société de la faune et des parcs du Québec (FAPAQ) and Anticosti Forest Products Inc., in conjunction with the municipality of Anticosti Island, the Lac Geneviève Outfitter and SÉPAQ Anticosti. It is one of the most extensive wildlife management projects in the world.

The need for remedial action

The plan addresses a specific wildlife problem that originated in 1896, when Henri Menier, a rich French businessman who had purchased Anticosti the previous year, introduced a herd of 220 white-tailed deer to the island. In the island's predator-free environment, the herd's numbers grew steadily to more than 125,000 head in 2001, when the most recent survey was carried out. The herd now accounts for 30% of Québec's total white-tailed deer population. Although Anticosti Island is 1.4 times larger than Prince Edward Island, it is too small to support such a large deer population in the long term.

As a result, the deer are beginning to exhaust their main source of winter food, namely the fir forest. The fir trees, unable to regenerate due to browsing by the deer, are steadily being replaced by white spruce, a less popular species among the deer that normally makes up only 10% of the fir forest.

The photo opposite clearly illustrates the impact of the deer population on the island's vegetation. It shows a fenced-off area that was not available for browsing over a ten-year period. The contrast with the surrounding vegetation is astonishing.

Extensive action is therefore required to safeguard the future of the island's white-tailed deer and other fir-dependent species. The strategy now being applied reflects the scope of the challenge. It involves bringing 150 blocks of between 3 and 30 km^2 under management over a 70-year period, to be regenerated as balsam fir-white birch forests.

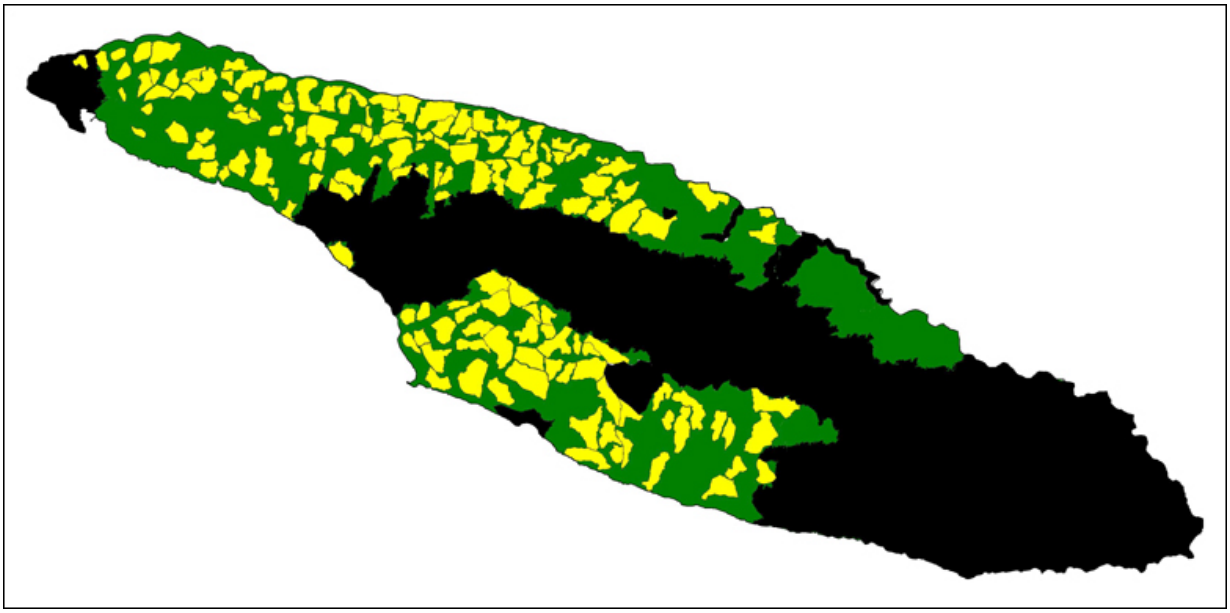
For each block, the future winter habitat of the deer is planned and roughly 60% of the forest is harvested. The block is fenced off and the deer population inside the fence is reduced by sport hunting. Fir trees are then planted on sites where natural fir and hardwood regeneration is insufficient. The fences are left in place for approximately ten years, giving sufficient time for the damaged areas to regenerate. When the fences are eventually removed, the block will provide an excellent winter habitat for the deer over a 60-year period, at which point the process will begin again.

Towards a better balance between the deer population and the environment

The principal goal of the strategy is to maintain a significant deer population in the long term, with a view to preserving an economically viable but scaled-down vacation and hunting industry.

It will be possible to maintain the quality of the hunting experience with a smaller deer population, provided deer visibility can be improved in the hunting territories. In the longer term, the herd's ecological impact on the environment will be reduced as its size declines. At the same time, the more abundant per-capita food resource should produce larger animals and minimize population fluctuations during harsh winters.

The strategy's impact on island activities



The area under management (yellow and green in the diagram) covers half the island's total area. As mentioned earlier, the strategy provides for the gradual creation of approximately 150 fenced blocks over a 70-year period. The management plan establishes the order in which blocks will be created for the next 150 years (two fencing cycles). During the planning process, the impact of the fenced area on hunting camp territories was taken into account by spreading fenced and non-fenced periods over time. Only 8% of the area under management will be fenced off at any one time. The blocks to be fenced in the next 150 years are shown in yellow on the map. Logging operations outside the fenced blocks, in white spruce stands, will be spread over the area shown in green.

The management plan also includes some significant modelling innovations. For example, timber volumes, deer visibility and the potential deer population were all modelled and projected over a 150-year period. This helped establish both the allowable annual cut and the impact of the strategy on the deer population. The results show that the potential deer population level can be maintained in the long term, and that the allowable annual cut is sufficient to provide for an annual harvest of 190,000 m^3.

The situation of Anticosti Island is by no means unique. Ecosystem disturbances due to wild ungulate overpopulations are increasingly common throughout the world, and their management has become a major issue. An international conference on cervid overpopulation will be held on Anticosti Island in 2004, to share current experience.

Work Plan of the *Commission d'étude sur la gestion de la forêt publique québécoise*

At a press conference held in Québec City on February 3 last, Guy Coulombe, President of the *Commission d'étude sur la gestion de la forêt publique québécoise* (task force on the management of Québec's public forests), presented the schedule of work leading up to submission of the Commission's final report in December 2004.

Following the meetings and analyses of the preparatory phase, now almost complete, the plan is divided into three steps. The Commission will begin by organizing a round of public consultations from mid-April to late June. Consultation briefs will then be examined and specific subjects discussed from July to September, and the final report will be prepared in October, November and December.

At the press conference, Mr. Coulombe also announced the launch of the Commission's website, which contains information on the Commission and its work. It has also been designed to foster communication with stakeholders and the general public, who will be encouraged to submit questions and comments. An online consultation function will be available, enabling Commission members to obtain clarification and confirmation of observations, issues and orientations, and the briefs received by the Commission will also be posted on the website, which can be accessed at:

www.commission-foret.qc.ca

Pierre Corbeil, Minister for Forests, Wildlife and Parks, also attended the press conference. *"The Commission's work will provide a clear, objective view of the situation of Québec's forests, based on firm scientific and technical foundations,"* he said. *"The Commission has the means of doing this, thanks in part to the broad range of expertise of its members, and to the fact that they will be able to work independently. The public nature of the exercise will also ensure transparency."*

Minister Corbeil announced the names of the six Commission members on December 18, 2003. They are:

- Mr. Jules Arsenault, Dean of the Université du Québec en Abitibi-Témiscamingue;
- Ms. Marie Anick Liboiron, Forest Engineer;
- Mr. André Bouchard, Full Professor, Department of Biological Science, Faculty of Arts and Science, Université de Montréal;
- Mr. Jean-Thomas Bernard, Full Professor, Department of Economics, Faculty of Social Sciences, Université Laval;
- Mr. Jean Huot, Full Professor, Department of Biology, Faculty of Science and Engineering, Université Laval;
- Mr. Éric Bauce, Forest Engineer, Full Professor, Department of Wood Science and Forestry, Faculty of Forestry and Geomatics, Université Laval.

Mr. Jean Huot will be the Commission's Vice-President, and Mr. Gérard Szaraz, a forest engineer who was previously involved in organizing the XII World Forestry Congress, will be its secretary.

In the usual order:
(back row) Gérard Szaraz, Jules Arsenault, Marie Anick Liboiron, Jean-Thomas Bernard;
(front row) André Bouchard, Éric Bauce, Guy Coulombe and Jean Huot.

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The Life Cycle of Forest Products

(By Steve Huppé, Direction du développement de l'industrie des produits forestiers)

Québec's forest products industry, like others throughout the world, has undergone a number of major changes in recent years. Among other things, some formerly popular products have been replaced by new ones – for example, oriented strandboard (OSB) has replaced softwood plywood.

The industry must therefore adapt constantly. Not only is it facing increasing competition from materials made of plastic, concrete, steel and new fibres, but it must also compete with firms from Europe and South America, whose products are now present on markets occupied by Québec firms.

All these factors have a direct impact on the life cycles of products, which are now replaced more quickly than before. The forest products industry is by no means immune to this phenomenon.

Companies use the notion of product life cycle to review the market positions of their products and adjust them where necessary. This enables them to plan their new product development work and remain competitive.

A product's life cycle illustrates the various stages of its sale and consumption on a given market. The notion of life cycle is based on the premise that a product has a limited life span, sales will go through different phases, the cost-price ratio will vary with each phase, and marketing and production strategies must be changed accordingly.

A product's life cycle is divided into four main phases, namely introduction, growth, maturity and decline. The diagrams below show these various phases along with anticipated profitability levels for certain given products.

A product that has begun to decline can be revived if it is altered in some way and if a market niche can be found. Changes in sales can be used to estimate a product's position on the life cycle curve. Like the high technology sector, the forest products industry would benefit from incorporating the notion of life cycle into its product management strategies.

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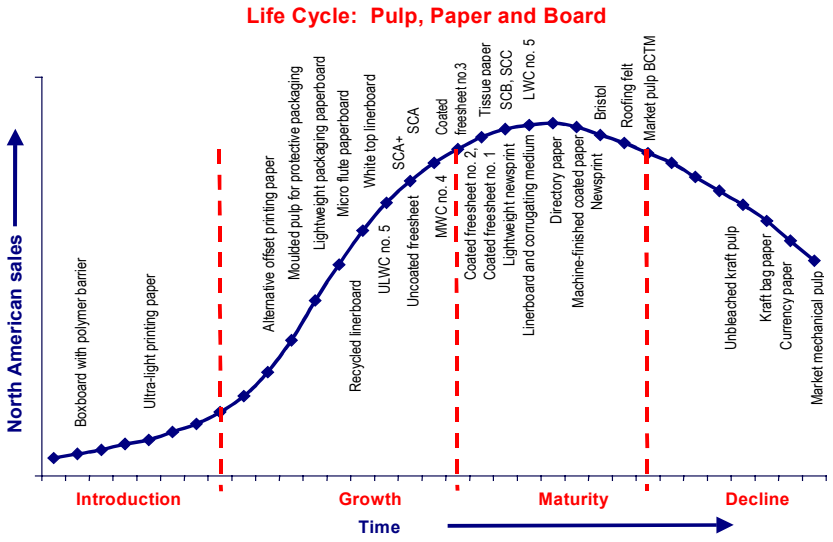
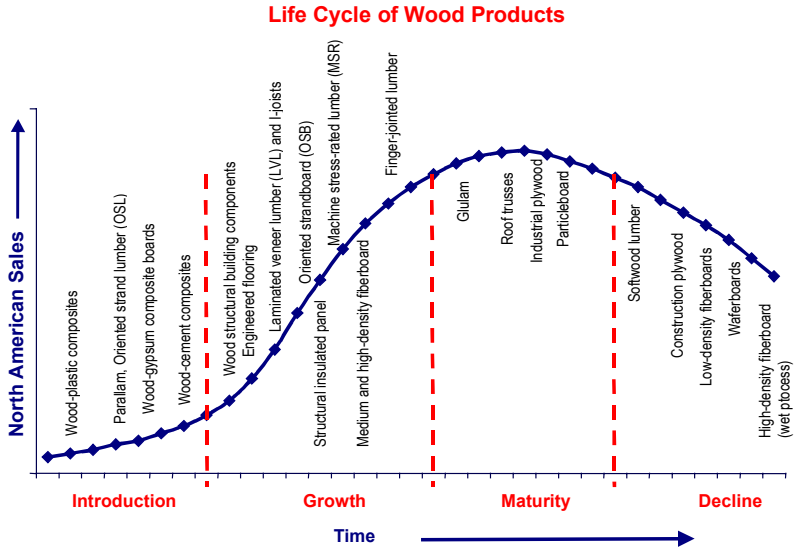


Sources: Ministère des Ressources naturelles, de la Faune et des Parcs and Université du Québec à Trois-Rivières, March 2003



Sources: Basic graphs, USDA Forest Service, Nexfor and additions by the Ministère des Ressources naturelles, de la Faune et des Parcs, 2002

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