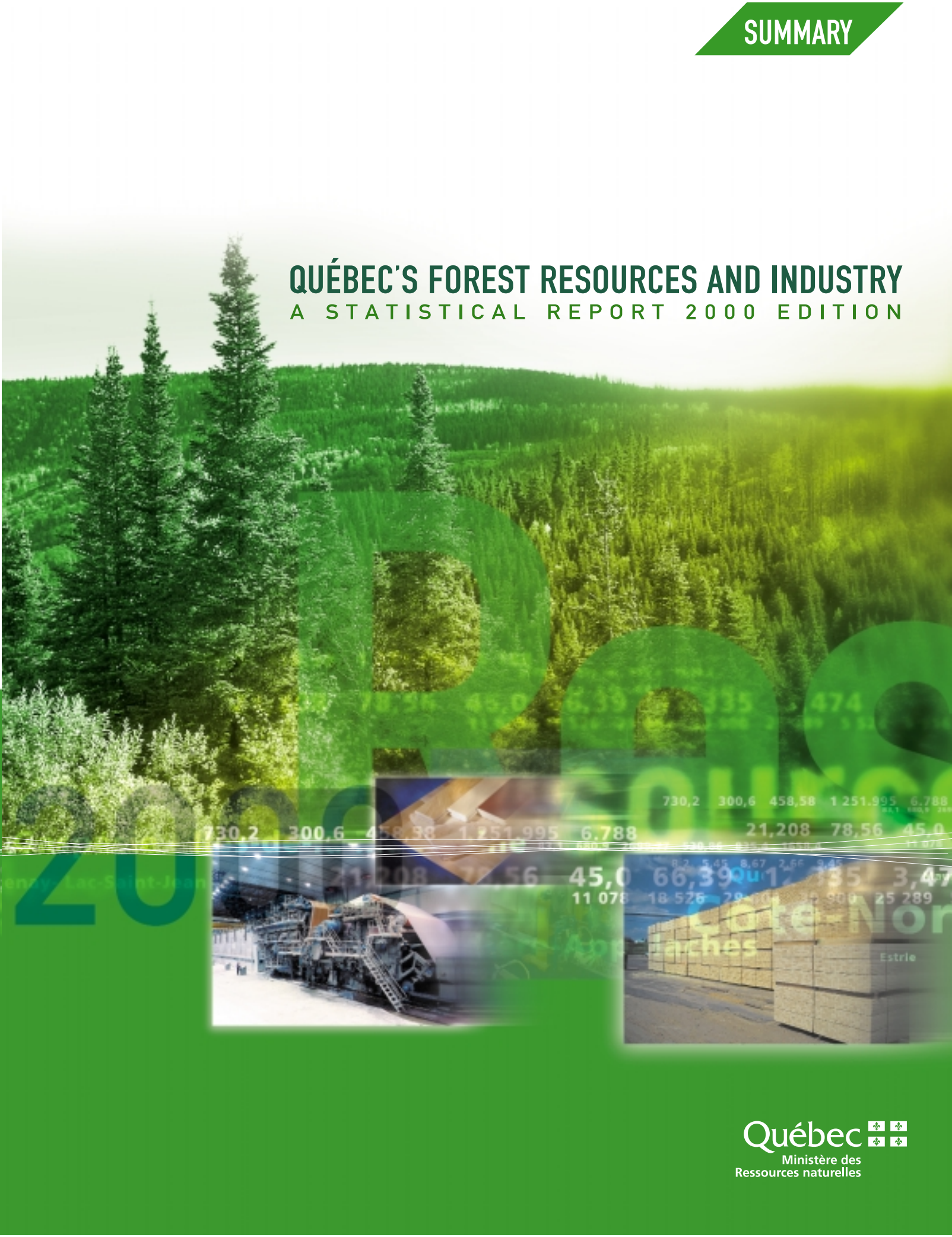


QUÉBEC'S FOREST RESOURCES AND INDUSTRY

A STATISTICAL REPORT 2000 EDITION



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QUÉBEC'S FOREST RESOURCES AND INDUSTRY
A STATISTICAL REPORT 2000 EDITION

DESIGN, RESEARCH AND TEXT

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We also invite you to visit the Ministère's Internet site at:
<http://www.mrn.gouv.qc.ca>

N.B.

The preparation of this report required the collaboration of all administrative units within the Secteur des forêts and Forêt Québec. Unless otherwise indicated, the data are provided by the administrative units of the ministère des Ressources naturelles with responsibility for the sector in question.

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Since Québec's forest system was first adopted in December 1986, the ministère des Ressources naturelles (MRN) has taken a number of concrete steps toward consolidating its goal of sustainable forest management. For example, in 1996 it amended the **Forest Act** and the **Regulation respecting standards of forest management for forests in the public domain**, and it also adopted various measures to ensure the protection of forest biodiversity. This ongoing process clearly shows that Québec's forests are evolving constantly.

With the amendment of the **Forest Act** in June 1996, Québec confirmed its commitment to the principle of sustainable forest development in order to meet the economic, environmental and social needs of present and future generations while giving proper consideration to the other potential uses of the forest. Public and private forests must now be managed in a way that preserves biological diversity, conserves soil and water resources, and maintains or improves the condition and productivity of forest ecosystems.

The **Regulation respecting standards of forest management for forests in the public domain** was also overhauled to enable the MRN to comply with the resolutions formulated in its **Forest Protection Strategy**. For example, the revised regulation, in force since May 1996, prohibits all forms of logging except cutting with protection of regeneration and soils (CPRS) and substantially reduces the size of single-block cutting areas. The new regulation will facilitate the environmental certification of Québec's forest products, which is vital to our industry.

The MRN has also published a report on Québec's forest biodiversity, in which it committed to enhancing our knowledge about the forest, providing better protection for fragile and exceptional ecosystems, and continuing to apply the **Forest Protection Strategy**. To meet these commitments, it is currently developing a new approach to the maintenance of biodiversity in forest landscapes. The next five-year report on the state of Québec's forests will provide an update on the progress made in each of these areas.

F O R E W O R D

The MRN is also about to take another crucial step in the development of its methods, with its review of the current forest system (Bill 136, **An Act to amend the Forest Act and other legislative provisions**, was introduced in the National Assembly in May 2000). The proposed amendments were formulated following extensive public consultations and reflect the contributions of all players with an interest in sound forest management. The bill is currently being examined by a parliamentary standing committee (fall 2000) and will subsequently be voted on by the Members of the National Assembly.

Furthermore, in keeping with its mission, the MRN continues to make different tools available to anyone interested in our forests, including this document. As in past years, the 2000 edition of **Québec's Forest Resources and Industry** provides a succinct report on Québec's forest sector. However, this year we have made some minor changes to the content as well as major changes to the format. The paper edition presents a short version of the full report, which is available exclusively in **PDF** and **Excel** formats on the MRN's Internet site (<http://www.mrn.gouv.qc.ca/3/30/301>)¹. The short version summarizes the report text and contains highlights from each chapter, as well as some of the more important maps and detailed tables.

We hope you find this year's report as useful as past editions and, as always, we welcome your comments.

¹ The full version is updated regularly, and you can obtain the most recent data by consulting it on a regular basis.

N O T E

The full version of this document can be obtained from the Internet site of the ministère des Ressources naturelles (www.mrn.gouv.qc.ca) by clicking on the "Forest" tab and selecting the document you want.

Readers wishing to use the data contained in this publication should bear in mind the changes affecting some of the tables illustrating statistical trends. An attempt to compare this year's tables with those of previous years may be difficult and lead only to confusion.

For further information, please contact the author, Blaise Parent, at (418) 627-8644, extension 4112.

SYMBOLS USED

bd ft:	board foot
BDMT:	bone-dry metric ton
cm:	centimetre
cm ³ :	cubic centimetre
dm ³ :	cubic decimetre
FSPL:	fir, spruce, jack pine, larch
G:	billion
ha:	hectare
hl:	hectolitre
kg:	kilogram
km:	kilometre
km ² :	square kilometre
L:	litre
lb:	pound
m:	metre
m ² :	square metre
m ³ :	cubic metre
M:	million
mt:	metric ton
ngrv:	nominal gross raw volume
no.:	number
sq.ft.:	square foot
t:	ton
":	inch
%:	percent
\$:	dollar
DM:	deutsche mark
£:	pound sterling
¥:	yen

CONVERSION FACTORS

1 cord of wood = 85 solid cubic feet = 2.41 cubic metres
1 cunit = 100 solid cubic feet = 2.831 cubic metres
1 board foot (bd ft) = a piece of wood 1 inch thick by 1 foot wide by 1 foot long
1000 board feet (bd ft) = 2.36 cubic metres (net value)
1 cubic metre = 423.7 bd ft = 35.3 cubic feet = 0.353 cunits = 1.5 stacked cubic metres
1 metric ton (long ton) = 1000 kilograms = 2205 pounds
1 Imperial ton (short ton) = 2000 pounds
1 square kilometre = 100 hectares = 0.386 square miles
1 hectare = 2.47 acres

N.B.: In the full version of the text, each table, chart and map has been assigned a reference code, which is indicated in the upper right-hand corner. The first two figures of the code correspond to the chapter, the next two to the section and the last two to the illustration. For example, code 02.01.03 designates the third illustration of the first section of chapter 2. The codes in the summary version are the same as those in the full version, so that readers can locate the different elements easily. As a result, the numbering is not sequential.

ESTABLISHMENT

The smallest operating unit, generally a mill or factory, able to provide data on its inputs, outputs and activities for calculation of added value.

TOTAL JOBS

Individuals working on production or assigned to non-manufacturing activities in an establishment (cafeteria, head office, administration or sales). Also includes workers assigned to new constructions, repairs or major alterations. Owners and active partners not considered as employees are not included in the total jobs figure.

TOTAL SALARIES AND WAGES

Compensation paid to all the salaried and non-salaried employees of an organization.

VALUE OF SHIPMENTS AND OTHER INCOME

Value of shipments of company-specific products plus income generated by non-manufacturing activities such as the sale of goods purchased and resold without processing, the book value of construction and capital work carried out by the establishment's personnel, for its own use, the cafeteria, etc.

VALUE ADDED TO TOTAL ACTIVITY

Value added in the manufacturing activity, plus added value from non-manufacturing activities. This latter figure is obtained by subtracting from gross non-manufacturing production all purchases of goods for resale without processing (taking into account the net stocks variable for those goods), purchases of materials and supplies used in new construction and the production of machinery and tools for use by the establishment, and office supplies purchased and used by the establishment in a non-manufacturing activity.

CAPITAL EXPENDITURES

Capital expenditures include the cost of acquiring, constructing and installing plants, material and sustainable tools, whether for replacement or rental.

MAINTENANCE AND REPAIRS

Maintenance and repair costs incurred for works, materials and tools are indicated separately. They are not considered to be capital expenditures.

G L O S S A R Y

OF THE MAIN ECONOMIC TERMS USED IN THE TEXT

CONSTANT DOLLARS

Dollars in a reference year used as a basis for converting dollars from other years, to eliminate the impact of fluctuations in purchasing power. The conversion is made using a price index.

BALANCE OF TRADE

The difference between the monetary value of exports and imports of merchandise, goods and services. If a country exports more than it imports, its balance of trade is positive. If it imports more than it exports, its balance of trade is negative.

NATIONAL EXPORTS

Products grown, extracted or manufactured in Canada and sold to other countries, including products from foreign sources that are processed in Canada.

SHIPMENT

Shipment of merchandise (goods) to a domestic or foreign destination.

IMPORTS

All merchandise that crosses a country's borders, whether for immediate consumption or storage.

SELLING PRICE INDEX

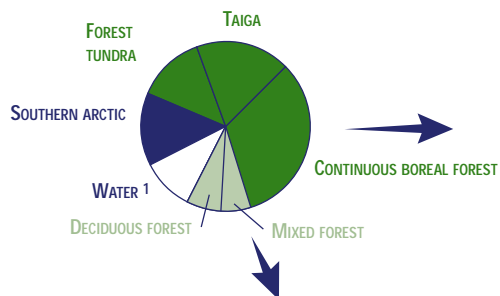
An index showing variations in the general rate of inflation or price variations in a given economic sector, compared with a reference year to which a value of 100 is assigned.

GROSS DOMESTIC PRODUCT (GDP)

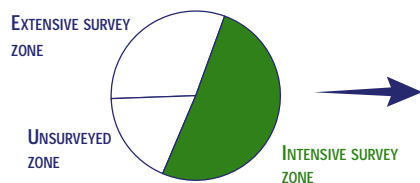
The value of all goods and services produced in a given period within the geographical boundaries of a country or territory.

S U M M A R Y

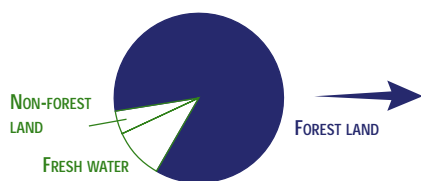
TOTAL AREA OF QUÉBEC 1: 1 667 926 km²



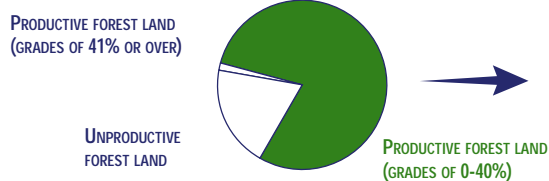
VEGETATION ZONES AND SUBZONES ²		1 501 500 km ²
<i>(according to the 1998 ecological classification)</i>		
• ARCTIC	• Southern arctic	232 100 km ²
• BOREAL	• Forest tundra	224 800 km ²
	• Taiga	294 300 km ²
	• Continuous boreal forest	541 500 km ²
• NORTHERN TEMPERATE	• Mixed forest	98 600 km ²
	• Deciduous forest	110 200 km ²



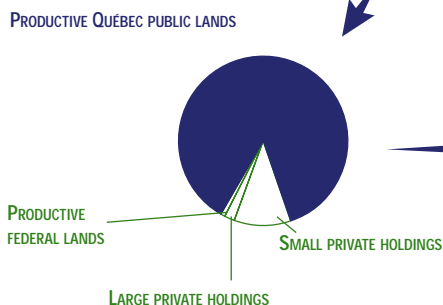
LAND AREA ³		1 496 646 km ²
• Unsurveyed zone		267 322 km ²
• Extensive survey zone		464 481 km ²
• Intensive survey zone		764 843 km ²



INTENSIVE SURVEY ZONE ⁴		764 843 km ²
• Fresh water	(-) 76 188 km ²	
• Non-forest land	(-) 33 532 km ²	
• Forest land	655 123 km ²	



Forest land	655 123 km ²
Unproductive forest land	(-) 126 253 km ²
Productive forest land	528 870 km ²
• Grades of 41% or over	10 706 km ²
• Grades of 0-40%	518 164 km ²



Productive forest lands	
Grades of 0-40%	518 164 km ²
• Productive Québec public lands	448 928 km ²
• Small private holdings	55 126 km ²
• Large private holdings	11 072 km ²
• Productive federal lands	3 039 km ²

Merchantable volume	
	4 367 902 000 m ³
	3 722 564 000 m ³
	524 670 000 m ³
	88 191 000 m ³
	32 478 000 m ³

1 Including the waters of the St. Lawrence River and the Gulf of St. Lawrence, James Bay, Hudson Bay, Ungava Bay and Hudson Strait (171 280 km²)

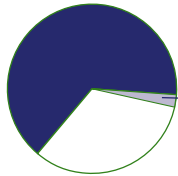
2 The limits of the bioclimatic domains have been revised by the *Comité sur la carte des régions écologiques*. The committee also established the new ecological land classification system in 1998.

3 Data for Québec are taken from the 2nd ten-year survey and have not yet been revised to reflect the new ecoforest survey that will be completed in 2002. The land area will be revised to correspond exactly to Québec's vegetation zone.

4 Lands whose forests can be developed over 120 years, in keeping with the principle of sustained yield.

DISTRIBUTION OF PRODUCTIVE QUÉBEC PUBLIC LANDS

AREAS COVERED BY TSFMAs



AREAS COVERED BY FMCs

FOREST RESERVES FREE OF RIGHTS

Productive Québec public lands
(grades of 0-40%)

- Areas covered by timber supply and forest management agreements (TSFMAs)
- Areas covered by forest management contracts (FMCs)

Forest reserves free of rights and areas where forest production is prohibited (RSFM 1, parks, etc.)

448 928 km²

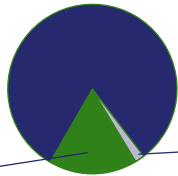
308 357 km²

5 321 km²

135 250 km²

SURFACE AREAS TAKEN INTO ACCOUNT IN CALCULATING THE ALLOWABLE ANNUAL CUT

AREAS COVERED BY TSFMAs



PRIVATE LANDS

AREAS COVERED BY FMCs

Québec public lands on which rights have been granted

- TSFMA
- FMC

Productive private lands taken into account in calculating allowable harvests
(grades of 0-40%)

SPH²: 55 126 km², LPH²: 11 072 km²

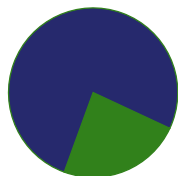
308 357 km²

5 321 km²

66 198 km²

ALLOWABLE ANNUAL CUT – MARCH 31, 1999

ALLOWABLE ANNUAL CUT IN PUBLIC FORESTS



ALLOWABLE HARVESTS IN PRIVATE FORESTS

Allowable annual cut – public forests
(common areas)

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

57 041 200 m³

43 736 800 m³

30 052 400 m³

1 621 000 m³

3 744 600 m³

8 318 800 m³

Allowable harvest – private forests
(large and small private holdings)

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

13 304 400 m³

4 277 700 m³

1 126 200 m³

2 331 500 m³

5 569 000 m³

VOLUMES ALLOCATED IN THE PUBLIC FORESTS - MARCH 31, 1999

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

37 550 650 m³

29 005 950 m³

960 500 m³

3 140 850 m³

4 443 350 m³

1 RSFM: Regulation respecting standards of forest management for forests in the public domain

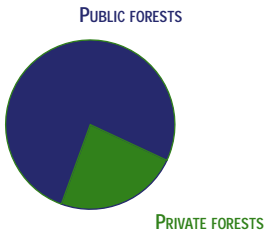
2 SPH: small private holdings

LPH: large private holdings

S U M M A R Y

(c o n t ' d)

TIMBER HARVESTED – VOLUME (1998-1999)



PUBLIC FORESTS

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

PRIVATE FORESTS ¹

- Fir, spruce, jack pine, larch
- Other softwoods
- Poplars
- Other hardwoods

¹ Estimates

43 357 489 m³

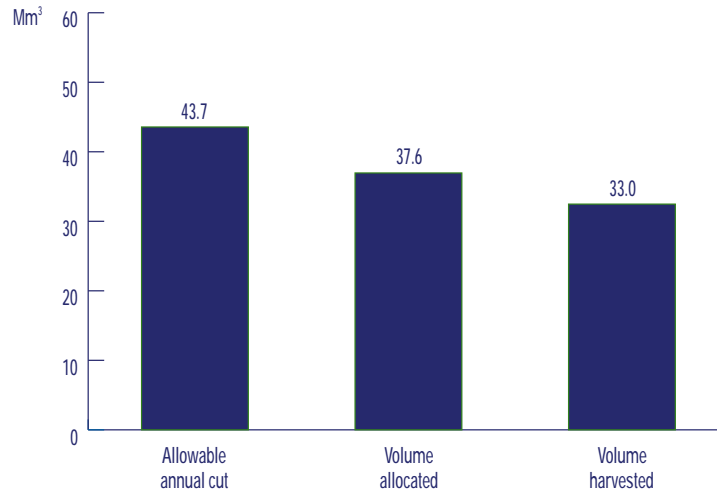
33 003 189 m³

26 891 803 m³
854 253 m³
2 454 469 m³
2 802 664 m³

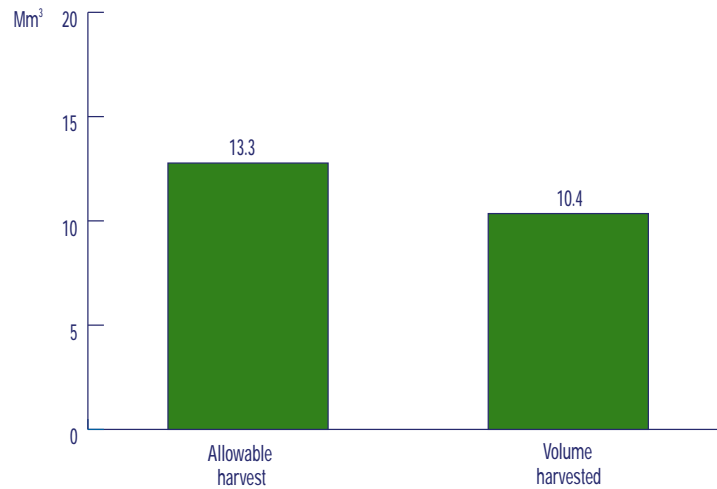
10 354 300 m³

4 083 600 m³
607 100 m³
1 919 700 m³
3 743 900 m³

PUBLIC FORESTS (ALLOWABLE ANNUAL CUT, VOLUME ALLOCATED, VOLUME HARVESTED) (1998-1999)



PRIVATE FORESTS (ALLOWABLE HARVEST, VOLUME HARVESTED) (1998-1999)



S U M M A R Y

(c o n t ' d)

FOREST PROTECTION (1999)

AREA AFFECTED (ha)	1 473 380
Spruce budworm	22 970
Hemlock looper	472 139
Forest fires	978 271
(Mature stands = 23 142 ha)	

SILVICULTURAL TREATMENTS PLANNED AND CARRIED OUT (1998-1999)

	PLANNED (ha)	CARRIED OUT (ha)
PUBLIC FORESTS	506 369	593 390
Site preparation	3 583	38 335
Planting and seeding	48 416	50 485 (105.0 million seedlings)
Non-commercial treatments	132 753	108 570
Commercial treatments	321 617	396 000
PRIVATE FORESTS		59 886
Site preparation		12 146
Planting and seeding		14 511 (33.2 million seedlings)
Non-commercial treatments		24 092
Commercial treatments		9 137

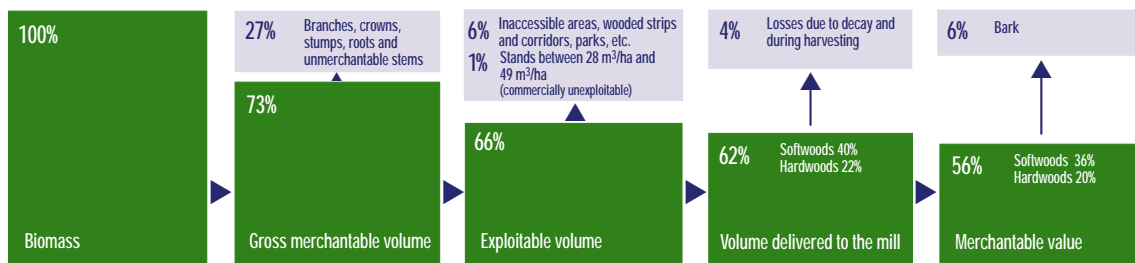
NETWORK OF PERMANENT ROADS (1998)

14 017 km (513 bridges)

EXPERIMENTAL, TEACHING AND RESEARCH FORESTS (1999)

64 600 ha

FROM FOREST TO MILL ¹



¹ Updated December 1999

TIMBER CONSUMED IN PRIMARY PROCESSING PLANTS (1999)

TOTAL CONSUMPTION (m³)	72 799 479
CONSUMPTION BY SPECIES (m³)	
Fir, spruce, jack pine, larch	57 766 124
Other softwoods	2 464 446
Poplars	5 324 904
Other hardwoods	7 244 005
CONSUMPTION BY PRODUCT (m³)	
Roundwood	47 399 107
Chips	18 758 044
Sawdust, shavings and wood residues	6 642 328
CONSUMPTION BY SOURCE (m³)	
Public forests	33 126 602
Private forests	9 066 682
Exchanges between mills	24 346 444
Outside Québec	6 259 751

S U M M A R Y

(c o n t ' d)

THE FOREST SECTOR IN QUÉBEC'S ECONOMY (1997)

	Jobs (no.)	Wages (\$, 000s)	Value of Shipments (\$, 000s)	Added Value (\$, 000s)	Capital Expenditures and Repairs (\$, 000s)
Logging (Gr 04)	11 387	329 600	2 349 600	705 800	135 900
Wood industry (Gr 25)	36 515	1 089 792	6 885 396	2 769 022	501 100
Pulp and paper industry (Gr 27)	35 095	1 763 188	10 411 525	4 174 232	1 374 800
TOTAL	82 997	3 182 580	19 646 521	7 649 054	2 011 800

LOGGING INDUSTRY (1999)

Number of primary processing plants, including 1 318 sawmills	1 419
Number of pulp, paper and cardboard mills, 41 of which are included under primary processing plants	64

FOREST PRODUCT PRODUCTION (1999)

Lumber (m ³ , 000s)	17 897
Joint sawmill production (BDMT, 000s)	12 796
Chips	7 418
Sawdust and shavings	2 371
Bark	3 007
Pulp and paper production (BDMT, 000s)	10 092
Newsprint	4 007
Cardboard and paper other than newsprint	4 489
Market pulp	1 596

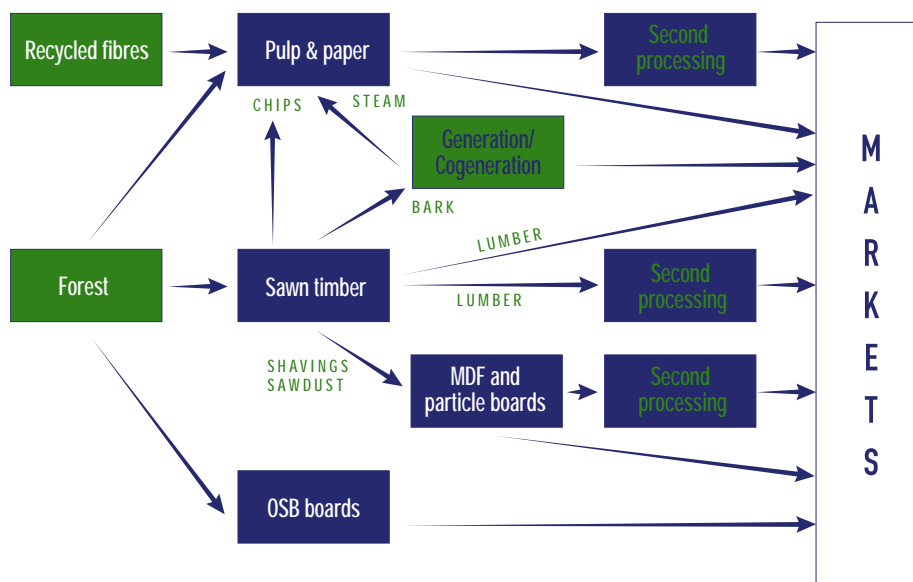
QUÉBEC'S BALANCE OF TRADE ¹ IN THE FOREST PRODUCTS SECTOR, IN 1999 (\$, MILLIONS) ²

Wood, charcoal and wooden structures	3 850.2
Pulp, paper and cardboard	5 956.6

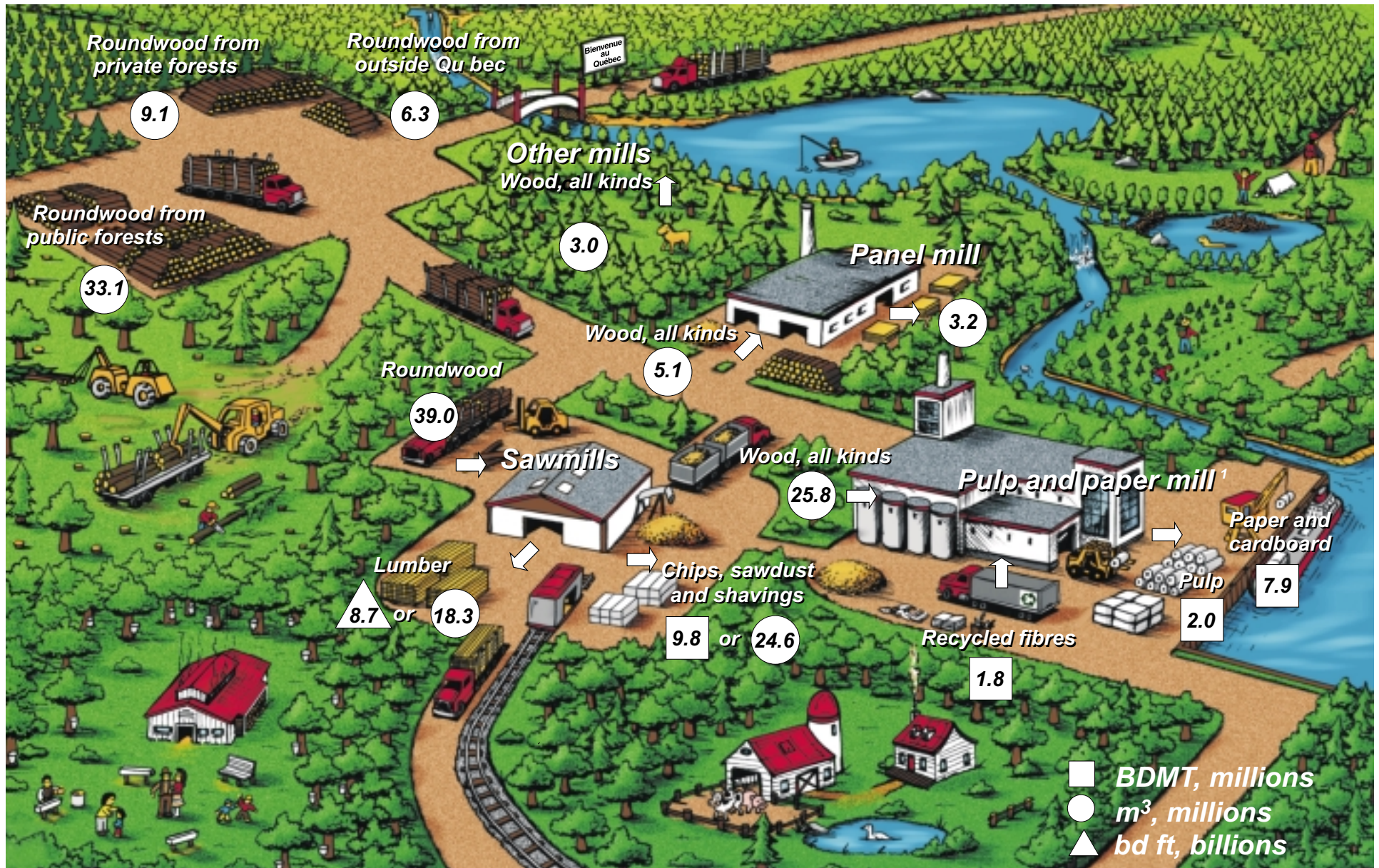
¹ Based on customs data

² Product designation according to the World Custom Organization's harmonized Commodity Description and Coding System.

SIMPLIFIED CHART – FOREST PRODUCTS INDUSTRY



SUPPLIES FOR QUÉBEC'S PRIMARY WOOD PROCESSING INDUSTRY, IN 1999



¹ Including data from the 1999 annual survey.

QUÉBEC'S FOREST RESOURCES AND INDUSTRY

Table of Contents

Foreword	3	8. TIMBER USE	
Note	4	- Highlights	44
Symbols Used	4	- Roundwood and Chip Purchases and Sales Outside Québec in 1998 and 1999	45
Conversion Factors	4		
Glossary of Main Economic Terms	5	9. WOOD INDUSTRIES	
Summary	6	- Highlights	46
Supplies for Québec Primary Wood Processing Industry, in 1999	11	- Overview	48
		- The Sawmill Industry	49
1. GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS			
- Highlights	13	10. THE PULP AND PAPER INDUSTRY	
- Vegetation Zones and Subzones	14	- Highlights	51
- Public Land Use Planning	15	- Production Capacity	54
- Administrative Divisions in Québec's Public Forests	16	- Production	55
- Types of Ownership and Survey Zones	17	- Environment	56
- Private Forests	18		
2. INTENSIVE SURVEY ZONE		11. THE FOREST SECTOR IN QUÉBEC'S ECONOMY	
- Highlights	20	- Highlights	58
- Area and Gross Merchantable Volume of Productive Forests (grades of 0-40%)	21	- Economic and Financial Indicators	60
3. FOREST PROTECTION IN QUÉBEC			
- Highlights	25		
- Insects and Diseases	26		
- Forest Fires	27		
- Forest Fires – Intensive Protection Zone	28		
4. SUSTAINABLE DEVELOPMENT OF QUÉBEC'S FORESTS			
- Highlights	29		
5. FOREST MANAGEMENT			
- Highlights	30		
- Allowable Annual Cut	32		
- Harvest	35		
- Forest Dues	37		
- Seedling Production	38		
- Summary of Silvicultural Treatments Carried Out	39		
6. FOREST USE FOR EDUCATIONAL AND RECREATIONAL PURPOSES			
- Highlights	42		
7. LOGGING			
- Highlights	43		

GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

Highlights

01.00.01

TOTAL AREA OF QUÉBEC (km²)

Total area	1 667 926
Land area ¹	1 496 646
Vegetation zones (according to the 1998 ecological classification) ² :	
• Arctic	232 100
• Boreal	1 060 600
• Northern Temperate	208 800

¹ November 2000 update: original land data were drawn from the 2nd survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the 3rd survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).

² The bioclimatic domain boundaries have been reviewed by the *Comité sur la carte des régions écologiques*, which also established the new ecological classification system in 1998.

TYPES OF OWNERSHIP (km²)

• Public lands (Québec)	1 374 255
• Private lands	115 994
• Federal lands	6 397

SURVEY ZONES (km²)

• Intensive survey zone	764 843
• Extensive survey zone	464 481
• Unsurveyed zone	267 322

PUBLIC LAND USE PLANNING (km²)

Public lands ¹	1 373 490
• Forest production prohibited	65 552
• Forest production allowed	86 830
• Forest production has priority	1 221 108
- Forest and leisure area	6 650
- Forest production area	361 206
- Other resource production areas	853 252

¹ The areas were established from data gathered in 1997, and differ slightly from the areas measured during forest surveys. In particular, they have not been adjusted to reflect the latest modifications, including those resulting from sales of land, for example. Harmonization should be completed by 2002.

MANAGEMENT OF PRIVATE FORESTS IN 1999

Development agencies (no.)	17
• Productive area (ha, 000s)	6 459
Syndicates or wood marketing boards (no.)	15
Owners receiving benefits under the Private Forest Development Program (no.)	12 959

ADMINISTRATION OF PUBLIC FORESTS AS AT MARCH 31, 1999 (no.)

Administrative regions	17
Common areas	120
Timber supply and forest management agreements (TSFMA)	264

FOREST COOPERATIVES IN 1997-1998

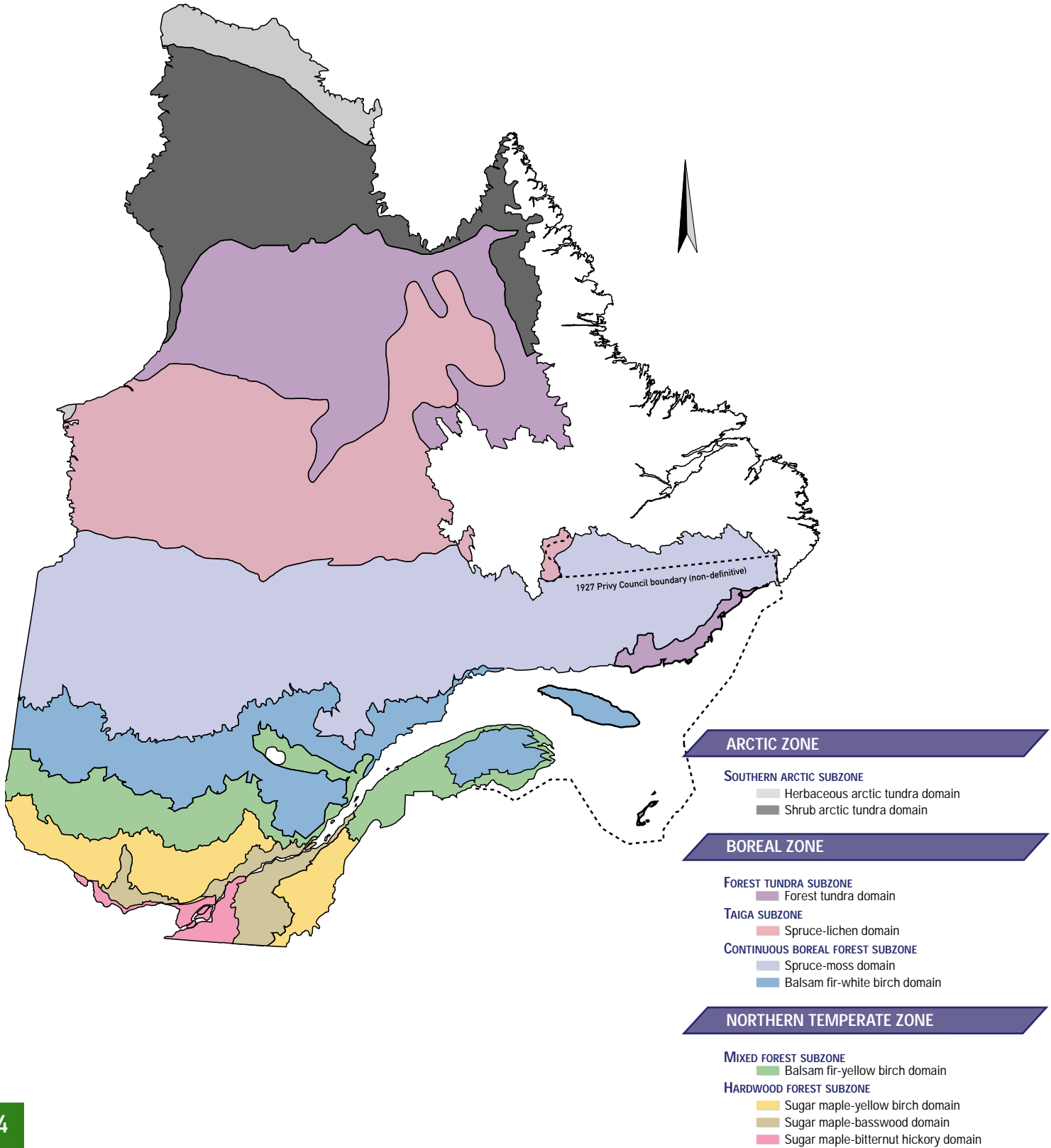
• Forest cooperatives (no.)	46
• Members (no.)	3 550
• Workers (4 weeks or over)	5 901
• Silvicultural work (ha, 000s)	63 399
• Harvest (m ³ , 000s)	6 500
• Turnover (\$, millions)	429



GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

Vegetation Zones and Subzones

01.01.01

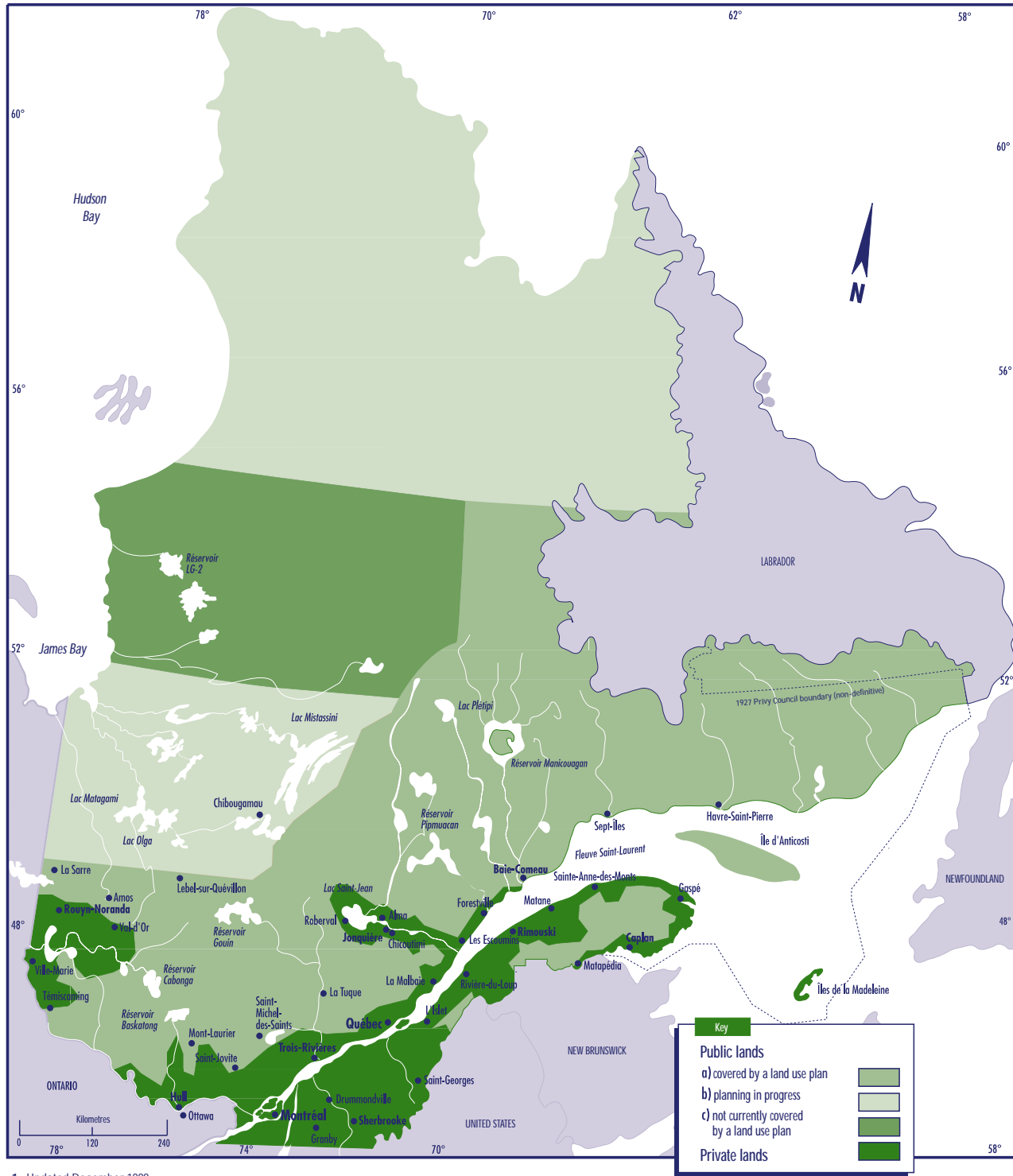


GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

Public Land Use Planning

AREAS SUBJECT TO THE LAND USE PLANNING PROCESS 1

01.03.01



1 Updated December 1999

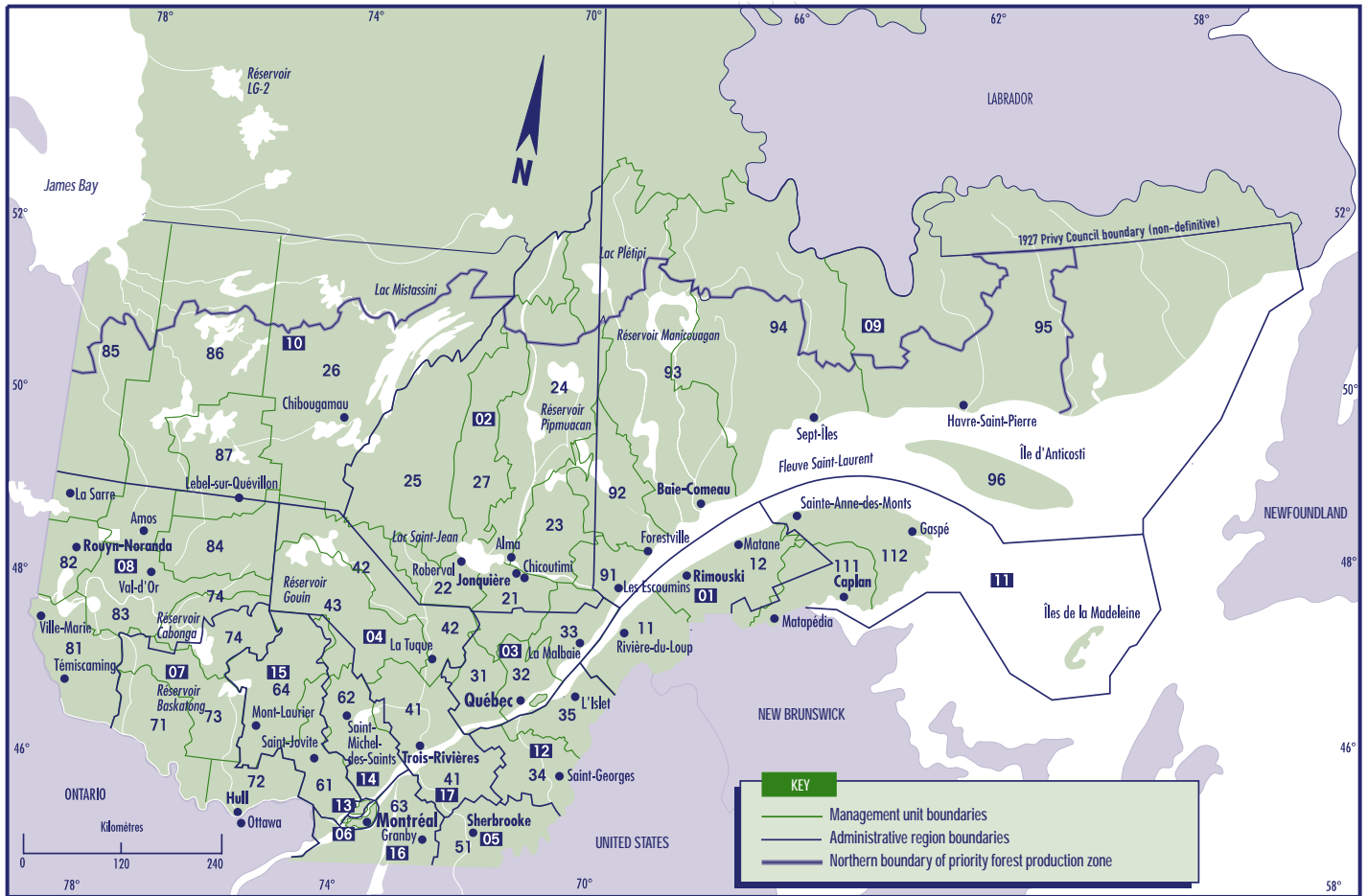
Sources: Direction générale de la gestion du territoire public and Service du développement et de l'intégrité du territoire



GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

Administrative divisions in Québec's public forests ¹

01.05.02



KEY	
ADMINISTRATIVE REGIONS	MANAGEMENT UNITS
01 Bas-Saint-Laurent	11-12 p. ² -111 p.-112 p.
02 Saguenay—Lac-Saint-Jean	21 p.-22-23 p.-24-25-27-33 p.-42 p.-91 p.-92 p.-93 p.
03 Capitale-Nationale	21 p.-31-32-33 p.
04 Mauricie	41 p.-42 p.-43 p.
05 Estrie	51
06 Montréal	63 p.
07 Outaouais	71-72-73-74 p.
08 Abitibi-Témiscamingue	74 p.-81-82-83-84 p.
	85 p.-86 p.-87 p.
09 Côte-Nord	23 p.-91 p.-92 p.-93 p.-94-95-96 p.
10 Nord-du-Québec	26-84 p.-85 p.-86 p.-87 p.
11 Gaspésie—Îles-de-la-Madeleine	111 p.-112 p.-12 p.
12 Chaudière-Apalaches	34-35
13 Laval	63 p.
14 Lanaudière	41 p.-43 p.-62 p.-64 p.
15 Laurentides	61-62 p.-64 p.
16 Montérégie	63 p.
17 Centre-du-Québec	41 p.
	1. Updated July 1997
	2 p.: part of

N.B. This document provides figures for each of the Québec government's 17 administrative regions. However, for internal management purposes, the ministère des Ressources naturelles considers only 10 administrative regions, subdivided into 36 management units.

GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

Types of Ownership and Survey Zones

BREAKDOWN OF QUÉBEC ¹ BY SURVEY ZONE AND TYPE OF OWNERSHIP ²

01.06.02

	ADMINISTRATIVE REGIONS																	TOTAL
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	
	(km ²)																	
UNSURVEYED ZONE																		
Québec public lands	0	0	0	0	0	0	0	0	0	260 771	0	0	0	0	0	0	0	260 771
Private lands (Inuit)	0	0	0	0	0	0	0	0	0	6 551	0	0	0	0	0	0	0	6 551
Federal lands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total area	0	0	0	0	0	0	0	0	0	267 322	0	0	0	0	0	0	0	267 322
EXTENSIVE SURVEY ZONE ³																		
Québec public lands	0	0	0	0	0	0	0	0	47 359	413 443	0	0	0	0	0	0	0	460 802
Forests in the public domain ⁴	47 359 413 443																	460 802
Other tenures ⁵																		0
Private lands	0	0	0	0	0	0	0	0	0	2 116	0	0	0	0	0	0	0	2 116
Large holdings ⁶	2 116																	2 116
Small holdings																		0
Federal lands	0	0	0	0	0	0	0	0	38	1 525	0	0	0	0	0	0	0	1 563
Total area	0	0	0	0	0	0	0	0	47 397	417 084	0	0	0	0	0	0	0	464 481
INTENSIVE SURVEY ZONE ³																		
Québec public lands	11 563	100 073	12 667	31 549	754	92	25 661	57 341	222 493	147 740	16 285	1 599	0	9 022	15 176	549	118	652 682
Forests in the public domain	11 250	99 427	11 423	31 508	543	0	25 351	55 029	222 006	147 603	15 488	1 471	0	8 402	14 397	530	74	644 502
Other tenures	313	646	1 244	41	211	0	310	2 312	487	138	797	128	0	620	779	19	44	8 088
Private lands	11 072	6 307	6 692	7 643	9 671	514	7 895	7 180	1 991	1 463	3 973	13 617	261	4 375	6 844	10 877	6 952	107 327
Large holdings	1 124	861	2 315	3 647	1 306	0	487	142	971	1 179	125	689	0	3	60	33	40	12 982
Small holdings	9 948	5 446	4 377	3 996	8 365	514	7 408	7 038	1 020	284	3 848	12 928	261	4 373	6 784	10 844	6 912	94 345
Federal lands	2	17	242	586	5	15	545	26	409	1846	289	0	0	8	477	107	259	4 834
Total area	22 637	106 397	19 601	39 778	10 430	621	34 101	64 547	224 893	151 049	20 547	15 216	261	13 405	22 498	11 533	7 329	764 843
Total (land)	22 637	106 397	19 601	39 778	10 430	621	34 101	64 547	272 290	835 455	20 547	15 216	261	13 405	22 498	11 533	7 329	1 496 646

¹ Not including areas covered by the waters of the St. Lawrence River and Gulf, James Bay, Hudson Bay, Ungava Bay and the Hudson Strait.

² Updated November 2000: the original data were drawn from the 2nd survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the 3rd survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).

³ The summary of surveyed forests in Chapter 2 covers the intensive survey zone only, since forest ecosystems in the extensive survey zone are so fragile that timber harvesting is prohibited.

⁴ Land supporting forest stands.

⁵ Forest stations, experimental and research forests, etc.

⁶ More than 800 hectares in a single block.

N.B.: Figures have been rounded off, which may have caused negligible errors in the totals.

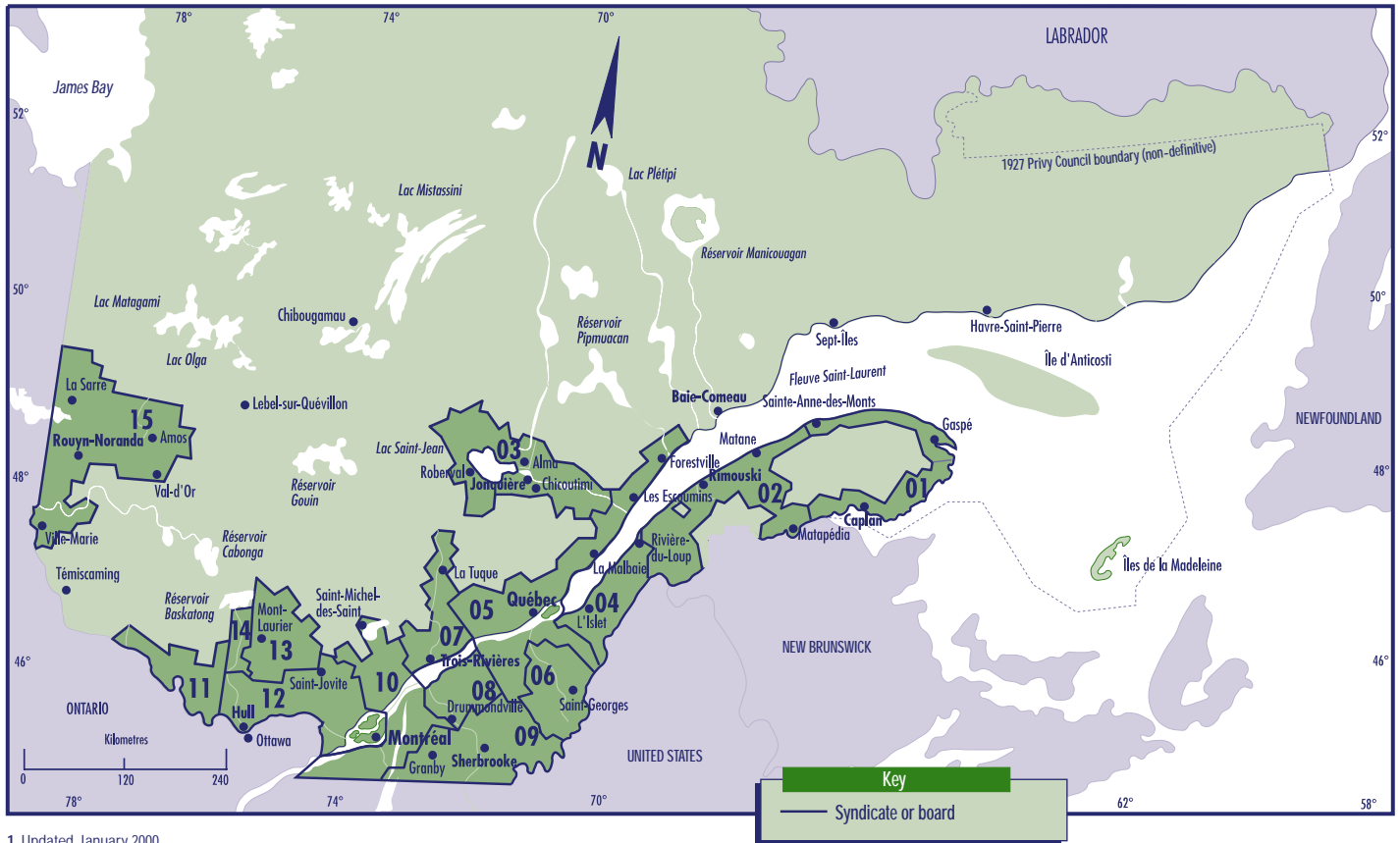


GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

Private Forests

AREAS COVERED BY SYNDICATES AND WOOD MARKETING BOARDS ¹

01.07.01



¹ Updated January 2000

SYNDICATES OR BOARDS

01.07.02

- 01 - Syndicat des producteurs de bois de la Gaspésie
- 02 - Syndicat des producteurs de bois du Bas-Saint-Laurent
- 03 - Syndicat des producteurs de bois du Saguenay—Lac-Saint-Jean
- 04 - Syndicat des producteurs de bois de la Côte-du-Sud
- 05 - Syndicat des producteurs de bois de la région de Québec
- 06 - Syndicat des producteurs de bois de la Beauce
- 07 - Syndicat des producteurs de bois de la Mauricie
- 08 - Syndicat des producteurs de bois du Centre-du-Québec
- 09 - Syndicat des producteurs de bois de l'Estrie
- 10 - Syndicat des producteurs de bois de la région de Montréal
- 11 - Office des producteurs de bois du Pontiac
- 12 - Syndicat des producteurs de bois Outaouais-Laurentides
- 13 - Syndicat des producteurs de bois du comté de Labelle
- 14 - Office des producteurs de bois de la Gatineau
- 15 - Syndicat des producteurs de bois d'Abitibi-Témiscamingue

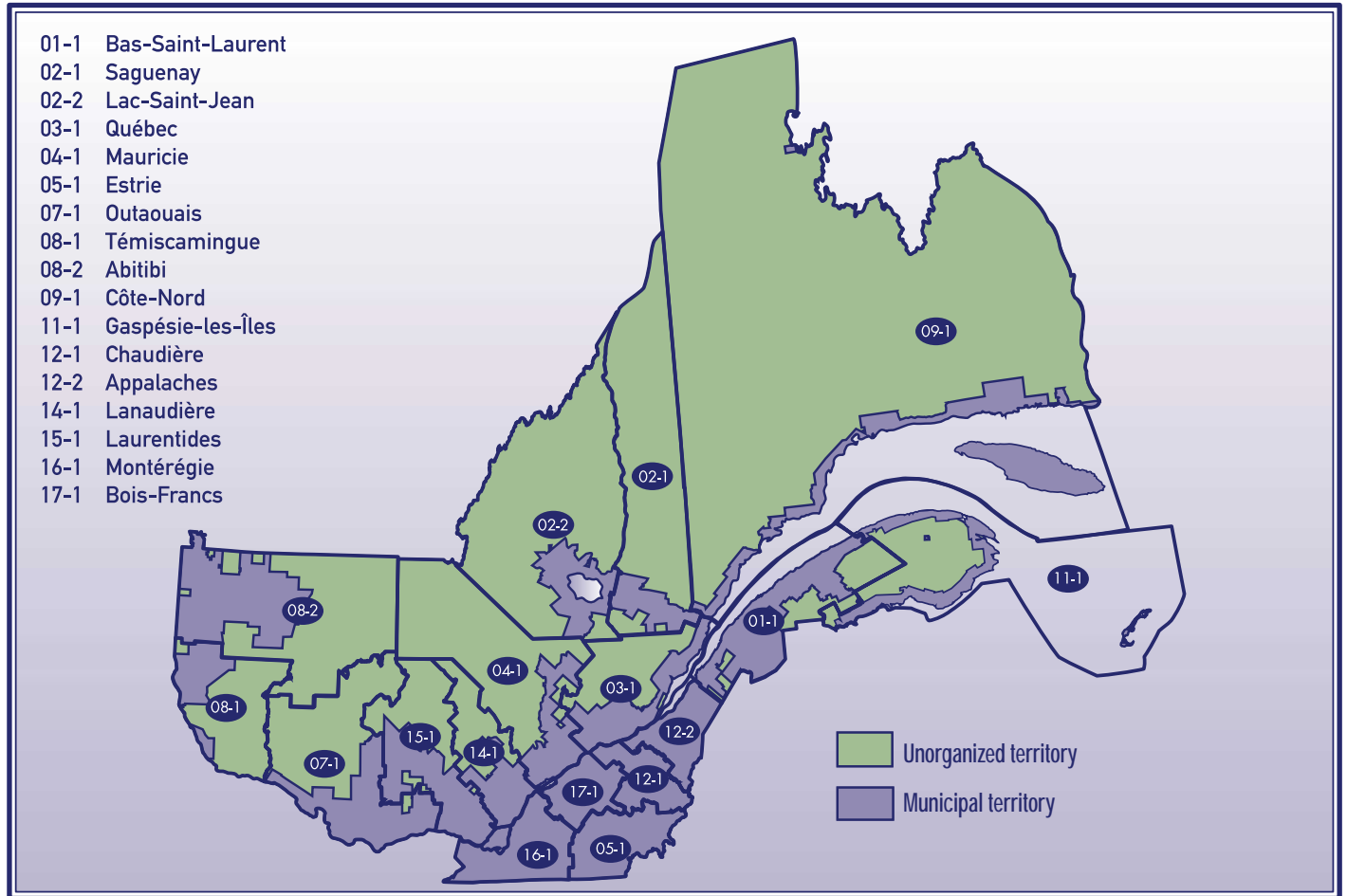
N.B. There are approximately 120 000 private woodlot owners in Québec, and 41 407 are registered as forest producers within the meaning of the **Forest Act** (December 1999). Of these, 12 959 received benefits under the **Private Forest Development Program** in 1997-1998.

GEOGRAPHICAL DISTRIBUTION OF QUÉBEC'S FORESTS

Private Forests (cont'd)

REGIONAL AGENCIES FOR PRIVATE FOREST DEVELOPMENT ¹

01.07.03



¹ Updated December 1999



INTENSIVE SURVEY ZONE

Highlights

02.00.01

LAND SURVEY	AREA (km ²)	GROSS MERCHANTABLE VOLUME (m ³ , 000s)
Intensive survey zone ¹	764 843	
Bodies of water	-76 188	
Non-forest land	-33 532	
Forest land	655 123	
Unproductive forest land	-126 253	
Productive forest land (grades of 41% and over)	-10 706	
Productive forest land (grades of 0-40%)	518 164	4 367 902
• Québec public lands	448 928	3 722 564
• Small private holdings	55 126	524 670
• Large private holdings	11 072	88 191
• Federal lands	3 039	32 478

¹ Area in which the ministère des Ressources naturelles conducts detailed forest surveys.

INTENSIVE SURVEY ZONE

Area and Gross Merchantable Volume of Productive Forests (grades of 0-40%) ¹

BY AGE, FOREST TYPE AND ADMINISTRATIVE REGION

02.03.01

		ADMINISTRATIVE REGIONS								SUBTOTAL ²	
		01		02		03		04			
		(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)
TOTAL AREA ²		18 587	164 827	79 584	618 995	15 528	121 401	31 356	312 799	145 054	1 218 022
BY AGE	0-10 years	4 916	2 324	14 638	8 967	2 831	3 637	4 049	3 121	26 434	18 050
	30 years	1 773	12 681	9 655	44 317	4 160	25 312	4 947	25 178	20 535	107 489
	50 years	6 847	82 148	12 682	105 642	4 131	39 901	10 505	127 760	34 166	355 451
	70 years	3 163	42 539	8 847	97 431	3 118	36 494	5 706	77 553	20 832	254 017
	90 years	1 629	21 817	9 759	122 676	1 147	14 808	5 043	67 133	17 577	226 435
	120 years	259	3 317	24 004	239 961	141	1 249	1 106	12 053	25 509	256 580
BY FOREST TYPE	Softwood	6 812	64 424	52 163	446 857	5 548	42 194	12 137	119 377	76 661	672 852
	Mixedwood	6 326	59 980	12 136	111 953	5 108	43 786	10 970	120 826	34 540	336 545
	Hardwood	3 932	40 359	5 868	59 387	3 526	35 233	5 940	72 596	19 267	207 575
	Regenerating	1 516	65	9 416	797	1 346	187	2 308	0	14 585	1 050
QUÉBEC PUBLIC LANDS ²		10 831	99 848	75 769	598 477	10 428	77 783	25 590	266 796	122 619	1 042 905
BY AGE	0-10 years	2 851	287	13 215	7 342	1 874	1 772	2 861	2 204	20 801	11 605
	30 years	834	5 252	7 844	31 109	2 714	14 883	3 858	19 649	15 250	70 894
	50 years	3 045	39 430	12 213	100 945	2 617	24 466	8 666	109 258	26 541	274 099
	70 years	2 462	33 325	8 816	97 154	1 941	20 670	5 037	68 774	18 255	219 923
	90 years	1 414	18 716	9 704	122 226	1 142	14 743	4 410	58 588	16 670	214 273
	120 years	225	2 837	23 979	239 701	141	1 249	757	8 323	25 101	252 110
BY FOREST TYPE	Softwood	4 837	48 210	51 291	442 189	4 586	34 813	10 257	106 997	70 971	632 208
	Mixedwood	3 356	33 014	10 746	103 108	3 006	25 980	9 372	104 443	26 481	266 545
	Hardwood	1 727	18 558	4 971	52 383	1 855	16 803	4 373	55 356	12 925	143 101
	Regenerating	911	65	8 761	797	982	187	1 588	0	12 242	1 050
SMALL PRIVATE HOLDINGS ²		6 701	55 988	3 033	17 289	2 808	24 655	2 273	22 320	14 814	120 251
BY AGE	0-10 years	1 789	2 037	1 003	1 333	580	1 256	458	743	3 829	5 369
	30 years	747	6 153	1 616	11 728	827	6 207	442	3 387	6 631	27 474
	50 years	3 541	39 635	399	4 088	834	9 034	842	10 174	5 617	62 930
	70 years	484	6 043	9	92	566	8 149	352	5 233	1 411	19 517
	90 years	138	2 045	5	49	1	9	156	2 356	300	4 459
	120 years	3	75	0	0	0	0	23	427	26	502
BY FOREST TYPE	Softwood	1 393	9 551	483	2 804	367	2 832	218	1 998	2 461	17 185
	Mixedwood	2 728	25 374	1 286	8 206	1 179	9 851	726	7 492	5 920	50 923
	Hardwood	2 068	21 063	813	6 279	1 045	11 972	1 174	12 830	5 101	52 144
	Regenerating	512	0	450	0	217	0	154	0	1 333	0
LARGE PRIVATE HOLDINGS ²		1 053	8 970	773	3 175	2 089	16 900	2 995	16 463	6 910	45 507
BY AGE	0-10 years	276	0	418	292	344	594	720	166	1 758	1 052
	30 years	192	1 276	191	1 446	601	4 058	641	2 109	1 626	8 889
	50 years	260	3 070	68	591	639	5 921	854	6 350	1 822	15 933
	70 years	216	3 163	22	184	501	6 272	158	1 336	897	10 954
	90 years	77	1 056	50	402	4	55	294	3 203	425	4 716
	120 years	31	405	25	260	0	0	326	3 298	382	3 964
BY FOREST TYPE	Softwood	582	6 662	388	1 861	572	4 309	1 587	9 548	3 129	22 380
	Mixedwood	242	1 586	103	629	863	7 256	602	4 811	1 809	14 282
	Hardwood	137	722	78	685	536	5 335	248	2 104	998	8 846
	Regenerating	92	0	204	0	119	0	558	0	974	0
FEDERAL LANDS ²		2	22	9	54	202	2 064	498	7 220	711	9 359
BY AGE	0-10 years	0	0	3	1	33	15	10	8	46	24
	30 years	0	0	5	34	18	164	5	33	28	231
	50 years	1	14	2	17	42	480	143	1 979	187	2 490
	70 years	1	8	0	1	110	1 404	158	2 210	268	3 623
	90 years	0	0	0	0	0	1	182	2 986	182	2 987
	120 years	0	0	0	0	0	0	0	4	0	4
BY FOREST TYPE	Softwood	0	1	1	3	24	240	76	835	101	1 079
	Mixedwood	1	5	1	10	59	700	270	4 080	331	4 796
	Hardwood	1	15	6	40	91	1 124	144	2 305	242	3 484
	Regenerating	0	0	2	0	29	0	7	0	38	0

¹ Updated November 2000: the original data were drawn from the 2nd survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the 3rd survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).
² The figures have been rounded off, which may have caused negligible errors.



INTENSIVE SURVEY ZONE

Area and Gross Merchantable Volume of Productive Forests (cont'd) (grades of 0-40%)¹

02.03.01

BY AGE, FOREST TYPE AND ADMINISTRATIVE REGION (CONT'D)

		ADMINISTRATIVE REGIONS								SUBTOTAL ² (km ²) (m ³ , 000s)	
		05 (km ²) (m ³ , 000s)		06 (km ²) (m ³ , 000s)		07 (km ²) (m ³ , 000s)		08 (km ²) (m ³ , 000s)			
TOTAL AREA²		7 653	86 391	43	350	27 214	365 977	48 554	444 501	83 464	897 220
BY AGE	0-10 years	1 603	190	20	3	2 565	7 067	8 480	3 070	12 668	10 331
	30 years	1 350	12 862	7	61	1 595	13 410	5 815	24 762	8 766	51 096
	50 years	3 578	53 700	13	215	7 903	117 983	9 622	95 079	21 115	266 977
	70 years	333	5 060	0	0	5 005	69 200	11 159	145 386	16 497	219 646
	90 years	788	14 571	3	71	9 780	154 367	10 210	138 483	20 781	307 492
	120 years	1	7	0	0	366	3 952	3 269	37 720	3 636	41 679
BY FOREST TYPE	Softwood	1 267	13 411	0	3	3 483	37 132	17 676	148 251	22 427	198 797
	Mixedwood	2 809	31 846	3	25	10 435	144 156	17 088	174 707	30 335	350 733
	Hardwood	2 975	41 134	23	323	12 342	183 978	10 991	121 445	26 332	346 880
	Regenerating	602	0	17	0	954	712	2 798	97	4 370	809
QUÉBEC PUBLIC LANDS²		677	9 127	0	0	21 523	287 127	44 859	419 428	67 060	715 682
BY AGE	0-10 years	71	9	0	0	1 868	5 894	7 379	2 856	9 318	8 759
	30 years	53	415	0	0	1 286	9 903	5 199	20 660	6 538	30 977
	50 years	299	4 792	0	0	4 735	68 663	8 119	79 546	13 154	153 001
	70 years	107	1 547	0	0	4 272	57 531	10 784	140 953	15 163	200 031
	90 years	147	2 359	0	0	8 999	141 247	10 178	138 103	19 323	281 709
	120 years	1	6	0	0	363	3 888	3 201	37 310	3 565	41 205
BY FOREST TYPE	Softwood	108	1 001	0	0	2 993	29 694	17 113	145 034	20 214	175 730
	Mixedwood	272	3 455	0	0	8 515	114 091	16 234	167 143	25 020	284 689
	Hardwood	287	4 670	0	0	9 470	142 630	9 134	107 153	18 891	254 454
	Regenerating	10	0	0	0	545	712	2 379	97	2 935	809
SMALL PRIVATE HOLDINGS²		5 733	62 119	42	349	4 843	66 552	3 563	24 012	14 181	153 032
BY AGE	0-10 years	1 262	143	19	3	647	1 052	1 093	211	3 022	1 410
	30 years	1 166	11 300	7	60	276	3 202	587	4 000	2 036	18 562
	50 years	2 755	40 256	13	215	2 675	41 762	1 473	15 308	6 916	97 541
	70 years	135	2 124	0	0	630	10 041	365	4 301	1 131	16 465
	90 years	415	8 296	3	71	614	10 495	12	129	1 044	18 992
	120 years	0	0	0	0	0	0	32	63	32	63
BY FOREST TYPE	Softwood	992	10 674	0	3	453	6 840	476	2 550	1 922	20 067
	Mixedwood	2 154	23 997	3	25	1 708	26 721	826	7 295	4 691	58 037
	Hardwood	2 054	27 447	23	322	2 293	32 992	1 842	14 168	6 212	74 928
	Regenerating	534	0	15	0	389	0	419	0	1 356	0
LARGE PRIVATE HOLDINGS²		1 241	15 129	0	0	403	5 633	113	945	1 757	21 706
BY AGE	0-10 years	270	38	0	0	36	108	2	0	309	146
	30 years	131	1 148	0	0	24	203	22	62	177	1 413
	50 years	523	8 636	0	0	207	3 167	23	169	753	11 972
	70 years	91	1 390	0	0	40	663	8	115	139	2 168
	90 years	227	3 916	0	0	93	1 428	21	252	340	5 596
	120 years	0	1	0	0	3	63	36	347	39	411
BY FOREST TYPE	Softwood	167	1 732	0	0	18	322	86	656	271	2 711
	Mixedwood	383	4 389	0	0	106	1 684	23	242	511	6 316
	Hardwood	633	9 007	0	0	270	3 626	4	46	907	12 680
	Regenerating	58	0	0	0	9	0	0	0	67	0
FEDERAL LANDS²		1	17	1	1	445	6 666	19	116	467	6 800
BY AGE	0-10 years	0	0	1	0	13	13	6	3	20	15
	30 years	0	0	0	1	10	101	6	41	16	143
	50 years	1	17	0	0	285	4 391	6	55	292	4 463
	70 years	0	0	0	0	63	964	2	18	65	982
	90 years	0	0	0	0	74	1 196	0	0	74	1 196
	120 years	0	0	0	0	0	0	0	0	0	0
BY FOREST TYPE	Softwood	0	3	0	0	18	277	2	10	20	290
	Mixedwood	0	4	0	0	107	1 660	6	27	113	1 691
	Hardwood	1	10	0	1	309	4 729	11	79	321	4 818
	Regenerating	0	0	1	0	11	0	1	0	13	0

¹ Updated November 2000; the original data were drawn from the 2nd survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the 3rd survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).
² The figures have been rounded off, which may have caused negligible errors.

INTENSIVE SURVEY ZONE

Area and Gross Merchantable Volume of Productive Forests (cont'd) (grades of 0-40%) ¹

BY AGE, FOREST TYPE AND ADMINISTRATIVE REGION (CONT'D)

02.03.01

		ADMINISTRATIVE REGIONS								SUBTOTAL ²	
		09		10		11		12			
		(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)
TOTAL AREA ²		143 736	1 108 749	83 688	525 583	16 451	135 773	10 899	93 634	254 775	1 863 738
BY AGE	0-10 years	15 267	7 854	16 935	2 958	3 645	830	3 005	1 732	38 853	13 373
	30 years	10 062	29 937	10 050	23 529	2 616	13 323	1 768	13 763	24 496	80 553
	50 years	6 760	55 219	10 205	85 156	5 141	57 364	4 465	54 179	26 572	251 918
	70 years	12 123	111 977	16 032	142 242	2 521	31 601	788	9 962	31 464	295 782
	90 years	7 414	92 972	5 645	59 325	2 054	27 148	866	13 916	15 979	193 362
	120 years	92 109	810 789	24 822	212 373	474	5 507	6	81	117 412	1 028 750
BY FOREST TYPE	Softwood	118 944	998 564	62 747	458 879	7 091	65 404	2 458	21 189	191 239	1 544 037
	Mixedwood	8 803	84 444	4 782	53 806	5 981	51 674	4 687	38 404	24 253	228 327
	Hardwood	2 944	21 175	1 076	12 004	1 905	18 612	2 699	34 038	8 624	85 829
	Regenerating	13 045	4 566	15 084	893	1 475	83	1 056	2	30 659	5 545
QUÉBEC PUBLIC LANDS ²		142 173	1 097 448	81 696	509 666	13 343	108 351	1 489	14 612	238 701	1 730 077
BY AGE	0-10 years	15 030	6 986	16 624	2 877	2 996	768	431	48	35 080	10 679
	30 years	9 675	28 413	9 965	23 283	2 088	9 976	81	449	21 809	62 121
	50 years	6 263	51 326	10 083	84 258	3 854	42 420	376	5 578	20 577	183 582
	70 years	11 987	110 503	15 863	140 334	2 061	25 350	421	5 762	30 332	281 948
	90 years	7 249	91 140	5 370	55 914	1 874	24 383	174	2 696	14 667	174 133
	120 years	91 969	809 080	23 791	202 999	470	5 454	6	81	116 236	1 017 614
BY FOREST TYPE	Softwood	118 087	991 573	61 254	445 533	6 363	59 345	526	5 264	186 231	1 501 715
	Mixedwood	8 401	81 692	4 604	51 754	4 377	36 931	583	5 735	17 965	176 112
	Hardwood	2 770	20 191	1 014	11 493	1 277	11 992	218	3 612	5 279	47 287
	Regenerating	12 915	3 992	14 823	886	1 326	83	162	2	29 226	4 963
SMALL PRIVATE HOLDINGS ²		518	3 439	170	771	2 777	24 617	8 752	72 411	12 217	101 237
BY AGE	0-10 years	78	446	58	26	608	60	2 387	1 670	3 131	2 202
	30 years	159	673	46	181	469	3 070	1 634	12 954	2 309	16 879
	50 years	204	1 535	44	370	1 155	13 580	3 807	44 294	5 210	59 778
	70 years	31	316	7	70	383	5 371	291	3 182	712	8 940
	90 years	14	126	9	88	159	2 494	633	10 311	814	13 019
	120 years	31	343	6	35	4	42	0	0	41	420
BY FOREST TYPE	Softwood	210	1 483	57	273	649	5 351	1 800	14 769	2 716	21 877
	Mixedwood	150	961	47	355	1 435	13 308	3 786	29 707	5 418	44 331
	Hardwood	101	580	35	142	557	5 957	2 331	27 935	3 024	34 615
	Regenerating	56	415	31	0	137	0	834	0	1 058	415
LARGE PRIVATE HOLDINGS ²		762	5 414	759	6 497	103	779	659	6 611	2 283	19 301
BY AGE	0-10 years	120	357	125	40	20	0	188	14	452	411
	30 years	192	703	16	36	32	169	53	360	293	1 268
	50 years	225	1 799	47	342	25	266	282	4 308	578	6 714
	70 years	64	663	77	851	19	233	77	1 018	236	2 766
	90 years	105	1 172	170	2 115	6	101	59	910	340	4 298
	120 years	58	720	325	3 114	1	10	0	0	383	3 845
BY FOREST TYPE	Softwood	472	3 740	559	5 347	50	407	132	1 157	1 213	10 651
	Mixedwood	186	1 216	78	996	50	357	318	2 963	631	5 531
	Hardwood	57	319	13	155	3	16	150	2 491	223	2 980
	Regenerating	47	140	108	0	1	0	59	0	216	140
FEDERAL LANDS ²		282	2 448	1 064	8 650	228	2 026	0	0	1 574	13 123
BY AGE	0-10 years	39	64	129	15	21	2	0	0	189	81
	30 years	36	149	22	29	27	108	0	0	85	286
	50 years	68	560	32	186	106	1 099	0	0	207	1 844
	70 years	41	494	85	988	58	647	0	0	184	2 128
	90 years	46	535	96	1 208	15	171	0	0	158	1 913
	120 years	51	646	700	6 225	0	0	0	0	751	6 871
BY FOREST TYPE	Softwood	174	1 769	876	7 726	28	300	0	0	1 078	9 795
	Mixedwood	66	575	52	701	120	1 078	0	0	238	2 354
	Hardwood	15	85	14	215	68	647	0	0	98	947
	Regenerating	27	19	121	8	11	0	0	0	159	26

¹ Updated November 2000; the original data were drawn from the 2nd survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the 3rd survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).
² The figures have been rounded off, which may have caused negligible errors.



INTENSIVE SURVEY ZONE

Area and Gross Merchantable Volume of Productive Forests (cont'd) (grades of 0-40%)¹

BY AGE, FOREST TYPE AND ADMINISTRATIVE REGION (CONT'D)

02.03.01

		ADMINISTRATIVE REGIONS										TOTAL ²	
		13		14		15		16		17			
		(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)	(km ²)	(m ³ , 000s)
TOTAL AREA²		59	345	9 894	104 712	17 866	212 998	3 543	40 399	3 509	30 468	518 165	4 367 902
BY AGE	0-10 years	31	0	1 425	2 374	1 834	2 492	593	313	788	700	82 627	47 633
	30 years	13	101	1 145	7 810	1 569	11 103	795	6 660	763	5 042	58 081	269 853
	50 years	14	224	3 816	47 878	5 171	63 114	1 613	22 777	1 792	21 578	94 259	1 029 916
	70 years	0	1	2 487	33 774	4 447	63 648	118	1 969	37	496	75 882	869 332
	90 years	1	19	839	10 749	4 019	58 211	425	8 680	128	2 653	59 750	807 602
	120 years	0	0	182	2 126	826	14 430	0	0	0	0	147 565	1 343 565
BY FOREST TYPE	Softwood	0	0	1 752	18 400	2 409	23 325	209	2 855	549	4 168	295 248	2 464 434
	Mixedwood	8	59	4 418	49 290	6 367	74 520	819	11 012	973	9 974	101 713	1 060 461
	Hardwood	24	286	3 096	37 008	8 155	115 114	2 224	26 533	1 708	16 327	69 428	835 553
	Regenerating	28	0	627	13	936	38	291	0	279	0	51 776	7 454
QUÉBEC PUBLIC LANDS²		0	0	7 565	81 891	12 880	151 103	16	153	88	753	448 928	3 722 564
BY AGE	0-10 years	0	0	1 063	1 995	1 143	1 596	5	1	16	20	67 426	34 656
	30 years	0	0	691	4 354	872	4 611	4	33	16	90	45 179	173 080
	50 years	0	0	2 681	34 038	3 133	33 838	5	70	48	505	66 139	679 133
	70 years	0	0	2 166	29 449	3 222	44 201	1	8	4	56	69 142	775 616
	90 years	0	0	783	9 937	3 705	52 841	2	41	4	83	55 155	733 016
	120 years	0	0	182	2 118	805	14 015	0	0	0	0	145 887	1 327 062
BY FOREST TYPE	Softwood	0	0	1 586	16 801	2 052	19 862	1	4	19	154	281 073	2 346 474
	Mixedwood	0	0	3 441	39 626	4 791	54 252	3	33	32	308	77 733	821 565
	Hardwood	0	0	2 102	25 450	5 508	76 952	10	117	32	290	44 748	547 651
	Regenerating	0	0	436	13	529	38	2	0	5	0	45 374	6 873
SMALL PRIVATE HOLDINGS²		59	345	2 319	22 702	4 717	58 748	3 439	39 100	3 379	29 254	55 126	524 670
BY AGE	0-10 years	31	0	362	378	643	839	571	285	763	678	12 352	11 162
	30 years	13	101	452	3 449	640	6 006	783	6 553	741	4 903	10 605	83 926
	50 years	14	224	1 133	13 822	1 947	27 959	1 569	22 117	1 732	20 921	24 139	305 291
	70 years	0	1	318	4 274	1 171	18 544	114	1 906	31	404	4 888	70 051
	90 years	1	19	53	774	297	5 002	402	8 239	111	2 349	3 022	52 853
	120 years	0	0	0	3	21	398	0	0	0	0	121	1 386
BY FOREST TYPE	Softwood	0	0	166	1 591	331	3 162	208	2 844	525	3 957	8 329	70 682
	Mixedwood	8	59	971	9 595	1 493	19 218	811	10 888	928	9 494	20 240	202 544
	Hardwood	24	286	991	11 516	2 514	36 368	2 144	25 368	1 655	15 803	21 665	251 029
	Regenerating	28	0	190	0	380	0	278	0	271	0	4 893	415
LARGE PRIVATE HOLDINGS²		0	0	3	34	53	732	31	499	37	412	11 072	88 191
BY AGE	0-10 years	0	0	0	0	7	41	3	8	9	2	2 537	1 659
	30 years	0	0	0	1	4	42	1	7	6	48	2 106	11 668
	50 years	0	0	1	7	18	267	10	177	8	106	3 190	35 175
	70 years	0	0	0	4	18	273	1	26	2	35	1 293	16 226
	90 years	0	0	1	21	6	92	16	281	13	222	1 141	15 226
	120 years	0	0	0	0	1	17	0	0	0	0	805	8 237
BY FOREST TYPE	Softwood	0	0	0	4	4	54	1	8	5	47	4 623	35 854
	Mixedwood	0	0	1	9	17	234	3	59	12	166	2 985	26 594
	Hardwood	0	0	1	21	30	444	27	432	17	200	2 203	25 603
	Regenerating	0	0	0	0	2	0	0	0	3	0	1 262	140
FEDERAL LANDS²		0	0	7	84	217	2 414	57	648	5	49	3 039	32 478
SELON L'ÂGE	0-10 years	0	0	1	0	42	15	15	19	1	0	313	155
	30 years	0	0	1	6	53	444	8	68	0	1	191	1 179
	50 years	0	0	1	11	73	1 050	28	414	4	46	792	10 317
	70 years	0	0	3	46	37	629	1	29	0	1	559	7 440
	90 years	0	0	1	17	12	276	6	118	0	0	432	6 507
	120 years	0	0	0	4	0	0	0	0	0	0	752	6 880
BY FOREST TYPE	Softwood	0	0	0	3	22	248	0	0	1	9	1 222	11 425
	Mixedwood	0	0	5	60	66	817	2	33	1	6	756	9 757
	Hardwood	0	0	1	21	103	1 350	44	615	4	34	813	11 270
	Regenerating	0	0	0	0	26	0	11	0	0	0	248	26

¹ Updated November 2000: the original data were drawn from the 2nd survey for regions 02, 03, 04, 09, 10, 14 and 15, and from the 3rd survey for regions 01, 05, 06, 07, 08, 11, 12, 13, 16 and 17 (a small area is still missing for region 16).
² The figures have been rounded off, which may have caused negligible errors.

FOREST PROTECTION IN QUÉBEC

Highlights

03.00.01

AREAS DISTURBED BY THE SPRUCE BUDWORM (ha, 000s)

	1998	1999 ¹
Light defoliation	1.2	2.6
Moderate defoliation	2.2	3.8
Severe defoliation	7.3	16.5
Total area disturbed	10.7	22.9

¹ Preliminary figures

AREAS DISTURBED BY THE HEMLOCK LOOPER (ha, 000s)

	1998	1999 ¹
Light defoliation	2.6	2.2
Moderate defoliation	6.0	18.8
Severe defoliation	18.3	451.2
Total area disturbed	26.9	472.2

¹ Preliminary figures

FOREST FIRES

Intensive protection zone	1998	1999 ¹
• Fires (no.)	797	1 005
• Area disturbed (ha, 000s)	11.8	27.8
• Fire control and firefighting costs (\$, millions)	55.8	58.8
• Relative importance of fires caused by lightning ² (%)		
- Number		32
- Area disturbed		79

Limited protection zone	1998	1999 ¹
• Fires (no.)	57	32
• Area disturbed (ha, 000s)	406.5	69.9
• Fire control and firefighting costs (\$, millions)	1.4	1.0

¹ Preliminary figures

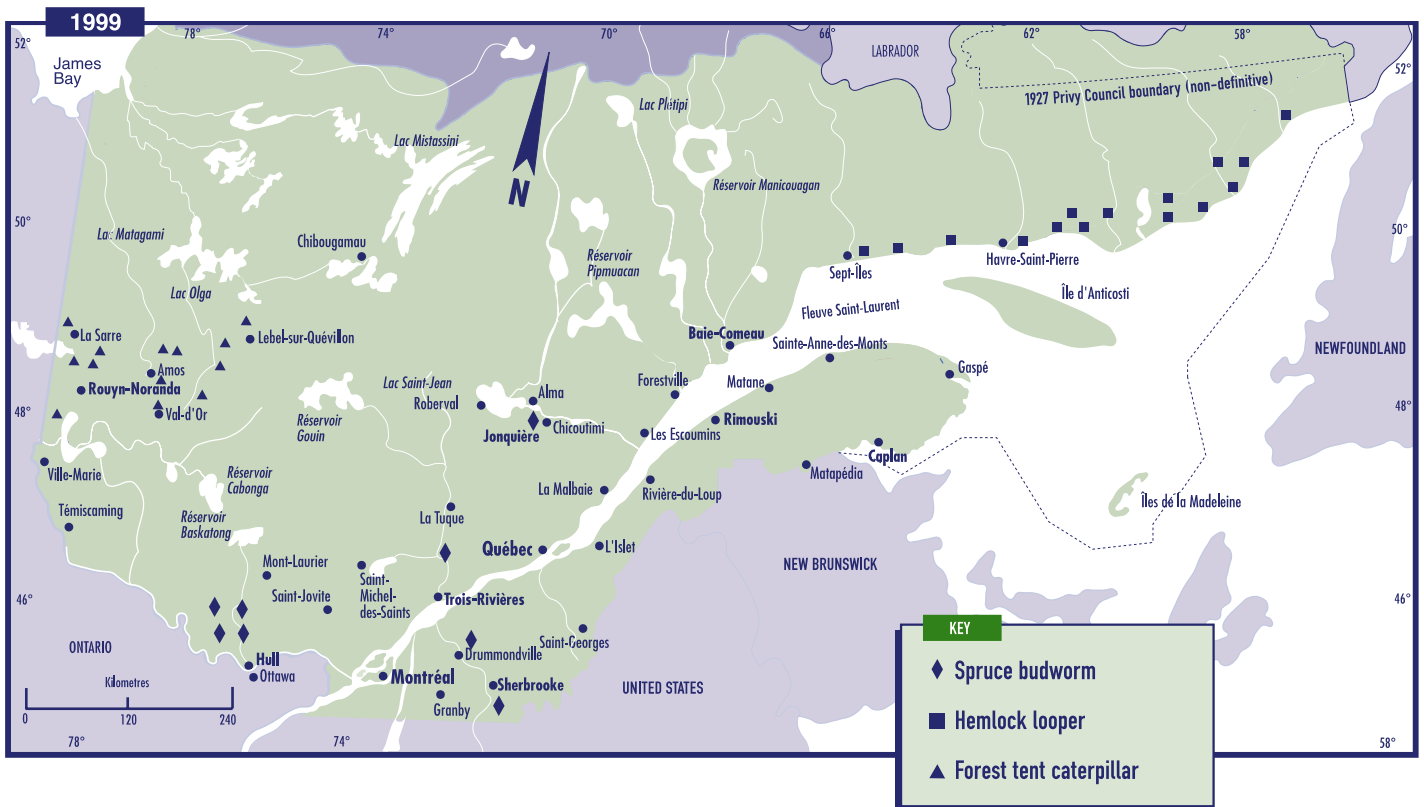
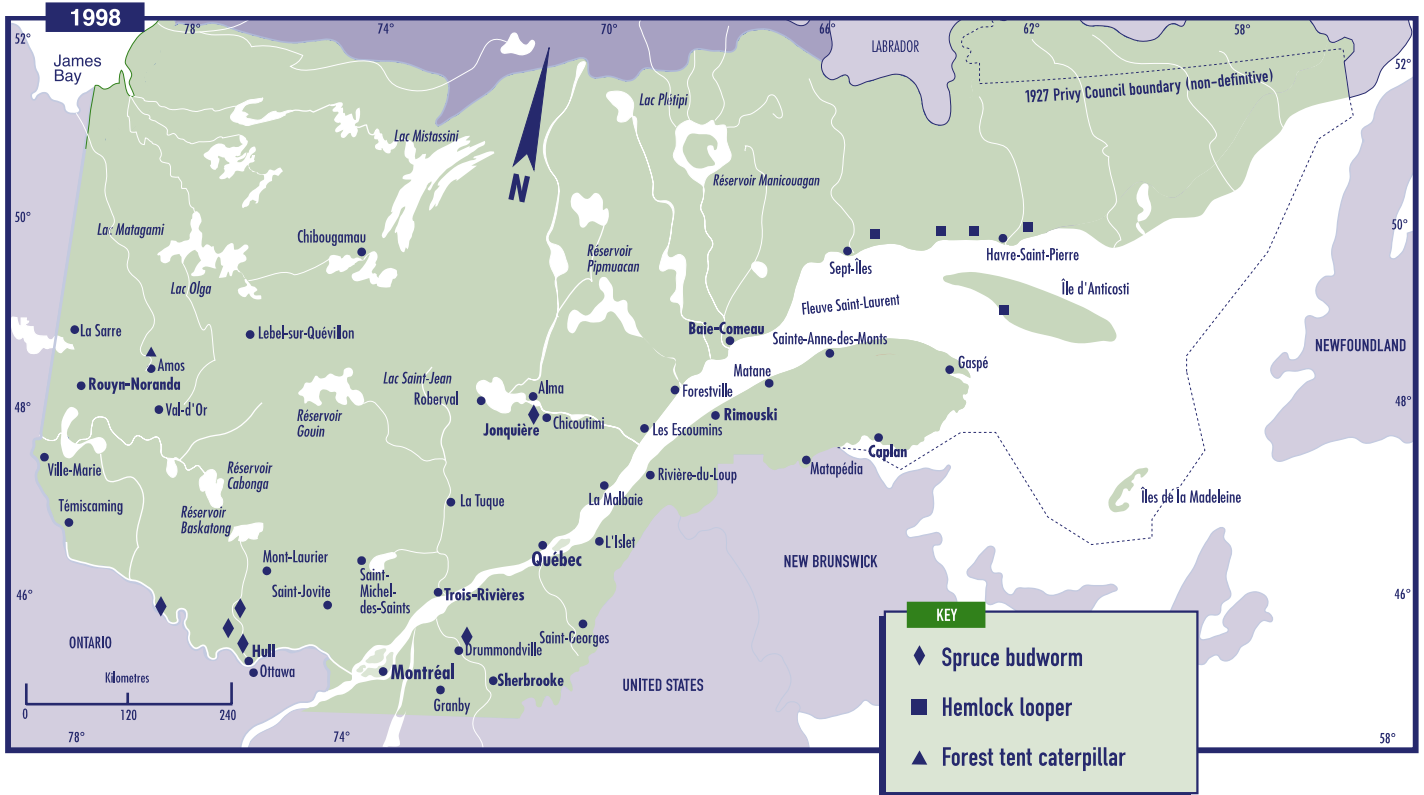
² Lightning was the main cause of forest fires in Québec during the period 1990-1999.

FOREST PROTECTION IN QUÉBEC

Insects and Diseases

03.03.01

AREAS DAMAGED BY DEFOLIATOR INSECTS

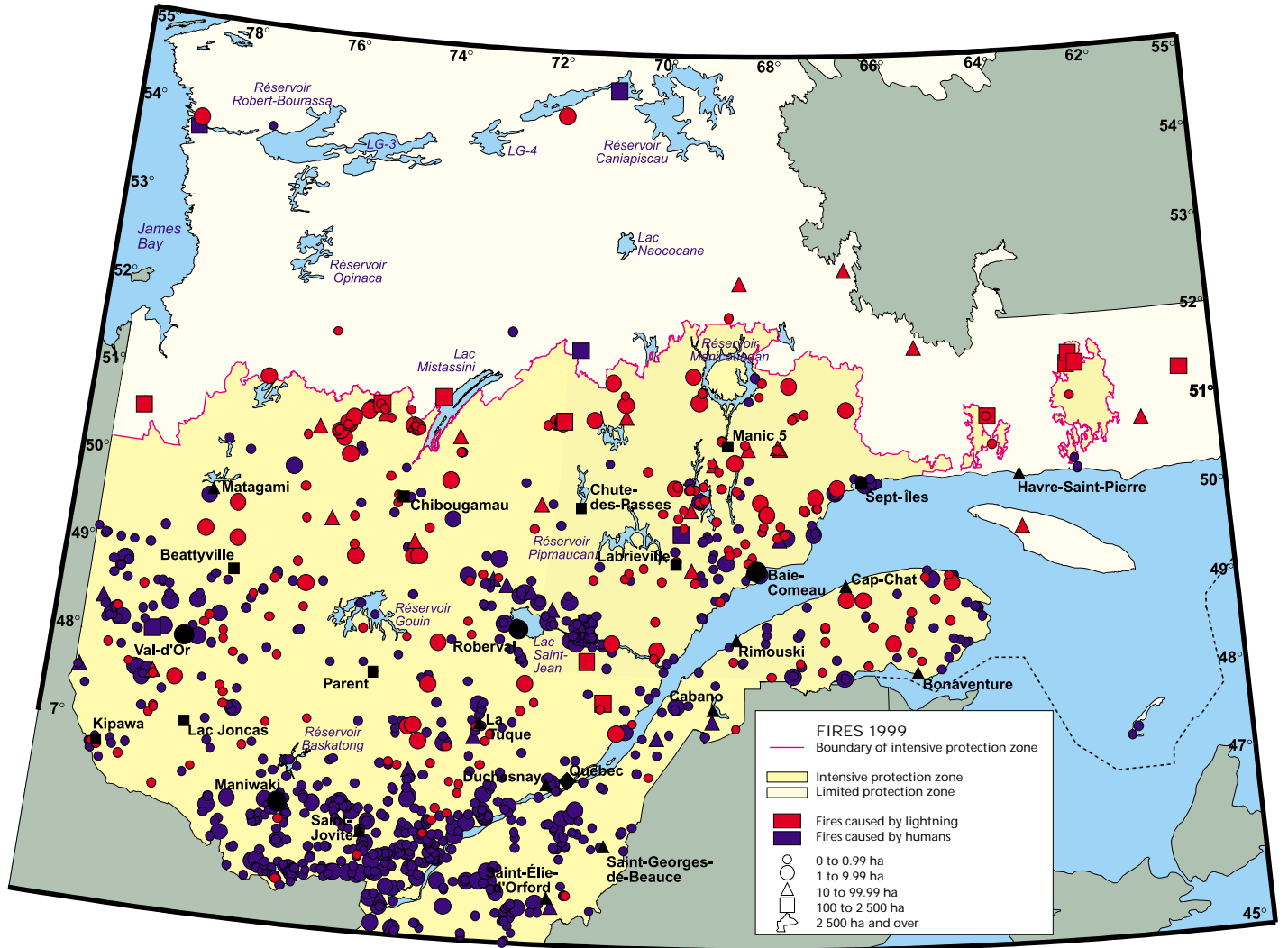


FOREST PROTECTION IN QUÉBEC

Forest Fires

AREAS DAMAGE BY FIRES

03.04.02



FOREST PROTECTION IN QUÉBEC

Forest Fires: Intensive Protection Zone

BREAKDOWN OF FOREST FIRES BY ADMINISTRATIVE REGION

03.04.10

ADMINISTRATIVE REGIONS		1994	1995	1996	1997	1998 1	1999 2
01 BAS-SAINT-LAURENT	no.	27	26	35	16	20	35
	ha	18	6	12	3	5	86
02 SAGUENAY—LAC-SAINT-JEAN	no.	66	185	324	64	61	122
	ha	464	45 240	52 211	5 421	5 321	2 374
03 CAPITALE-NATIONALE	no.	11	38	33	23	20	24
	ha	7	54	13	2 916	6	5 204
04 MAURICIE—BOIS-FRANCS	no.	42	112	111	81	67	79
	ha	744	62 574	2 308	8 822	801	79
05 ESTRIE	no.	7	19	4	18	13	24
	ha	1	19	1	7	14	48
06 MONTRÉAL	no.	0	0	0	0	0	2
	ha	0	0	0	0	0	0
07 OUTAOUAIS	no.	51	115	48	127	104	102
	ha	193	80	46	53	203	39
08 ABITIBI-TÉMISCAMINGUE	no.	94	182	116	118	165	119
	ha	174	55 120	5 238	101	110	429
09 CÔTE-NORD	no.	30	107	141	37	110	134
	ha	281	220	24 731	3 413	1 052	18 913
10 NORD-DU-QUÉBEC	no.	23	123	158	131	38	59
	ha	134	2 561	159 180	72 743	4 189	421
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	no.	17	47	61	26	33	46
	ha	8	29 555	31	179	7	27
12 CHAUDIÈRE-APPALACHES	no.	17	24	7	18	15	33
	ha	18	8	2	10	8	10
13 LAVAL	no.	0	0	0	0	0	0
	ha	0	0	0	0	0	0
14 LANAUDIÈRE	no.	23	65	33	61	61	87
	ha	66	49	17	33	71	42
15 LAURENTIDES	no.	44	73	40	82	52	86
	ha	51	62	22	40	16	31
16 MONTÉRÉGIE	no.	11	29	9	9	22	36
	ha	20	29	5	9	34	94
17 CENTRE-DU-QUÉBEC	no.				8	16	17
	ha				4	9	11
TOTAL	no.	463	1 145	1 120	819	797	1 005
	ha	2 179	195 577	243 817	93 753	11 845	27 807

1 Figures revised in 1999

2 Preliminary figures

SUSTAINABLE DEVELOPMENT OF QUÉBEC'S FORESTS

Highlights

04.00.01

SUSTAINABLE DEVELOPMENT CRITERIA

1. Preservation of biological diversity
2. Maintenance and improvement of the conditions and productivity of forest ecosystems
3. Conservation of soil and water resources
4. Maintenance of the function of forest ecosystems as a component of global ecological cycles
5. Maintenance of the multiple socio-economic benefits society derives from the forests
6. Giving of proper consideration, in selecting forms of development, to the values and needs expressed by the populations concerned

DISTRIBUTION OF PROTECTED AREAS BY VEGETATION ZONE (km²)

Sugar maple-bitternut hickory domain	302
Sugar maple-basswood domain	884
Sugar maple-yellow birch domain	2 718
Balsam fir-yellow birch domain	1 728
Balsam fir-white birch domain	11 681
Spruce-moss domain	989
Forest tundra domain	14 548
Shrub Arctic tundra domain	12 252
Waters of the St. Lawrence River, James Bay, Hudson Bay, Ungava Bay and Hudson Strait	2 954
TOTAL	48 056

PLANT SPECIES DESIGNATED AS THREATENED OR VULNERABLE

Wild leek
 Adam-and-Eve
 Jack-in-the-pulpit
 Hop sedge
 Autumn coral-root, Pringle Corallorhiza variety
 Ram's Head Lady's Slipper
 Spread-leaved sunflower
 Mayapple
 Van Brunt's Jacob's badder
 Lemon sumac, fragrant variety

ANIMAL SPECIES LIKELY TO BE DESIGNATED AS THREATENED OR VULNERABLE

Fish	6
Amphibians	6
Reptiles	8
Birds	13
Mammals	17

FOREST MANAGEMENT

Highlights

05.00.01

ALLOWABLE ANNUAL CUT IN QUÉBEC'S FORESTS (m³, 000s)

	1999	2000
Allowable annual cut – public forests (common areas) (softwoods 71.7%; hardwoods 28.3%)	43 736.8	43 728.9
Allowable harvest – private forests (softwoods 40.5%; hardwoods 59.5%)	13 304.4	13 304.4
TOTAL	57 041.2	57 033.3

SURFACE AREAS CONSIDERED IN CALCULATING THE ALLOWABLE ANNUAL CUT IN QUÉBEC (ha, 000s)

	1999	2000
Productive public forests ¹ - TSFMA	30 835.7	30 836.4
- FMC	532.1	1 384.9
Private forests	6 629.8	6 629.8
TOTAL	37 997.6	38 851.1

¹ Grades of 0-40%

VOLUME OF TIMBER ALLOCATED IN QUÉBEC'S PUBLIC FORESTS (m³, 000s)

	1999	2000
Timber supply and forest management agreements (TSFMA)	37 550.7	37 258.9
Forest management contracts (FMC)	343.3	481.1

NUMBER OF COMMON AREAS AND TIMBER SUPPLY AND FOREST MANAGEMENT AGREEMENTS

	1999	2000
Common areas	120	121
Timber supply and forest management agreements (TSFMA)	264	256
Forest management contracts (FMC)	64	77

VOLUME OF TIMBER HARVESTED IN QUÉBEC, 1998-1999 (m³, 000s)

Public forests	33 003
Private forests ¹	10 355
• Volumes marketed by syndicates and marketing boards	6 313
TOTAL	43 358
Volume harvested/allowable annual cut ²	
• Softwoods	87.7 %
• Hardwoods	57.6 %
TOTAL	76.0 %

¹ Including approximately 2.0 million m³ of firewood

² Allowable annual cut (public and private forests), all species combined

SIZE OF CUTTING AREAS IN QUÉBEC, 1998-1999 (ha, 000s)

Public forests	396.0
Private forests (estimate)	85.0
TOTAL	481.0

Total size of cutting areas/productive forest area ¹ 1.29%

¹ Area of public and private forests considered in calculating the allowable annual cut

MARKET VALUE OF STANDING TREES (PUBLIC FORESTS, ALL SPECIES COMBINED), BASED ON THE MEAN PROVINCIAL UNIT RATE

	(\$/m ³)
1997-1998	12.36
1998-1999	10.52
1999-2000	11.56

RELATIVE SHARE OF ROUNDWOOD TRANSPORTATION METHODS IN QUÉBEC, 1998-1999

Truck	99.8%
River driving	0.1%
Rail	0.1%
TOTAL	100%

NETWORK OF PERMANENT FOREST ROADS IN QUÉBEC, 1998-1999

Length (km)	14 017
Bridges (no.)	513

QUÉBEC'S PRODUCTION OF SEEDLINGS FOR REFORESTATION

	1997-1998	1998-1999
Cones harvested (hl)	606.2	
Area of seed tree orchards (ha)	1 180.0	
Seedlings produced (000s)	151 487.0	172 190.0
• MRN nurseries	41 051.0	45 569.0
• Privately owned nurseries	110 436.0	126 621.0

REFORESTATION IN QUÉBEC ¹

		(seedlings, 000s)	(ha, 000s)
Public forests	1997-1998	103 050	58.6
	1998-1999	105 000	50.5
Private forests	1997-1998	34 834	15.2
	1998-1999	33 210	14.5
TOTAL	1997-1998	137 884	73.8
	1998-1999	138 210	65.0

¹ Preliminary figures

FOREST MANAGEMENT

Highlights (cont'd)

05.00.01

SITE PREPARATION IN QUÉBEC'S FORESTS ¹ (ha, 000s)

Public forests	1997-1998	35.7
	1998-1999	38.3
Private forests	1997-1998	11.2
	1998-1999	12.1
TOTAL	1997-1998	46.9
	1998-1999	50.4

SILVICULTURAL TREATMENTS CARRIED OUT IN QUÉBEC ¹ (ha, 000s)

Public forests	1997-1998	600.2
	1998-1999	593.4
Private forests	1997-1998	54.0
	1998-1999	59.9
TOTAL	1997-1998	654.2
	1998-1999	653.3

¹ Preliminary figures

NONCOMMERCIAL SILVICULTURAL TREATMENTS CARRIED OUT IN QUÉBEC ¹ (ha, 000s)

Public forests	1997-1998	97.1
	1998-1999	108.6
Private forests	1997-1998	20.5
	1998-1999	24.1
TOTAL	1997-1998	117.6
	1998-1999	132.7

¹ Preliminary figures

COMMERCIAL SILVICULTURAL TREATMENTS CARRIED OUT IN QUÉBEC ¹ (ha, 000s)

Public forests	1997-1998	407.1
	1998-1999	396.0
Private forests	1997-1998	7.1
	1998-1999	9.1
TOTAL	1997-1998	414.2
	1998-1999	405.1

¹ Preliminary figures

MAPLE SYRUP PRODUCTION IN QUÉBEC'S FORESTS

	1997	1998
Maple syrup (kilolitres)	19 663.0	19 240.0
Maple Sugar (kilograms)	42 000.0	52 000.0
Maple taffy (kilograms)	120 000.0	114 000.0
Maple butter (kilograms)	105 000.0	98 000.0
Wholesale value (\$, millions)	118.0	136.2

SILVICULTURAL TREATMENTS PLANNED IN THE PUBLIC FORESTS TO ACHIEVE PROPOSED YIELDS (ha, 000s/year)

Common areas	506.4
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FOREST MANAGEMENT

Allowable Annual Cut

The allowable annual cut was calculated for public forests (areas covered by TSFMAs ¹) (30.8 million ha) and for small and large private holdings (6.6 million ha).

05.01.01

ALLOWABLE ANNUAL CUT BY ADMINISTRATIVE REGION ² ON MARCH 31, 1999 (m³)

ADMINISTRATIVE REGIONS	PUBLIC FORESTS (ALLOWABLE ANNUAL CUT IN COMMON AREAS)					PRIVATE FORESTS ³ (ALLOWABLE HARVEST)					TOTAL
	Fir, spruce, jack pine, larch	Other softwoods	Poplars	Other hardwoods	SUBTOTAL	Fir, spruce, jack pine, larch	Other softwoods	Poplars	Other hardwoods	SUBTOTAL	
01 BAS-SAINT-LAURENT	1 200 843	73 478	95 271	247 114	1 616 706	662 800	152 100	480 900	499 600	1 795 400	3 412 106
02 SAGUENAY—LAC-SAINT-JEAN	7 446 665	1 683	612 734	1 008 836	9 069 918	258 500	5 500	246 200	95 900	606 100	9 676 018
03 CAPITALE-NATIONALE	895 419	7 067	73 401	276 062	1 251 949	438 400	62 200	128 100	544 200	1 172 900	2 424 849
04 MAURICIE	2 527 401	70 480	460 689	1 034 369	4 092 939	436 000	55 300	84 800	385 700	961 800	5 054 739
05 ESTRIE	35 530	1 622	4 385	40 573	82 110	389 900	138 200	127 100	789 500	1 444 700	1 526 810
06 MONTRÉAL	0	0	0	0	0	0	0	0	0	0	0
07 OUTAOUAIS	670 822	690 869	439 026	1 924 537	3 725 254	201 200	163 800	236 400	555 800	1 157 200	4 882 454
08 ABITIBI-TÉMISCAMINGUE	3 258 284	521 731	791 244	1 579 884	6 151 143	105 500	6 800	239 000	40 600	391 900	6 543 043
09 CÔTE-NORD	5 814 189	610	254 635	411 587	6 481 021	169 400	17 200	39 000	161 400	387 000	6 868 021
10 NORD-DU-QUÉBEC	5 118 244	0	569 660	243 959	5 931 863	8 300	400	12 600	2 400	23 700	5 955 563
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	1 831 757	72 022	129 229	184 886	2 217 894	364 800	72 800	139 900	157 800	735 300	2 953 194
12 CHAUDIÈRE-APPALACHES	133 710	11 354	10 295	60 811	216 170	761 600	143 900	242 700	744 100	1 892 300	2 108 470
13 LAVAL	0	0	0	0	0	0	0	0	0	0	0
14 LANAUDIÈRE	477 152	49 942	171 835	430 894	1 129 823	84 900	80 000	44 600	265 100	474 600	1 604 423
15 LAURENTIDES	642 384	120 142	132 196	875 288	1 770 010	190 900	119 300	187 500	694 800	1 192 500	2 962 510
16 MONTÉRÉGIE	0	0	0	0	0	120 500	60 200	67 000	409 600	657 300	657 300
17 CENTRE-DU-QUÉBEC	0	0	0	0	0	85 000	48 500	55 700	222 500	411 700	411 700
TOTAL	30 052 400	1 621 000	3 744 600	8 318 800	43 736 800	4 277 700	1 126 200	2 331 500	5 569 000	13 304 400	57 041 200

ALLOWABLE ANNUAL CUT BY ADMINISTRATIVE REGION ² ON MARCH 31, 2000 (m³)

ADMINISTRATIVE REGIONS	PUBLIC FORESTS (ALLOWABLE ANNUAL CUT IN COMMON AREAS)					PRIVATE FORESTS ³ (ALLOWABLE HARVEST)					TOTAL
	Fir, spruce, jack pine, larch	Other softwoods	Poplars	Other hardwoods	SUBTOTAL	Fir, spruce, jack pine, larch	Other softwoods	Poplars	Other hardwoods	SUBTOTAL	
01 BAS-SAINT-LAURENT	1 200 843	73 478	95 271	247 114	1 616 706	662 800	152 100	480 900	499 600	1 795 400	3 412 106
02 SAGUENAY—LAC-SAINT-JEAN	7 446 665	1 683	612 734	1 008 836	9 069 918	258 500	5 500	246 200	95 900	606 100	9 676 018
03 CAPITALE-NATIONALE	895 419	7 067	73 401	276 062	1 251 949	438 400	62 200	128 100	544 200	1 172 900	2 424 849
04 MAURICIE	2 527 401	70 480	460 689	1 034 369	4 092 939	436 000	55 300	84 800	385 700	961 800	5 054 739
05 ESTRIE	35 530	1 622	4 385	40 573	82 110	389 900	138 200	127 100	789 500	1 444 700	1 526 810
06 MONTRÉAL	0	0	0	0	0	0	0	0	0	0	0
07 OUTAOUAIS	670 822	690 869	439 026	1 924 537	3 725 254	201 200	163 800	236 400	555 800	1 157 200	4 882 454
08 ABITIBI-TÉMISCAMINGUE	3 258 284	521 731	791 244	1 579 884	6 151 143	105 500	6 800	239 000	40 600	391 900	6 543 043
09 CÔTE-NORD	5 808 989	610	254 435	409 087	6 473 121	169 400	17 200	39 000	161 400	387 000	6 860 121
10 NORD-DU-QUÉBEC	5 118 244	0	569 660	243 959	5 931 863	8 300	400	12 600	2 400	23 700	5 955 563
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	1 831 757	72 022	129 229	184 886	2 217 894	364 800	72 800	139 900	157 800	735 300	2 953 194
12 CHAUDIÈRE-APPALACHES	133 710	11 354	10 295	60 811	216 170	761 600	143 900	242 700	744 100	1 892 300	2 108 470
13 LAVAL	0	0	0	0	0	0	0	0	0	0	0
14 LANAUDIÈRE	477 152	49 942	171 835	430 894	1 129 823	84 900	80 000	44 600	265 100	474 600	1 604 423
15 LAURENTIDES	642 384	120 142	132 196	875 288	1 770 010	190 900	119 300	187 500	694 800	1 192 500	2 962 510
16 MONTÉRÉGIE	0	0	0	0	0	120 500	60 200	67 000	409 600	657 300	657 300
17 CENTRE-DU-QUÉBEC	0	0	0	0	0	85 000	48 500	55 700	222 500	411 700	411 700
TOTAL	30 047 200	1 621 000	3 744 400	8 316 300	43 728 900	4 277 700	1 126 200	2 331 500	5 569 000	13 304 400	57 033 300

¹ TSFMA: Timber supply and forest management agreement

² Volumes are distributed proportionally to the size of common areas located in the region

³ Allowable harvests are estimated for private forests only (1999 and 2000)

Sources: Direction de la gestion des stocks forestiers

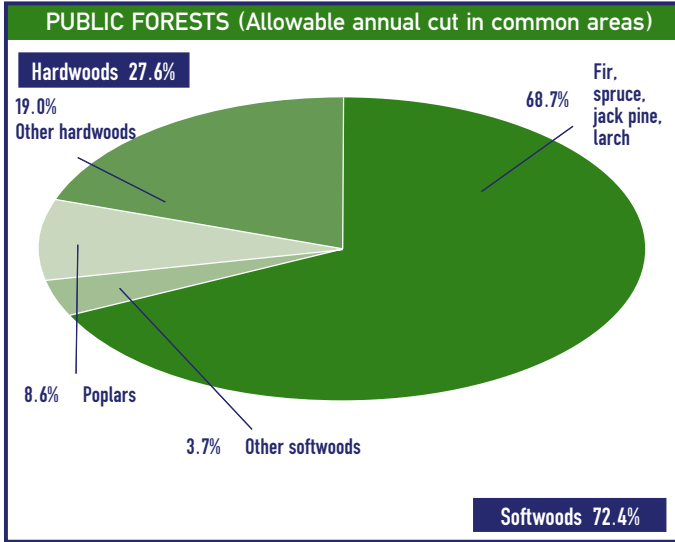
Fédération des producteurs de bois du Québec, *La forêt privée du Québec, son potentiel ligneux* (October 1988)

FOREST MANAGEMENT

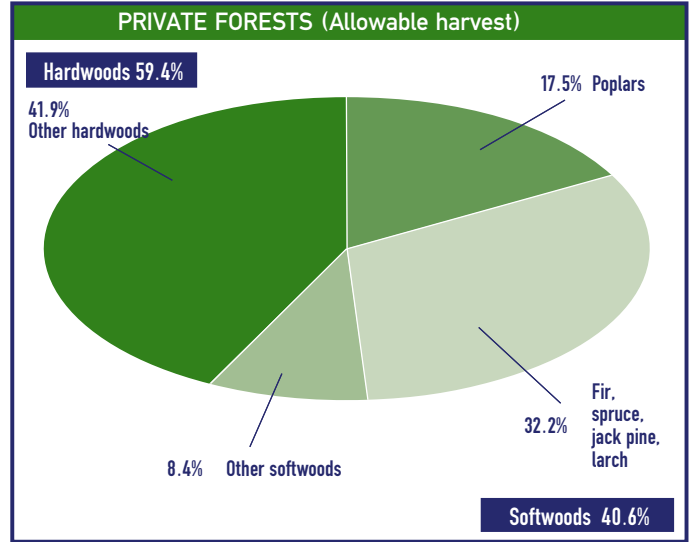
Allowable Annual Cut (cont'd)

BREAKDOWN OF ALLOWABLE ANNUAL CUT BY SPECIES (1999 AND 2000)

05.01.02



05.01.03



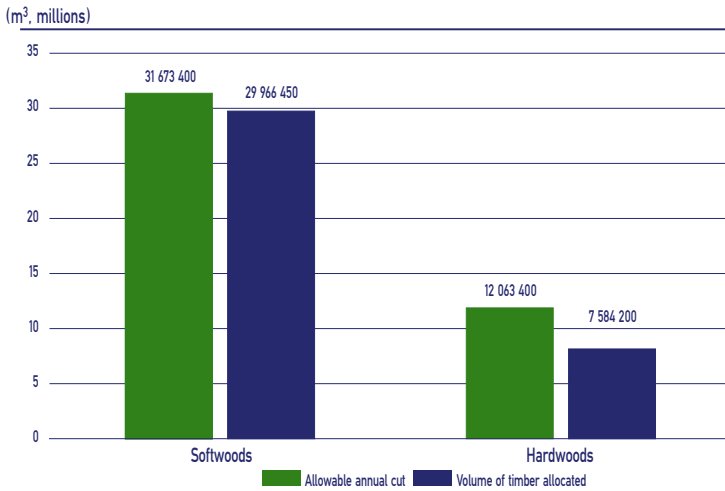
FOREST MANAGEMENT

Allowable Annual Cut (cont'd)

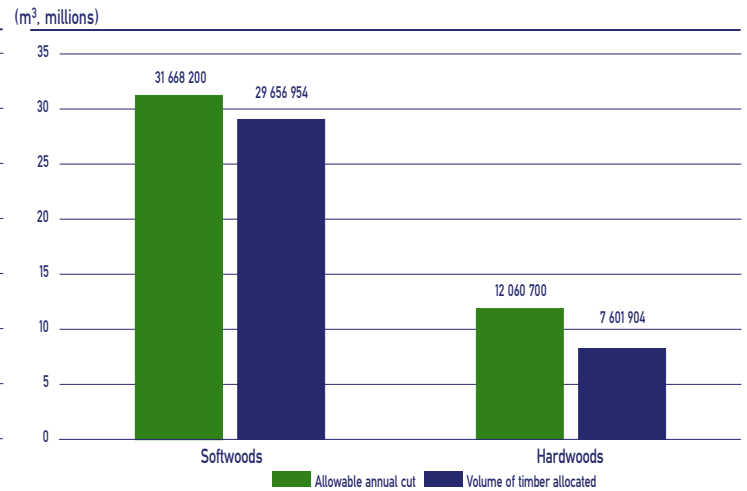
ALLOWABLE ANNUAL CUT/VOLUME ALLOCATED (COMMON AREAS)

05.0110

By species group (1998-1999)



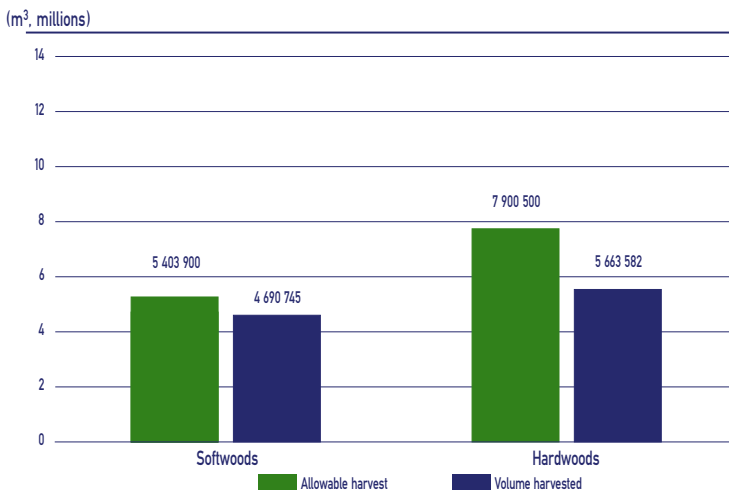
By species group (1999-2000)



ALLOWABLE HARVEST/VOLUME OF TIMBER HARVESTED 1 (PRIVATE FORESTS)

05.0111

By species group (1998-1999)



1 Including an estimated volume of firewood (2.0 million m³ of hardwoods)

FOREST MANAGEMENT

Harvest

VOLUME OF TIMBER HARVESTED IN PUBLIC AND PRIVATE FORESTS

05.02.01

A) BY TENURE AND SPECIES GROUP

	1994-1995 ¹		1995-1996 ¹		1996-1997		1997-1998		1998-1999 ²	
	TOTAL	(%)	TOTAL	(%)	TOTAL	(%)	TOTAL	(%)	TOTAL	(%)
	(m ³ , 000s)		(m ³ , 000s)		(m ³ , 000s)		(m ³ , 000s)		(m ³ , 000s)	
TOTAL	38 029	100	41 066	100	37 968	100	42 138	100	43 358	100
SOFTWOODS	28 960	76	31 523	77	29 606	78	32 403	77	32 437	75
HARDWOODS	9 069	24	9 543	23	8 362	22	9 735	23	10 921	25
QUÉBEC PUBLIC LANDS ³	29 214	100	31 261	100	28 541 ¹	100	32 557 ¹	100	33 003	100
SOFTWOODS	24 885	85	26 766	86	25 045	88	27 913	86	27 746	84
HARDWOODS	4 329	15	4 495	14	3 496	12	4 644	14	5 257	16
PRIVATE HOLDINGS ⁴	8 815	100	9 805	100	9 427 ²	100	9 581 ²	100	10 355	100
SOFTWOODS	4 075	46	4 757	49	4 561	48	4 490	47	4 691	45
HARDWOODS	4 740	54	5 048	51	4 866	52	5 091	53	5 664	55

¹ Revised figures

² Preliminary figures

³ Volume of wood harvested and actually measured in public forests, not including small volumes harvested for specific purposes (public utility works, mining activities, wildlife and leisure developments, etc.).

⁴ Estimated volume harvested in private forests by individual producers or producers' groups, including chips and firewood (approx. 2 million m³), but excluding small volumes of roundwood harvested for export.

FOREST MANAGEMENT

Harvest (cont'd)

VOLUME OF TIMBER HARVESTED IN PUBLIC AND PRIVATE FORESTS B) BY ADMINISTRATIVE REGION (m³, 000s)

05.02.02

 1997-1998 ¹

ADMINISTRATIVE REGIONS	PUBLIC FORESTS ²						PRIVATE FORESTS ³					
	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS
01 BAS-SAINT-LAURENT	1 090.9	40.1	1 131.0	111.0	214.4	325.3	813.1	54.3	867.4	430.8	258.8	689.6
02 SAGUENAY—LAC-SAINT-JEAN	6 657.0	2.5	6 659.5	356.6	273.4	630.0	257.8	0.5	258.4	111.7	52.8	164.5
03 CAPITALE-NATIONALE	811.1	1.1	812.2	36.9	61.9	98.7	287.2	9.9	297.2	19.4	146.3	165.7
04 MAURICIE	2 591.7	33.5	2 625.1	355.9	221.7	577.5	482.9	32.3	515.2	49.9	299.9	349.7
05 ESTRIE	34.6	5.8	40.4	11.0	26.4	37.4	487.6	89.2	576.8	81.4	719.1	800.6
06 MONTRÉAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07 OUTAOUAIS	389.6	321.7	711.3	219.4	765.8	985.3	149.4	71.5	220.9	189.2	447.9	637.1
08 ABITIBI-TÉMISCAMINGUE	2 012.3	201.7	2 214.1	394.8	374.1	768.9	139.8	2.5	142.3	251.9	36.5	288.4
09 CÔTE-NORD	4 750.3	0.0	4 750.3	2.0	2.4	4.4	24.9	1.4	26.3	2.8	21.8	24.6
10 NORD-DU-QUÉBEC	5 938.0	0.0	5 938.0	338.3	0.8	339.1	17.0	4.4	21.4	0.0	3.8	3.8
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	1 883.2	26.1	1 909.3	21.5	39.0	60.4	217.2	10.8	228.0	65.1	79.0	144.1
12 CHAUDIÈRE-APPALACHES	134.9	10.9	145.8	7.3	42.3	49.6	696.4	89.2	785.6	117.5	510.1	627.7
13 LAVAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 LANAUDIÈRE	302.5	18.5	321.0	113.2	135.4	248.7	86.2	42.7	128.9	53.8	264.2	318.0
15 LAURENTIDES	615.4	39.4	654.9	67.1	451.4	518.5	179.0	34.2	213.2	127.7	454.3	582.0
16 MONTÉRÉGIE	0.0	0.0	0.0	0.0	0.0	0.0	55.0	17.1	72.0	17.9	113.1	131.1
17 CENTRE-DU-QUÉBEC	0.0	0.0	0.0	0.0	0.0	0.0	99.5	37.0	136.4	19.8	144.5	164.2
TOTAL	27 211.7	701.4	27 913.1	2 035.0	2 608.8	4 643.8	3 993.0	496.9	4 489.9	1 538.9	3 552.2	5 091.1

¹ Preliminary figures

² Volume of wood harvested and actually measured in public forests, not including small volumes harvested for specific purposes (public utility works, mining activities, wildlife and leisure developments, etc.).

³ Estimated volume harvested in private forests by individual producers or producers' groups, including chips and firewood (approx. 2 million m³), but excluding small volumes of roundwood harvested for export.

05.02.03

 1998-1999 ¹

ADMINISTRATIVE REGIONS	PUBLIC FORESTS ²						PRIVATE FORESTS ³					
	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS	Fir, spruce, jack pine, larch	Other softwoods	TOTAL SOFTWOODS	Poplars	Other hardwoods	TOTAL HARDWOODS
01 BAS-SAINT-LAURENT	1 248.1	47.1	1 295.2	155.0	211.4	366.4	871.1	70.0	941.1	517.5	364.8	882.3
02 SAGUENAY—LAC-SAINT-JEAN	7 818.3	1.9	7 820.3	503.7	245.5	749.2	277.0	3.4	280.3	135.6	72.0	207.7
03 CAPITALE-NATIONALE	572.8	1.1	573.9	13.2	59.2	72.4	298.5	19.4	318.0	33.3	193.0	226.3
04 MAURICIE	2 242.0	45.3	2 287.3	341.6	236.5	578.1	502.0	60.3	562.3	68.0	401.7	469.7
05 ESTRIE	28.6	1.3	29.9	17.5	21.8	39.3	398.4	116.5	514.8	95.7	586.2	681.9
06 MONTRÉAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07 OUTAOUAIS	348.3	366.9	715.1	249.0	761.2	1 010.3	157.8	72.3	230.1	284.3	466.1	750.4
08 ABITIBI-TÉMISCAMINGUE	2 408.8	272.1	2 680.9	525.7	403.7	929.4	209.5	5.4	214.9	237.0	45.3	282.3
09 CÔTE-NORD	4 388.3	1.3	4 389.5	2.3	3.5	5.8	22.6	1.9	24.5	3.9	21.3	25.2
10 NORD-DU-QUÉBEC	4 840.9	1.2	4 842.1	306.9	0.3	307.3	11.2	2.4	13.7	26.0	6.7	32.7
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	1 740.1	31.8	1 771.9	90.9	55.6	146.4	251.5	28.5	280.0	76.0	88.6	164.6
12 CHAUDIÈRE-APPALACHES	139.9	13.2	153.0	5.7	61.6	67.3	657.1	89.2	746.4	140.4	450.4	590.7
13 LAVAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14 LANAUDIÈRE	478.8	19.7	498.5	139.5	188.2	327.7	91.5	39.6	131.0	54.8	277.0	331.8
15 LAURENTIDES	631.5	50.9	682.4	103.3	553.5	656.8	170.0	27.6	197.6	206.4	487.6	694.0
16 MONTÉRÉGIE	0.0	0.0	0.0	0.0	0.0	0.0	50.7	19.0	69.8	19.2	108.1	127.2
17 CENTRE-DU-QUÉBEC	5.6	0.5	6.1	0.2	0.5	0.7	114.6	51.6	166.2	21.6	175.1	196.6
TOTAL	26 891,8	854,3	27 746,1	2 454,5	2 802,7	5 257,1	4 083,6	607,1	4 690,7	1 919,6	3 743,9	5 663,6

¹ Preliminary figures

² Volume of wood harvested and actually measured in public forests, not including small volumes harvested for specific purposes (public utility works, mining activities, wildlife and leisure developments, etc.).

³ Estimated volume harvested in private forests by individual producers or producers' groups, including chips and firewood (approx. 2 million m³), but excluding small volumes of roundwood harvested for export.

FOREST MANAGEMENT

Forest Dues

05.03.06

MARKET VALUE OF STANDING TIMBER IN PUBLIC FORESTS BY QUALITY AND MEAN PROVINCIAL UNIT RATES, 1997-1998 TO 1999-2000 (\$/m³)

SPECIES GROUP	QUALITY ²	FISCAL YEAR (PERIOD) ¹														
		1997-1998 ³				1998-1999					1999-2000					
		1st per.	2nd per.	3rd per.	Mean	1st per.	2nd per.	3rd per.	4th per.	Mean	1st per.	2nd per.	3rd per.	4th per.	Mean	
FIR, SPRUCE, JACK PINE, LARCH	A (pole)	18.26	17.15	19.69	18.22	16.38	16.70	16.59	16.39	16.52	16.97	17.02	17.09	17.05	17.03	
	B (saw timber, pulpwood)	13.85	14.35	13.57	13.92	11.53	11.43	11.63	11.68	11.57	12.53	12.60	13.14	12.44	12.68	
WHITE PINE	B (saw timber, peeling)	13.64	15.75	16.42	16.26	16.54	16.42	16.48	16.62	16.51	16.50	16.50	16.39	16.44	16.46	
RED PINE	A (pole)	21.40	21.69	21.98	21.95	22.90	23.36	23.20	22.93	23.10	23.38	23.45	23.54	23.50	23.47	
	B (saw timber)	10.20	10.96	11.75	11.63	11.79	11.71	11.75	11.85	11.77	11.76	11.76	11.68	11.72	11.73	
HEMLOCK, CEDAR	B (saw timber)	5.73	4.21	3.69	4.53	4.30	4.25	4.31	4.35	4.30	4.36	4.49	4.81	4.43	4.52	
WHITE AND RED PINE, HEMLOCK, CEDAR	C (pulpwood)	2.74	2.28	2.41	2.39	2.60	2.52	2.55	2.43	2.52	1.55	1.55	1.60	1.73	1.61	
OAK, CHERRY, WALNUT, HICKORY	A (peeling)	36.93	37.99	37.26	37.43	54.26	54.37	54.80	56.86	55.07	39.38	39.97	40.74	40.92	40.25	
	B (saw timber)	17.44	21.56	24.15	23.13	44.33	44.43	45.01	44.84	44.65	17.86	17.68	17.11	17.95	17.65	
	C (saw timber)					9.09	9.11	9.23	9.19	9.16	10.57	10.46	10.12	10.62	10.44	
YELLOW BIRCH, ASH, BASSWOOD, ELM	A (peeling)	20.68	20.24	21.17	20.93	24.73	24.78	24.97	25.91	25.10	26.18	26.57	27.08	27.20	26.76	
	B (saw timber)	11.35	11.69	13.06	12.60	21.18	21.23	21.51	21.43	21.34	12.04	11.92	11.54	12.10	11.90	
	C (saw timber)					8.06	8.08	8.18	8.15	8.12	7.22	7.15	6.92	7.26	7.14	
WHITE BIRCH	A (peeling)	20.95	33.11	17.19	17.42	13.20	13.23	13.33	13.83	13.40	12.70	12.89	13.14	13.20	12.98	
	B (saw timber)	5.87	6.09	6.88	6.73	9.70	9.72	9.85	9.81	9.77	5.13	5.07	4.91	5.15	5.07	
	C (saw timber)					3.97	3.98	4.03	4.01	4.00	2.94	2.91	2.82	2.96	2.91	
MAPLE	A (peeling)					17.37	17.40	17.54	18.20	17.63	32.05	32.53	33.16	33.31	32.76	
	B (saw timber)					15.35	15.38	15.58	15.52	15.46	13.95	13.81	13.36	14.02	13.79	
	C (saw timber)					6.94	6.95	7.04	7.02	6.99	6.66	6.59	6.38	6.69	6.58	
OTHER HARDWOODS	B (saw timber)	5.14	5.71	6.04	5.92	11.09	11.12	11.26	11.22	11.17	5.69	5.64	5.45	5.72	5.63	
	C (saw timber)	4.67	5.18	5.45	5.33	4.10	4.11	4.16	4.14	4.13	3.36	3.33	3.22	3.38	3.32	
POPLARS	B (saw timber, peeling)	1.57	1.77	1.94	1.83	1.94	2.11	2.49	2.16	2.18	5.37	6.94	7.63	6.34	6.57	
	C (pulpwood)	0.75	0.71	0.74	0.73	0.87	1.07	1.48	1.10	1.13	4.34	6.07	6.81	5.39	5.65	
ALL HARDWOODS EXCEPT POPLARS	D (pulpwood)	2.04	1.99	2.06	2.03	2.51	2.46	2.48	2.38	2.46	1.83	1.81	1.88	2.02	1.89	
ALL SPECIES	All qualities	13.12	12.87	11.81	12.36	10.47	10.40	10.60	10.61	10.52	11.35	11.51	12.00	11.36	11.56	
QUALITY HARDWOODS	All qualities	4.74	4.54	4.93	4.81	7.43	7.41	7.51	7.44	7.45	5.21	5.16	5.07	5.33	5.19	
POPLARS	All qualities	1.17	1.14	1.03	1.07	1.26	1.44	1.84	1.48	1.51	4.71	6.38	7.11	5.74	5.98	

¹ In 1997-1998: 1st period from April 1 to July 31; 2nd period from August 1 to November 30; 3rd period from December 1 to March 31

Beginning in 1998-1999: 1st period from April 1 to June 30; 2nd period from July 1 to September 30; 3rd period from October 1 to December 31; 4th period from January 1 to March 31

² The letters A, B, C and D correspond to the quality assigned during wood grading based on species, diameter, length and imperfections observed on the trunk and crosscuts.

³ Since 1997-1998, mean unit rates have been estimated from the volume of timber harvested in each tariff zone during the previous year, for all species groups except FSPL.

FOREST MANAGEMENT

Seedling Production

SEEDLING PRODUCTION (000s) BY ADMINISTRATIVE REGION 1 AND PRODUCER CATEGORY

05.05.05

ADMINISTRATIVE REGIONS	PRODUCERS	1995-1996			1996-1997			1997-1998			1998-1999		
		Bareroot	Container	TOTAL	Bareroot	Container	TOTAL	Bareroot	Container	TOTAL	Bareroot	Container	TOTAL
01 BAS-SAINT-LAURENT	FF 2	11 078	5 074	16 152	9 965	6 772	16 737	10 180	6 886	17 067	10 315	7 154	17 469
	P&FC 3		13 452	13 452		9 800	9 800		14 126	14 126		11 653	11 653
	TOTAL	11 078	18 526	29 604	9 965	16 572	26 537	10 180	21 012	31 193	10 315	18 807	29 121
02 SAGUENAY—LAC-SAINT-JEAN	FF	3 990	1 056	5 046	3 135	3 388	6 523	2 679	3 594	6 273	2 772	7 438	10 210
	P&FC		18 399	18 399		24 748	24 748		11 872	11 872		19 203	19 203
	TOTAL	3 990	19 456	23 446	3 135	28 135	31 270	2 679	15 466	18 145	2 772	19 203	29 413
03 CAPITALE-NATIONALE	FF	612		612	394		394						
	P&FC		7 455	7 455		7 763	7 763		10 743	10 743		10 519	10 519
	TOTAL	612	7 455	8 067	394	7 763	8 157		10 743	10 743		10 519	10 519
04 MAURICIE ET 17 CENTRE-DU-QUÉBEC	FF	577	639	1 216	639	939	1 578	3 605	1 082	4 687	3 534	1 237	4 770
	P&FC		13 538	13 538		14 606	14 606		14 810	14 810		27 389	27 389
	TOTAL	577	14 177	14 754	639	15 545	16 184	3 605	15 892	19 497	3 534	28 625	32 159
05 ESTRIE	FF												
	P&FC	767	1 237	2 004				1 053		1 053			
	TOTAL	767	1 237	2 004				1 053		1 053			
07 OUTAOUAIS	FF												
	P&FC		1 818	1 818	784	3 925	4 709		1 441	1 441	2 061	6 021	8 081
	TOTAL		1 818	1 818	784	3 925	4 709		1 441	1 441	2 061	6 021	8 081
08 ABITIBI-TÉMISCAMINGUE	FF	2 204	6 544	8 749	1 362	4 813	6 175	1 892	7 750	9 642	2 246	6 838	9 084
	P&FC		16 541	16 541		15 865	15 865		16 055	16 055		16 288	16 288
	TOTAL	2 204	23 085	25 289	1 362	20 678	22 039	1 892	23 805	25 697	2 246	23 126	25 371
09 CÔTE-NORD	FF												
	P&FC		8 259	8 259		8 620	8 620		12 498	12 498		8 455	8 455
	TOTAL		8 259	8 259		8 620	8 620		12 498	12 498		8 455	8 455
11 GASPÉSIE—ÎLES-DE-LA-MADELEINE	FF												
	P&FC		5 977	5 977		5 784	5 784		6 174	6 174		6 122	6 122
	TOTAL		5 977	5 977		5 784	5 784		6 174	6 174		6 122	6 122
12 CHAUDIÈRE-APPALACHES	FF												
	P&FC	1 870	2 895	4 765	2 586	2 934	5 520		1 473	1 473		1 840	1 840
	TOTAL	1 870	2 895	4 765	2 586	2 934	5 520		1 473	1 473		1 840	1 840
14 LANAUDIÈRE	FF	2 616	1 682	4 299	2 536	1 579	4 115	2 018	1 364	3 382	2 365	1 672	4 037
	P&FC												
	TOTAL	2 616	1 682	4 299	2 536	1 579	4 115	2 018	1 364	3 382	2 365	1 672	4 037
15 LAURENTIDES	FF												
	P&FC		22 322	22 322	716	20 281	20 997		20 191	20 191		17 072	17 072
	TOTAL		22 322	22 322	716	20 281	20 997		20 191	20 191		17 072	17 072
TOTAL	FF	21 077	14 996	36 073	18 030	17 491	35 521	20 374	20 677	41 051	21 231	24 338	45 569
	P&FC	2 637	111 894	114 531	4 086	114 325	118 411	1 053	109 383	110 436	2 061	124 560	126 621
	TOTAL	23 714	126 890	150 604	22 117	131 816	153 932	21 427	130 060	151 487	23 292	148 898	172 190

1 There is no seedling production in regions 06 (Montréal), 10 (Nord-du-Québec), 13 (Laval) and 16 (Montréal).

2 FF: Forestry Fund nurseries

3 P&FC: Private producers and forest companies

FOREST MANAGEMENT

Summary of Silvicultural Treatments Carried Out

A) PUBLIC FORESTS

05.14.01

TREATMENTS	AREA (1996-1997) ¹					AREA ¹ (1997-1998)					
	TSFMA ²		MRN ³		TOTAL	TSFMA		MRN		TOTAL	
	(ha)	(%)	(ha)	(%)	(ha)	(ha)	(%)	(ha)	(%)	(ha)	
SITE PREPARATION											
1) SCARIFYING	31 228.0	100.0			31 228.0	32 421.0	100.0			32 421.0	
2) CLEARING	3 424.0	100.0			3 424.0	3 119.0	100.0			3 119.0	
3) BRUSHING	49.0	100.0			49.0	74.0	43.8	95.0	56.2	169.0	
4) HARROWING	26.0	100.0			26.0						
5) REMOVAL OF RESIDUAL STEMS	680.0	100.0			680.0						
TOTAL	35 407.0	100.0			35 407.0	35 614.0	99.7	95.0	0.3	35 709.0	
REFORESTATION AND SEEDING											
1) PLANTING	(ha)	30 646.0	100.0		30 646.0	29 600.0	100.0			29 600.0	
	(seedlings, millions)	70.6	100.0		70.6	62.7	100.0			62.7	
2) REINFORCEMENT	(ha)	19 029.0	100.0		19 029.0	20 100.0	100.0			20 100.0	
	(seedlings, millions)	26.3	100.0		26.3	26.5	100.0			26.5	
3) ENRICHMENT	(ha)	2 054.0	100.0		2 054.0	1 762.0	100.0			1 762.0	
	(seedlings, millions)	0.5	100.0		0.5	0.4	100.0			0.4	
4) REGENERATION OF SBBA ⁴	NATURAL (ha)										
	ARTIFICIAL (ha)	5 839.0	100.0		5 839.0	7 111.0	100.0			7 111.0	
	(seedlings, millions)	10.9	100.0		10.9	13.4	100.0			13.4	
5) SEEDING	(ha)	8 773.0	100.0		8 773.0	1 730.0	100.0			1 730.0	
TOTAL	(ha)	66 341.0	100.0		66 341.0	60 303.0	100.0			60 303.0	
	(seedlings, millions)	108.3	100.0		108.3	103.0	100.0			103.0	
NONCOMMERCIAL TREATMENTS											
1) RELEASE (PLANTATIONS)		13 762.0	84.6	2 506.0	15.4	16 268.0	14 354.0	92.6	1 143.0	7.4	15 497.0
2) RELEASE (NATURAL REGENERATION)		3 061.0	72.0	1 189.0	28.0	4 250.0	1 787.0	69.5	783.0	30.5	2 570.0
3) PRE-COMMERCIAL THINNING		54 759.0	95.3	2 716.0	4.7	57 475.0	72 642.0	94.4	4 316.0	5.6	76 958.0
4) PHYTOSANITARY CONTROL		15.0	23.4	49.0	76.6	64.0					
5) FERTILIZATION		132.0	100.0			132.0					
6) DRAINAGE		1 429.0	100.0			1 429.0	2 036.0	100.0			2 036.0
TOTAL		73 158.0	91.9	6 460.0	8.1	79 618.0	90 819.0	93.6	6 242.0	6.4	97 061.0
COMMERCIAL TREATMENTS											
1) CUTTING WITH PROTECTION OF REGENERATION AND SOIL		211 076.0	100.0	11.0	0.0	211 087.0	278 326.0	100.0			278 326.0
2) SELECTION AND PRE-SELECTION CUTTING		48 140.0	100.0			48 140.0	58 576.0	100.0			58 576.0
3) IMPROVEMENT CUTTING		3 535.0	100.0			3 535.0	4 373.0	100.0			4 373.0
4) SHELTERWOOD CUTTING		4 767.0	100.0			4 767.0	5 154.0	100.0			5 154.0
5) COMMERCIAL THINNING		1 593.0	100.0			1 593.0	3 945.0	93.2	289.0	6.8	4 234.0
6) STRIP AND PATCH CUTTING		1 568.0	98.6	23.0	1.4	1 591.0	1 048.0	100.0			1 048.0
7) HARVESTING IN BUFFER STRIPS		280.0	100.0			280.0	718.0	100.0			718.0
8) OTHER METHODS:											
A) CUTTING FOR REFORESTATION		5 904.0	100.0			5 904.0	7 148.0	100.0			7 148.0
B) CLEAR CUTTING	- SBBA	9 116.0	100.0			9 116.0	11 284.0	100.0			11 284.0
	- ROADS	10 144.0	100.0			10 144.0	12 890.0	100.0			12 890.0
C) SALVAGE CUTTING	- SPECIAL PLANS ⁵	29 019.0	100.0			29 019.0	8 599.0	100.0			8 599.0
D) OTHER METHODS		16 017.0	100.0			16 017.0	7 762.0	99.0	77.0	1.0	7 839.0
SUBTOTAL		70 200.0	100.0			70 200.0	47 683.0	99.8	77.0	0.2	47 760.0
9) TREATMENTS CARRIED OUT UNDER THE RESOURCE DEVELOPMENT PROGRAM		1 132.0	100.0			1 132.0	6 913.0	100.0			6 913.0
TOTAL		342 291.0	100.0	34.0	0.0	342 325.0	406 736.0	99.9	366.0	0.1	407 102.0
GRAND TOTAL		517 197.0	98.8	6 494.0	1.2	523 691.0	593 472.0	98.9	6 703.0	1.3	600 175.0

1 Revised figures

2 TSFMA: Timber supply and forest management agreement holders

3 MRN: Ministère des Ressources naturelles

4 SBBA: stacking, branching and bucking area

5 Areas disturbed by natural disasters, etc.

FOREST MANAGEMENT

Summary of Silvicultural Treatments Carried Out (cont'd)

A) PUBLIC FORESTS (CONT'D)

05.14.02

TREATMENTS	AREA (1998-1999) ¹			AREA (1999-2000) ⁶			
	TSFMA ²		MRN ³	TOTAL	TSFMA		MRN
	(ha)	(%)	(ha)	(%)	(ha)	(%)	(ha)
SITE PREPARATION							
1) SCARIFYING	35 335.0	100.0			35 335.0		
2) CLEARING	3 000.0	100.0			3 000.0		
3) BRUSHING							
4) HARROWING							
5) REMOVAL OF RESIDUAL STEMS							
TOTAL	38 335.0	100.0			38 335.0		
REFORESTATION AND SEEDING							
1) PLANTING	(ha)	39 612.0	100.0		39 612.0		
	(seedlings, millions)	87.2	100.0		87.2		
2) REINFORCEMENT	(ha)	10 225.0	100.0		10 225.0		
	(seedlings, millions)	17.6	100.0		17.6		
3) ENRICHMENT	(ha)	648.0	100.0		648.0		
	(seedlings, millions)	0.2	100.0		0.2		
4) REGENERATION OF SBBA ⁴	NATURAL (ha)						
	ARTIFICIAL (ha)						
	(seedlings, millions)						
5) SEEDING	(ha)						
TOTAL	(ha)	50 485.0	100.0		50 485.0		
	(seedlings, millions)	105.0	100.0		105.0		
NONCOMMERCIAL TREATMENTS							
1) RELEASE (PLANTATIONS)		18 766.0	100.0		18 766.0		
2) RELEASE (NATURAL REGENERATION)		3 873.0	100.0		3 873.0		
3) PRE-COMMERCIAL THINNING		84 773.0	100.0		84 773.0		
4) PHYTOSANITARY CONTROL							
5) FERTILIZATION							
6) DRAINAGE		1 158.0	100.0		1 158.0		
TOTAL		108 570.0	100.0		108 570.0		
COMMERCIAL TREATMENTS							
1) CUTTING WITH PROTECTION OF REGENERATION AND SOIL		277 000.0	100.0		277 000.0		
2) SELECTION AND PRE-SELECTION CUTTING		55 000.0	100.0		55 000.0		
3) IMPROVEMENT CUTTING		500.0	100.0		500.0		
4) SHELTERWOOD CUTTING		5 000.0	100.0		5 000.0		
5) COMMERCIAL THINNING		2 600.0	100.0		2 600.0		
6) STRIP AND PATCH CUTTING		200.0	100.0		200.0		
7) HARVESTING IN BUFFER STRIPS		700.0	100.0		700.0		
8) OTHER METHODS:							
A) CUTTING FOR REFORESTATION		7 000.0	100.0		7 000.0		
B) CLEAR CUTTING	- SBBA	11 000.0	100.0		11 000.0		
	- ROADS	13 000.0	100.0		13 000.0		
C) SALVAGE CUTTING	- SPECIAL PLANS ⁵	9 000.0	100.0		9 000.0		
D) OTHER METHODS		7 000.0	100.0		7 000.0		
SUBTOTAL		47 000.0	100.0		47 000.0		
9) TREATMENTS CARRIED OUT UNDER THE RESOURCE DEVELOPMENT PROGRAM		8 000.0	100.0		8 000.0		
TOTAL		396 000.0	100.0		396 000.0		
GRAND TOTAL		593 390.0	100.0		593 390.0		

1 Revised figures
 2 TSFMA: Timber supply and forest management agreement holders
 3 MRN: Ministère des Ressources naturelles
 4 SBBA: stacking, branching and bucking area
 5 Areas disturbed by natural disasters, etc.
 6 Figures not available

FOREST MANAGEMENT

Summary of Silvicultural Treatments Carried Out (cont'd)

B) PRIVATE FORESTS

05.14.03

TREATMENTS	AREA (1996-1997) ¹ (ha)	AREA (1997-1998) ² (ha)	AREA (1998-1999) ² (ha)
SITE PREPARATION			
1) SCARIFYING	n.d. ³	1 029	883
2) CLEARING	n.d.	3 902	3 508
3) PLOUGHING AND HARROWING	n.d.	264	458
4) BRUSHING			
- MECHANICAL	n.d.	5 092	6 190
- CHEMICAL	n.d.	295	332
5) REMOVAL OF RESIDUAL STEMS	n.d.	520	538
6) OTHER TREATMENTS	n.d.	143	237
TOTAL	10 000	11 245	12 146
REFORESTATION			
1) PLANTING	n.d.	11 562	11 378
2) REINFORCEMENT	n.d.	3 102	3 068
3) ENRICHMENT	n.d.	510	65
TOTAL	15 400	15 174	14 511
	(seedlings, millions)	37,0	34,9
NONCOMMERCIAL TREATMENTS			
1) RELEASE (PLANTATIONS)			
- MECHANICAL	5 450	7 239	9 081
- CHEMICAL	6 050	4 516	3 975
2) RELEASE (NATURAL REGENERATION)			
- MECHANICAL	400	209	217
- CHEMICAL		22	16
3) PRE-COMMERCIAL THINNING	6 500	6 314	8 002
4) PHYTOSANITARY CONTROL	500	5	562
5) DRAINAGE	1 000	2 236	2 239
TOTAL	19 900	20 541	24 092
COMMERCIAL TREATMENTS			
1) SELECTION CUTTING	2 000	2 042	2 395
2) SHELTERWOOD CUTTING	300	366	535
3) STRIP AND PATCH CUTTING	50	11	27
4) COMMERCIAL THINNING	3 500	3 600	4 242
5) OTHER METHODS	1 000	1 056	1 938
TOTAL	6 850	7 075	9 137
GRAND TOTAL	52 150	54 035	59 886

1 Estimates

2 Preliminary figures

3 Figures not available

FOREST USE FOR EDUCATIONAL AND RECREATIONAL PURPOSES

Highlights

06.00.01

TEACHING AND RESEARCH FORESTS, JULY 2000

Teaching and research forests (no.)	16
Area (ha, 000s)	38.7

NOTE : The Duchesnay Forest Station is now under the responsibility of SEPAQ.

EXPERIMENTAL FORESTS, JULY 2000

Permanent (no.)	218
Temporary (no.)	419
TOTAL (no.)	637
Area (ha, 000s)	25.8

PRINCIPAL WILDLIFE-RELATED ACTIVITIES

	Participants (no.)	Expenditures (\$, millions)	Jobs (1992) (no.)	Value added (1992) (\$, millions)
Fishing (1995)	1 026 743	1 254.6	19 221	857.6
Hunting (1996)	394 000	285.6	4 187	179.8
Activities close to home (1996)	1 709 000	53.1	1 542	77.3
Wildlife-related travel (1996)	1 174 000	281.0	6 815	317.6

LOGGING

Highlights

07.00.01

ECONOMIC INDICATORS FOR THE QUÉBEC LOGGING INDUSTRY, 1998 ^{1, 2}

Jobs (no.)	11 694
Salaries and wages (\$, 000s)	338 499
Value of shipments (\$, 000s)	2 413 039
Value added to total activity (\$, 000s)	724 857
Capital expenditures (\$, 000s)	63 300

¹ Statistics Canada Group 04 (logging industry)

² Preliminary figures

TIMBER USE

Highlights

08.00.01

CONSUMPTION OF QUÉBEC'S PRIMARY WOOD PROCESSING PLANTS

BY SPECIES (1999)	(m ³ , 000s)
• FSPL	57 766
• Other softwoods	2 464
• Poplars	5 325
• Hardwoods	7 244
• TOTAL	72 799

BY TYPE OF WOOD MATERIAL (1999)	(m ³ , 000s)
• Roundwood	47 399
• Chips	18 758
• Sawdust, shavings and wood residues	6 642
• TOTAL	72 799

BY SOURCE (1999)	(m ³ , 000s)
• Public forests	33 126
• Private forests	9 067
• Exchange between mills	24 346
• Outside Québec	6 260
• TOTAL	72 799

BY PRODUCT (1999)	(m ³ , 000s)
• Pulp and paper	25 773
• Saw timber	38 981
• Peelers	366
• Panelboard	5 083
• Other	2 596
• TOTAL	72 799

PRINCIPAL PRODUCTS OF QUÉBEC'S PRIMARY WOOD PROCESSING PLANTS, 1999

Pulp destined for sale (BDMT)	2 009 782
Paper (BDMT)	6 299 675
Paperboard (BDMT)	1 616 139
Insulation board (mt)	83 745
Particle board (m ³)	3 232 654
Veneer (m ²)	111 722 162
Shingles (squares)	418 070
Poles (units)	347 062
Mulching material (BDMT)	117 907
Charcoal (mt)	6 320
Saw timber (bd ft, 000s)	8 753 031
Other products (bd ft, 000s) ¹	74 017

¹ Other products: fuel pellets, electricity, turning and shaping, laths, etc.

FSPL CHIP STOCKS AT QUÉBEC'S SAWMILLS

	December 1998	December 1999
FSPL chips (BDMT, 000s)	254.7	81.1

BARK IN QUÉBEC, 1999 (BDMT, 000S)

• Estimated production	3 760
• Use	2 082
• Shipments	477

ROUNDWOOD AND CHIP PURCHASES AND SALES OUTSIDE QUÉBEC, 1999

Region	Purchases (m ³ , 000s)	Sales (m ³ , 000s)
--------	--------------------------------------	----------------------------------

ONTARIO

• Softwoods	420.1	510.7
• Hardwoods	881.3	15.7

OTHER PROVINCES

• Softwoods	303.7	835.3
• Hardwoods	148.0	17.0

UNITED STATES

• Softwoods	3 110.8	410.8
• Hardwoods	1 396.1	12.0

OVERSEAS

• Softwoods	0.1	0.5
• Hardwoods	1.2	45.8

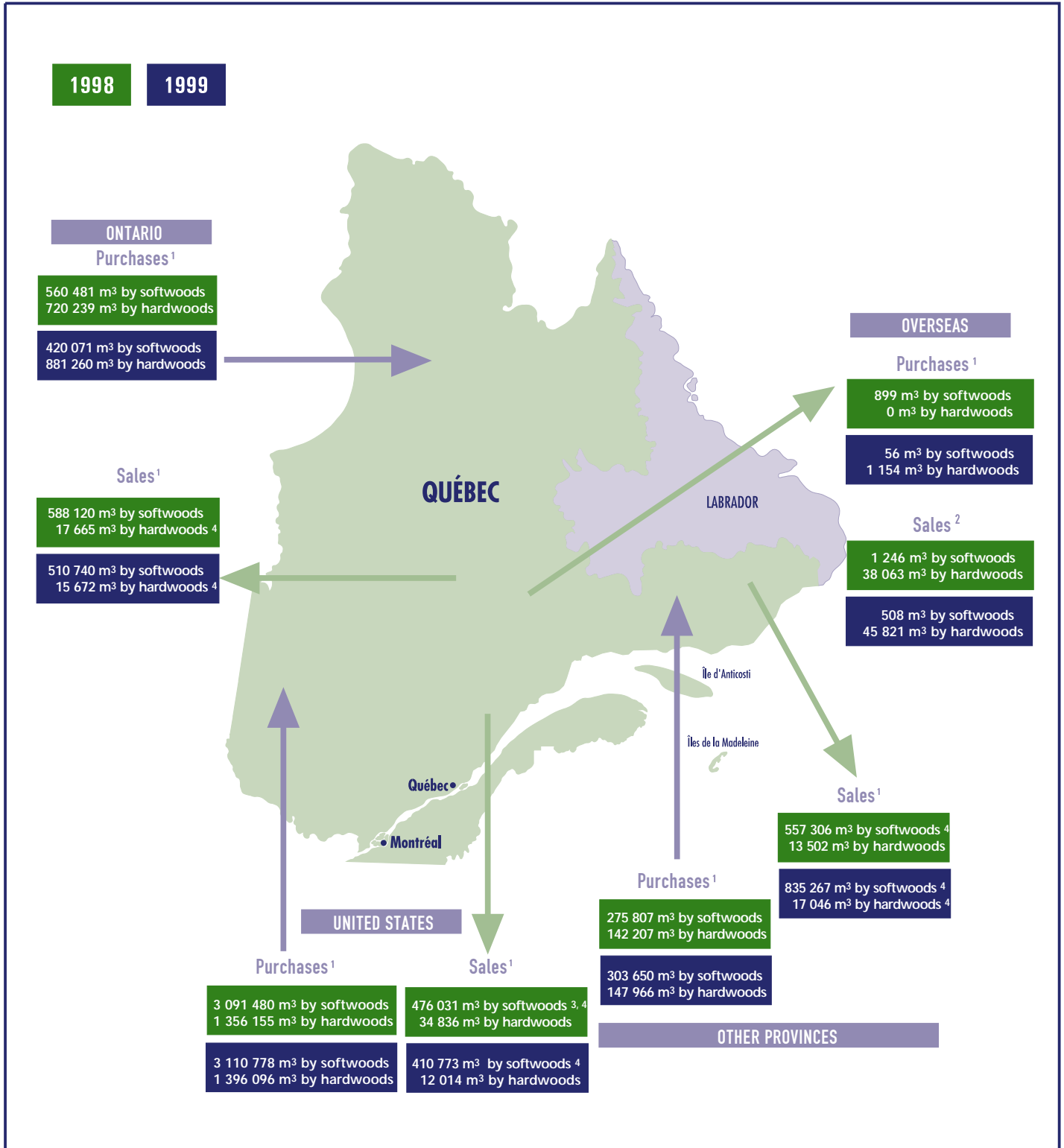
TOTAL

• SOFTWOODS	3 834.7	1 757.3
• HARDWOODS	2 426.6	90.5

TIMBER USE

ROUNDWOOD AND CHIP PURCHASES AND SALES OUTSIDE QUÉBEC IN 1998 AND 1999

08.05.01



1 Figures from the Forestry Register
 2 Figures from the Institut de la statistique du Québec
 3 Overseas trade figures from the Institut de la statistique du Québec indicate only 26 223 m³.
 4 Figures include timber sales from private forests listed in the marketing reports of Québec's syndicates and wood marketing boards.

WOOD INDUSTRIES

Highlights

09.00.01

QUÉBEC'S PRIMARY WOOD PROCESSING PLANTS, 1999 ¹

Lumber	1 318
Pulp and paper ²	41
Veneer and plywood	14
Particle board	11
Wood turning and shaping	12
Energy production and cogeneration ³	22
Other	1
TOTAL	1 419

¹ Source: Forestry Register, ministère des Ressources naturelles

² The remaining 23 pulp, paper and paperboard mills do not consume round-wood, chips, sawdust or shavings.

³ Mills producing electricity, pellets and fuel chips.

ESTABLISHMENTS BY WOOD PROCESSING GROUP, 1996 ¹ (MANUFACTURING ACTIVITIES ONLY)

Wood	1 105
Wooden furniture	224
Paper and related products	213
TOTAL	1 542

¹ Source: Institut de la statistique du Québec, *Statistiques manufacturières régionales, édition 1998*

ECONOMIC INDICATORS FOR QUÉBEC'S WOOD INDUSTRY, 1997 ¹

Jobs (No.)	36 515
Salaries and wages (\$, 000s)	1 089 792
Value of shipments and other revenue (\$, 000s)	6 885 396
Value added to total activity (\$, 000s)	2 769 022
Capital and repair expenditures (\$, 000s)	501 100

¹ Statistics Canada Group 25 (wood industry)

QUÉBEC'S LUMBER PRODUCTION, 1997, 1998 AND 1999

		(m ³ , 000s)
1997	• Softwoods	15 679.0
	• Hardwoods	683.0
1998	• Softwoods	16 498.0
	• Hardwoods	719.0
1999	• Softwoods	17 331.0
	• Hardwoods	566.0

SOURCE OF WOOD USED BY QUÉBEC'S SAWMILLS, 1999

	(m ³ , 000s)
Public forests	29 036.0
Private forests	5 495.4
Other mills	84.2
Outside Québec	4 365.1
TOTAL	38 980.7

QUÉBEC'S LUMBER SHIPMENTS, 1999

	(m ³ , 000s)
Softwood	17 135.4
Hardwood	1 732.0
TOTAL	18 867.4

JOINT PRODUCTION OF QUÉBEC'S SAWMILLS, 1999

	('000 tma)
Chips	7 418
Sawdust and shavings	2 371
Bark	3 007
TOTAL	12 796

DESTINATION OF QUÉBEC'S LUMBER SHIPMENTS, 1999

	Softwoods	Hardwoods ¹
Canada	47.6 %	45.4 %
United States	51.4 %	33.6 %
Overseas	1.0 %	21.0 %
TOTAL	100.0 %	100.0 %

¹ Estimates

ECONOMIC INDICATORS FOR QUÉBEC'S SAWMILL AND PLANING INDUSTRIES, 1998

Jobs (no.)	19 768
Salaries and wages (\$, 000s) ¹	651 900
Value of shipments and other revenue (\$, 000s)	4 026 000
Value added to total activity (\$, 000s) ¹	1 610 000
Capital and repair expenditures (\$, 000s) ¹	350 000

¹ Estimates

VOLUME AND VALUE OF QUÉBEC'S LUMBER EXPORTS BY DESTINATION, 1999

	Volume (m ³ , 000s)	Value (\$, millions)
United States	9 683.4	2 322.2
Europe	296.6	233.4
Middle East and Africa	59.3	18.2
Asia and Oceania	31.9	25.8
Central and South America	4.4	1.9
TOTAL	10 075.6	2 601.5

WOOD INDUSTRIES

Highlights (cont'd)

09.00.01

ECONOMIC INDICATORS FOR QUÉBEC'S VENEER AND PLYWOOD INDUSTRY, 1997 ¹

Jobs (no.)	1 810
Salaries and wages (\$, 000s)	52 186
Value of shipments and other revenue (\$, 000s)	409 380
Value added to total activity (\$, 000s)	130 866
Capital and repair expenditures (\$, 000s) ²	12 300

¹ This sector partially corresponds to Statistics Canada Group 25 (wood industry)
² Estimates

ECONOMIC INDICATORS FOR QUÉBEC'S PARTICLE BOARD INDUSTRY

	1998	1999
Jobs (no.)	1 900	2 072
Mills (no.)	13	13
Production capacity (m ³ , 000s/year)	3 910	4 073
Capital and repair expenditures (\$, 000s)	75 000 ¹	180 000

¹ Estimates

ECONOMIC INDICATORS FOR QUÉBEC'S ORIENTED STRAND BOARD (OSB) INDUSTRY, 1997

Jobs (no.)	776
Salaries and wages (\$, 000s)	33 066
Value of shipments and other revenue (\$, 000s)	217 936
Value added to total activity (\$, 000s)	67 565

QUÉBEC'S BALANCE OF TRADE ¹ IN THE WOOD PRODUCTS SECTOR, 1998 AND 1999 ²

	Exports	Imports	Balance of Trade
Wood, charcoal and wood products	(\$, millions)	(\$, millions)	(\$, millions)
• 1998	3 889.5	628.2	3 261.3
• 1999	4 549.9	699.7	3 850.2

¹ Based on customs figures
² Product descriptors drawn from the Harmonized Commodity Description and Coding System (World Customs Organization)

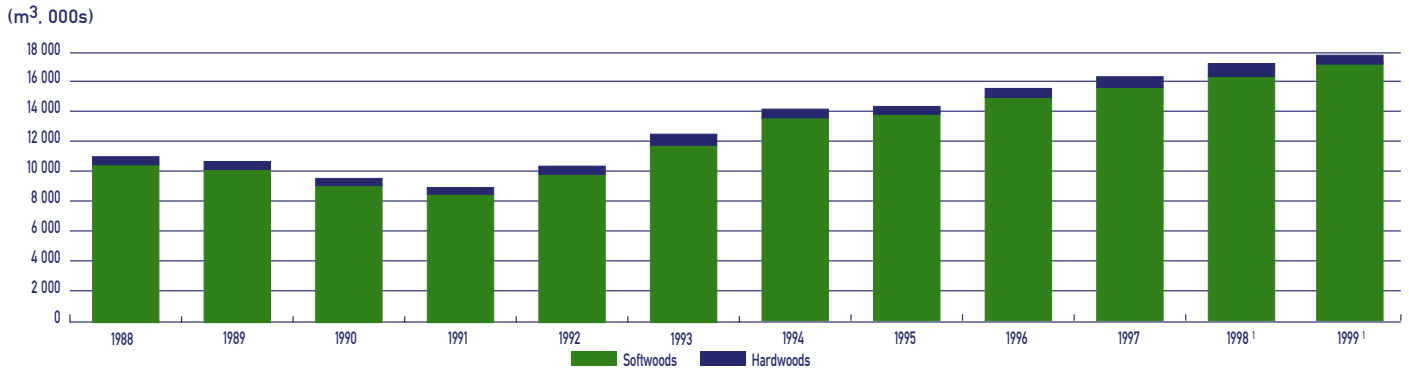


WOOD INDUSTRIES

Overview

LUMBER PRODUCTION IN QUÉBEC (SOFTWOODS AND HARDWOODS)

09.01.08



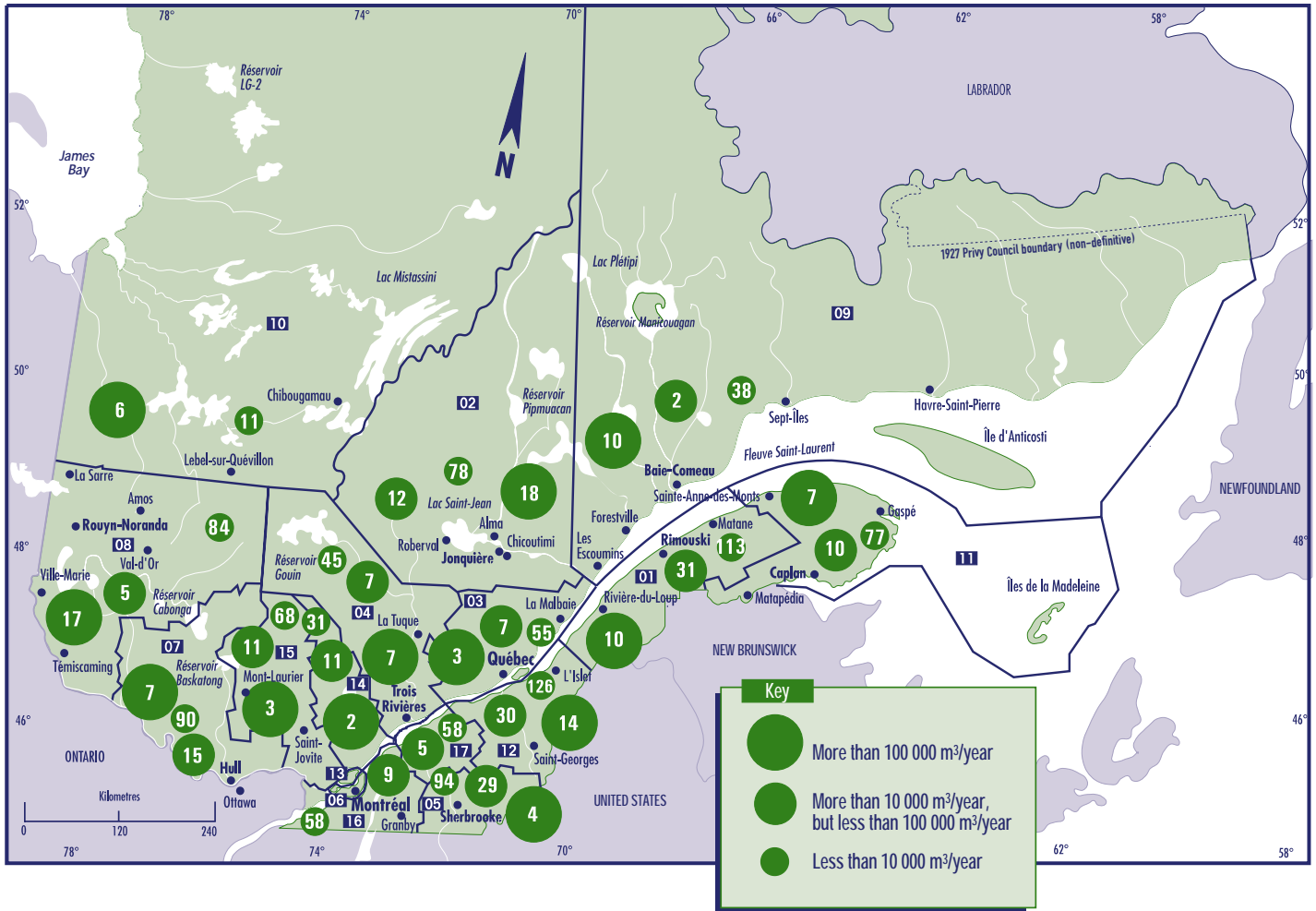
¹ Preliminary figures
Sources: Statistics Canada: 35-002 (1987 to 1995) and 35-003

WOOD INDUSTRIES

The Sawmill Industry

SAWMILLS BY SIZE (1999) ¹

09.02.01



¹ Mill size based on authorized consumption volumes

Source: Ministère des Ressources naturelles, Direction du développement de l'industrie des produits forestiers (compiled in-house)

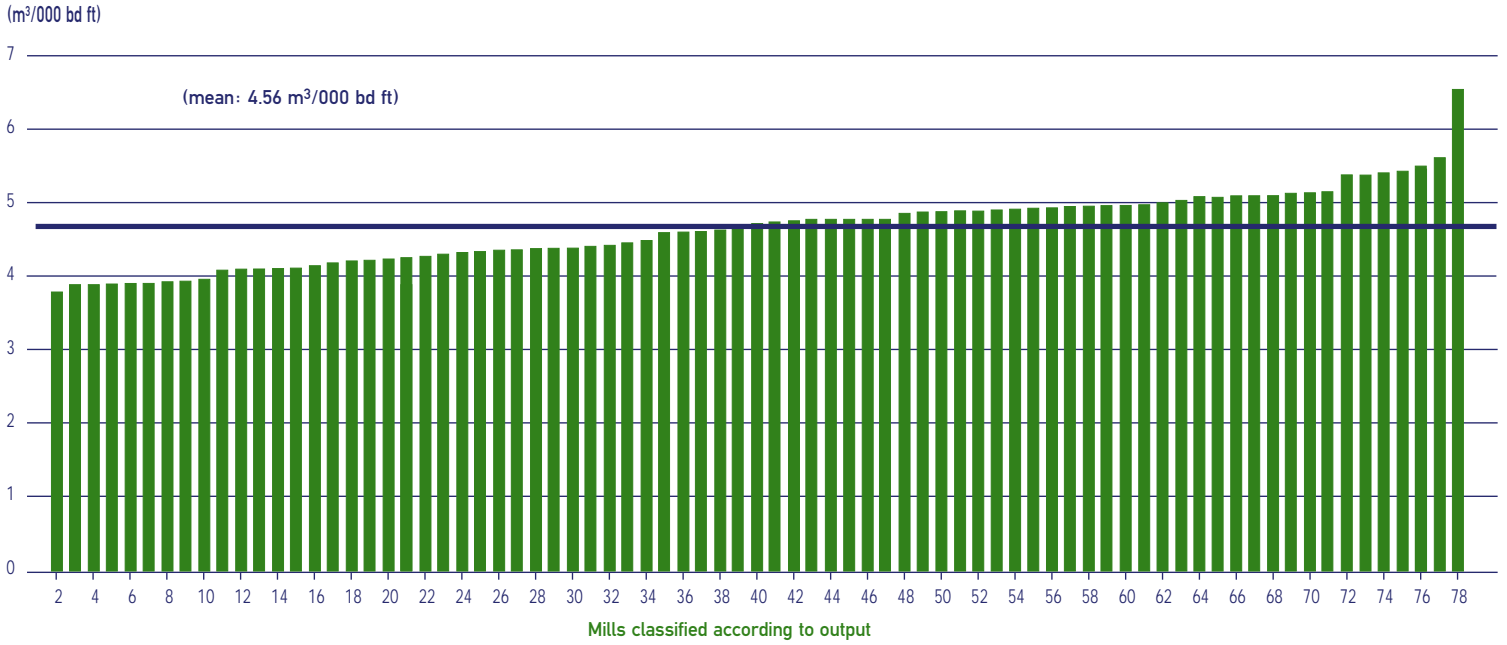


WOOD INDUSTRIES

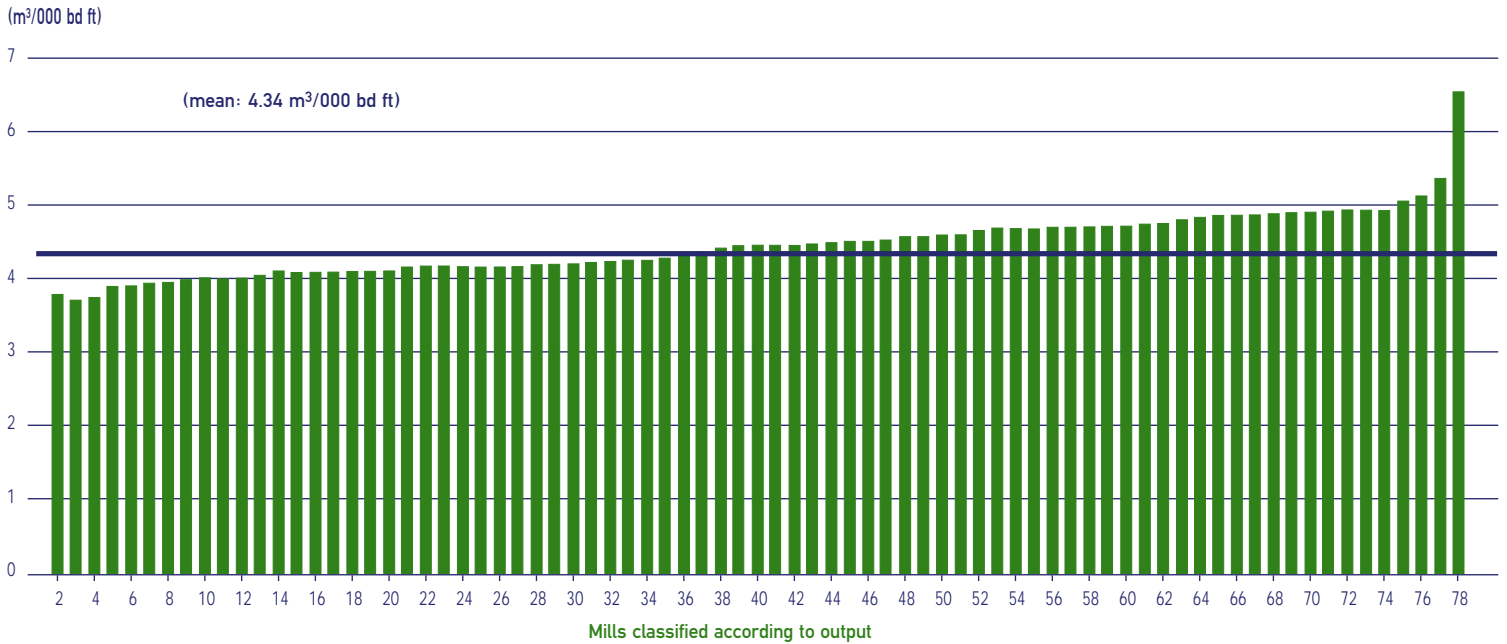
The Sawmill Industry (cont'd)

09.02.06

SAWMILL OUTPUT (FIR, SPRUCE, JACK PINE, LARCH), 1997
(TSFMA HOLDERS) ¹



SAWMILL OUTPUT (FIR, SPRUCE, JACK PINE, LARCH), 1998
(TSFMA HOLDERS) ¹



¹ TSFMA: timber supply and forest management agreement

THE PULP AND PAPER INDUSTRY

Highlights

10.00.01

QUÉBEC'S PULP, PAPER AND PAPERBOARD MILLS, FEBRUARY 2000

Mills consuming roundwood, chips, sawdust and shavings (primary processing mills)	41
Mills consuming marketed pulp and recycled fibres	23
TOTAL	64

PRODUCTION UNITS AND CAPACITY IN QUÉBEC'S PULP, PAPER AND PAPERBOARD INDUSTRY, FEBRUARY 2000 ¹

	Mills (no.)	Production capacity (000 mt/year)
Pulp destined for sale	11	2 151.0
Newsprint (mechanical, supercalandered, etc.)	22	6 196.2
Paperboard and cardboard packaging	11	1 209.2
Low-density board	2	99.8
Fine and specialty paper	7	899.4
Construction paperboard	2	101.2
Kraft papers (packing, carbon)	2	109.1
Sanitary tissue	7	284.0
TOTAL	64	11 049.9

¹ Classification by main product

MAIN SUPPLY SOURCES FOR QUÉBEC'S PULP AND PAPER INDUSTRY, 1999

	(m ³ , 000s)
Roundwood and chips (public forests)	1 663.2
Roundwood and chips (private forests)	2 534.2
Roundwood, chips, sawdust and shavings from Québec's mills	20 039.1
Roundwood, chips, sawdust and shavings from outside Québec	1 537.1
TOTAL	25 773.6

RAW MATERIALS USED IN QUÉBEC'S PULP AND PAPER MILLS, 1999

	(BDMT, 000s)
Roundwood	2 101
Joint sawmill production	8 489
Recycled fibres	2 671
TOTAL	13 261

RECYCLED FIBRE CONSUMPTION IN QUÉBEC'S PULP AND PAPER INDUSTRY, 1999

	(BDMT, 000s)
Recovered paper for de-inking	994.3
Recovered paperboard for de-inking	4.4
Recovered paper, without de-inking	398.8
Recovered paperboard, without de-inking	362.2
TOTAL	1 759.7

THE PULP AND PAPER INDUSTRY

Highlights (cont'd)

10.00.01

TYPES OF PULP PRODUCED BY QUÉBEC'S PULP AND PAPER INDUSTRY, 1998 AND 1999

	1998 (mt, 000s)	1999 (mt, 000s)
Thermomechanical pulp	2 845	3 067
Chemi-thermomechanical pulp	1 134	1 216
Other mechanical pulp	644	607
Subtotal	4 623	4 890
Sulphate pulp (Kraft)	2 155	2 213
Other mechanical pulp	483	395
Subtotal	2 638	2 608
TOTAL	7 261	7 498

QUÉBEC'S PAPER AND PAPERBOARD PRODUCTION, 1998 AND 1999

	1998 (mt, 000s)	1999 (mt, 000s)
Newsprint	3 812	4 007
Specialty printing and writing papers	2 306	2 473
Sanitary tissue	323	348
Paperboard	1 480	1 567
Other products	106	101
TOTAL	8 027	8 496

QUÉBEC'S SHARE OF CANADIAN PAPER AND PAPERBOARD PRODUCTION, 1998 AND 1999

	1998		1999	
	Newsprint (mt, 000s)	Other paper and paperboard (mt, 000s)	Newsprint (mt, 000s)	Other paper and paperboard (mt, 000s)
Québec	3 812	4 215	4 007	4 489
Canada	8 581	10 143	9 204	11 022
Québec/Canada (%)	44.4	41.6	43.5	40.7

ECONOMIC INDICATORS FOR QUÉBEC'S PAPER AND RELATED PRODUCTS INDUSTRY, 1997 ¹

Jobs (no.)	35 095
Salaries and wages (\$, 000s)	1 763 188
Value of shipments and other revenue (\$, 000s)	10 069 021
Value added to total activity (\$, 000s)	4 174 232
Capital and repair expenditures (\$, 000s)	1 374 800

¹ Statistics Canada Group 27 (paper and related products industry)

ECONOMIC INDICATORS FOR QUÉBEC'S PULP AND PAPER INDUSTRY, 1997 ¹

Jobs (no.)	23 809
Salaries and wages (\$, 000s)	1 333 867
Value of shipments and other revenue (\$, 000s)	8 119 701
Value added to total activity (\$, 000s)	3 259 155
Capital and repair expenditures (\$, 000s) ²	1 236 800

¹ Group 271 is a subdivision of Statistics Canada Group 27 (paper and related products industries).

² Estimates

THE PULP AND PAPER INDUSTRY

Highlights (cont'd)

10.00.01

DESTINATION OF QUÉBEC'S PULP AND PAPER SHIPMENTS, 1998

	Canada (mt, 000s)	United States (mt, 000s)	Other countries (mt, 000s)	TOTAL (mt, 000s)
Newsprint	534	2 419	865	3 818
Pulp destined for sale	353	480	634	1 467
Other paper and paperboard	1 431	2 507	248	4 186
TOTAL	2 318	5 406	1 747	9 471

DESTINATION OF QUÉBEC'S PULP AND PAPER SHIPMENTS, 1999

	Canada (mt, 000s)	United States (mt, 000s)	Other countries (mt, 000s)	TOTAL (mt, 000s)
Newsprint	545	2 560	903	4 008
Pulp destined for sale	327	561	687	1 575
Other paper and paperboard	1 474	2 804	206	4 484
TOTAL	2 346	5 925	1 796	10 067

RELATIVE SHARE OF QUÉBEC'S PULP AND PAPER EXPORTS, 1998 AND 1999

	1998	1999
Pulp and paper exports (\$, millions)	6 920	6 975
Total exports (\$, millions)	57 564	61 988
Relative share (%)	12.0	11.3

SHARE OF QUÉBEC'S NEWSPRINT EXPORTS ON US MARKET, 1998 AND 1999

	1998	1999
Québec's shipments to the United States (mt, 000s)	2 773	2 954
US newsprint consumption (mt, 000s)	11 631	11 852
Relative share (%)	23.8	24.9

QUÉBEC'S BALANCE OF TRADE ¹ IN THE PULP AND PAPER SECTOR, 1999 ²

	Exports (\$, millions)	Imports (\$, millions)	Balance of trade (\$, millions)
Woodpulp or pulp derived from other cellulosic fibrous material: paper or paperboard for recycling (waste and residues)	915.5	155.4	760.1
Paper and paperboard: cellulose pulp products, in paper or paperboard	6 059.6	863.1	5 196.5
TOTAL	6 975.1	1 018.5	5 956.6

¹ Based on customs figures

² Product descriptors drawn from the Harmonized Commodity Description and Coding System (World Customs Organization)

ENVIRONMENTAL PROTECTION

	1981	1998	1998 / 1981
Total suspended solids in mill effluent (kg/tonne of pulp produced)	26	2.9	-89 %
Biochemical oxygen demand in mill effluent (kg/tonne of pulp produced)	59	1.9	-97 %
Water consumption by mills (m ³ /tonne of pulp produced)	107	59	-45 %

INVESTMENTS BY PAPERMILLS TO CLEAN UP ATMOSPHERIC EMISSIONS, 1997

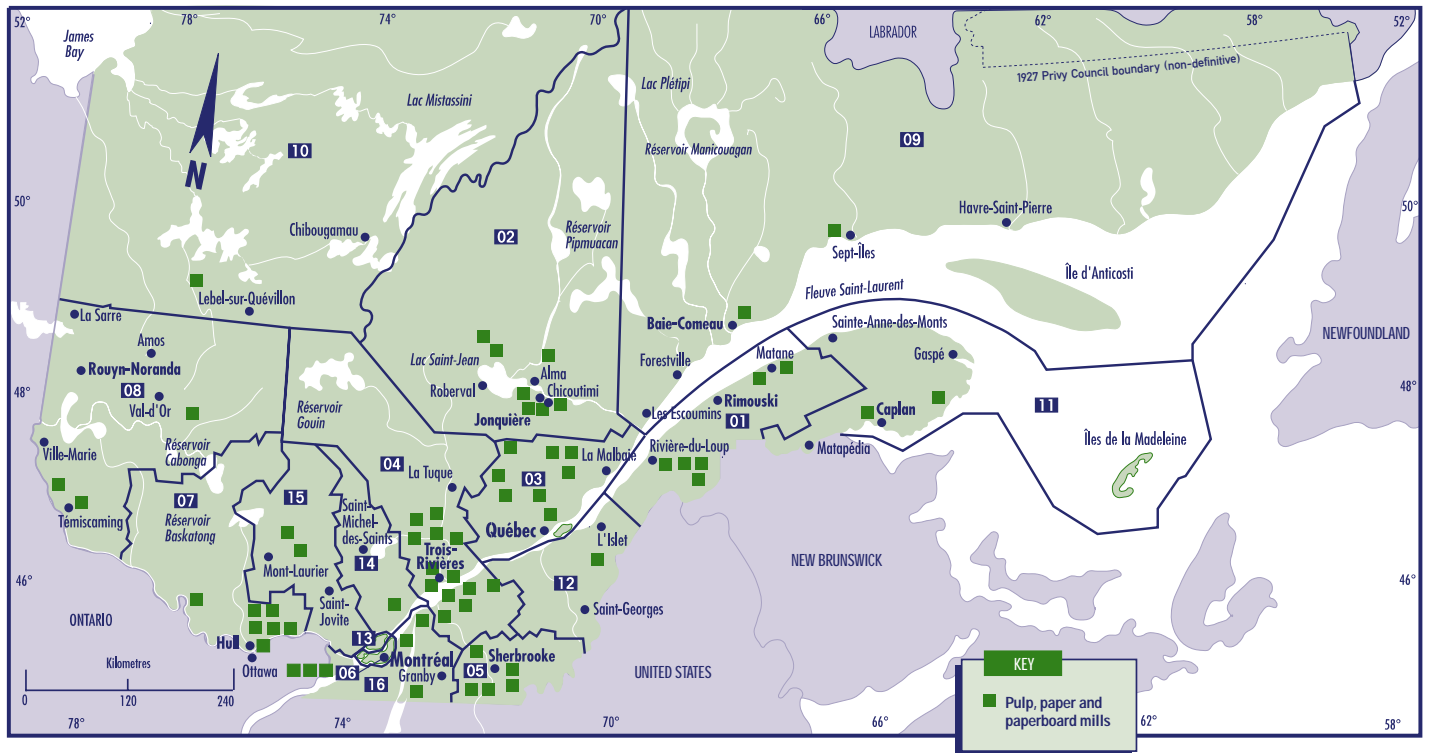
Québec investments (\$, 000s)	42 530
Canadian investments (\$, 000s)	171 872
Québec/Canada (%)	24.7

THE PULP AND PAPER INDUSTRY

Production Capacity

PULP, PAPER AND PAPERBOARD MILLS (FEBRUARY 2000)

10.01.01

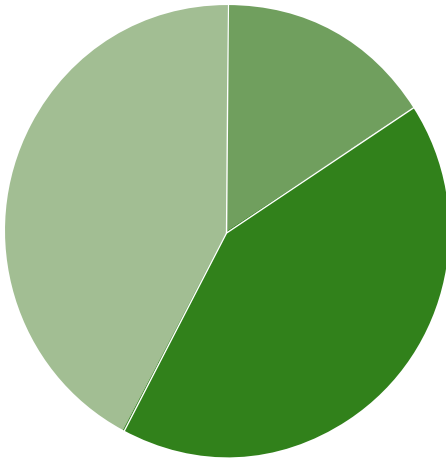


THE PULP AND PAPER INDUSTRY

Production

BREAKDOWN OF PRODUCTION BY PRODUCT

10.02.05



Production (%)			Products	Production (mt. 000s)		
1997	1998	1999 ¹		1997	1998	1999 ¹
42	40	40	Newsprint	4 122	3 812	4 007
16	15	16	Pulp destined for sale	1 538	1 459	1 596
42	44	44	Paper and paperboard other than newsprint	4 110	4 215	4 489
100	100	100	TOTAL	9 770	9 486	10 092

¹ Preliminary figures

Source: Association des industries forestières du Québec (AIFQ)

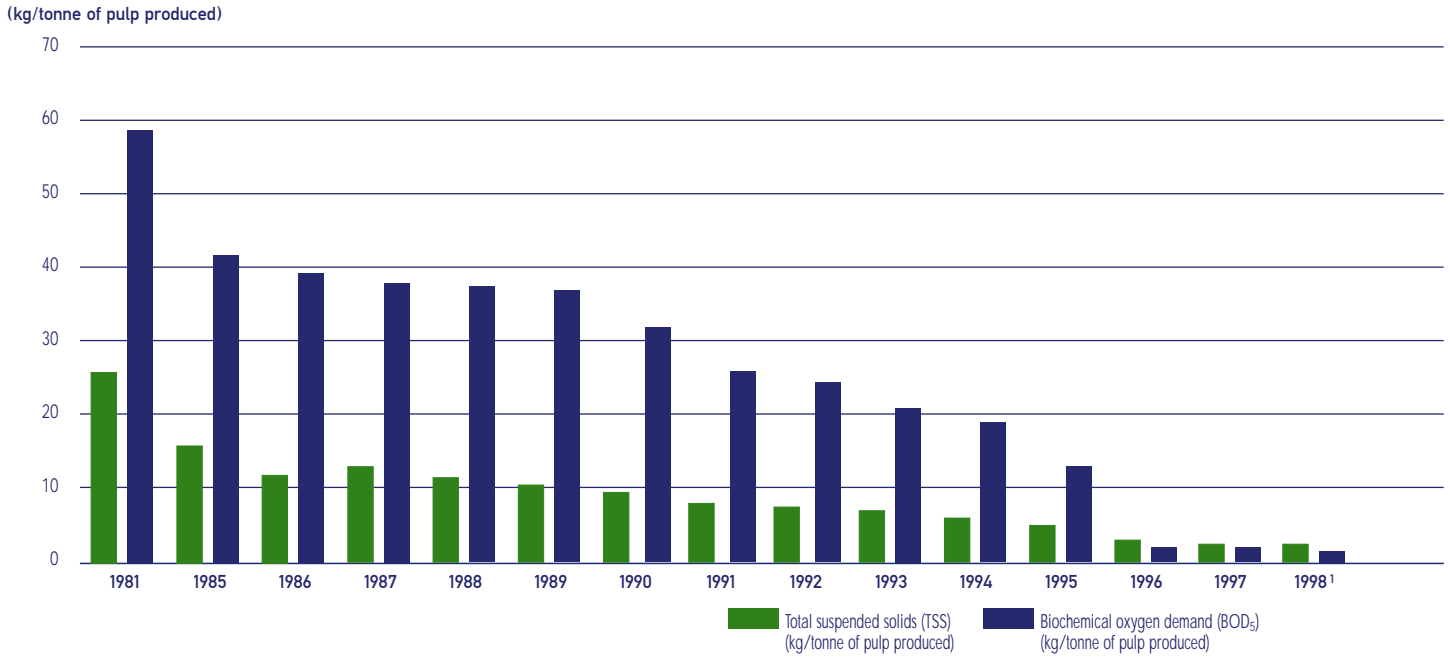


THE PULP AND PAPER INDUSTRY

Environment

TRENDS IN THE QUALITY OF EFFLUENTS FROM QUÉBEC'S PULP AND PAPER MILLS

10.06.02



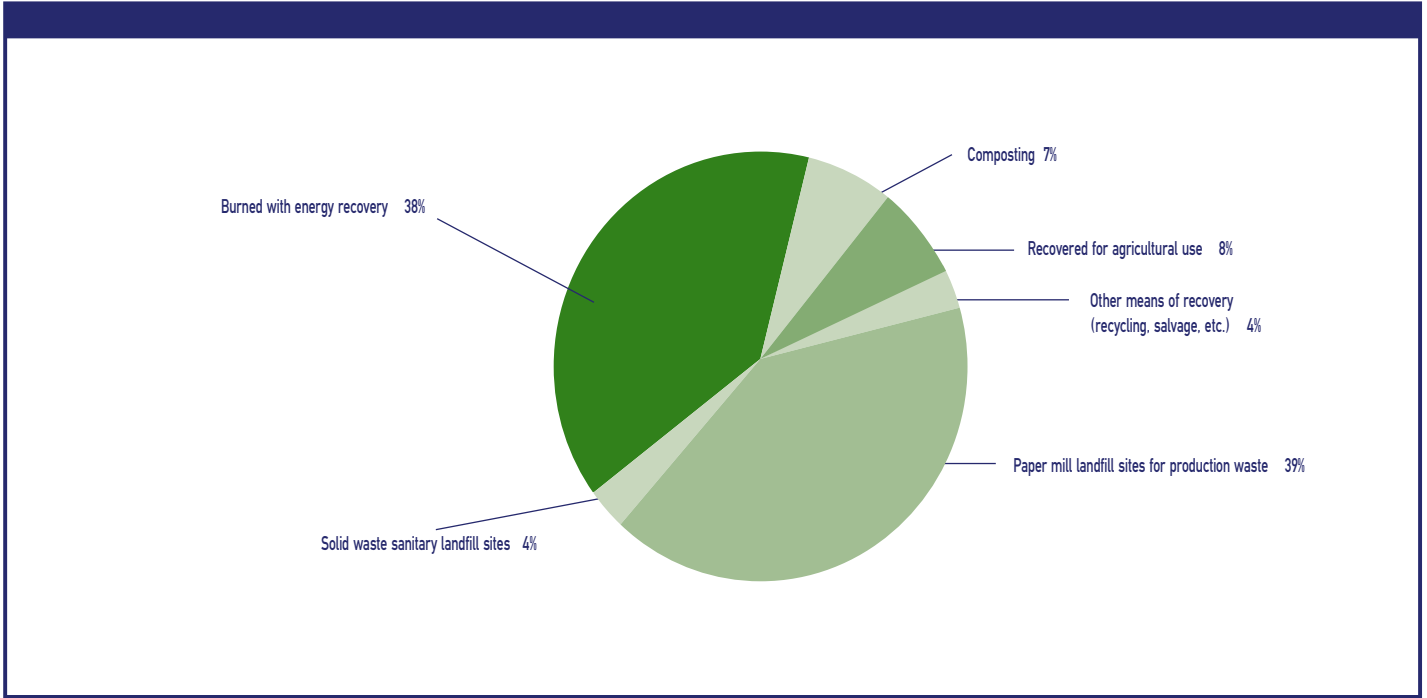
¹ As forecast by the ministère de l'Environnement et de la Faune

THE PULP AND PAPER INDUSTRY

Environment (cont'd)

DESTINATION OF PAPER MILL WASTES

10.06.05



Source: Association des industries forestières du Québec (AIFQ)

THE FOREST SECTOR IN QUÉBEC'S ECONOMY

Highlights

11.00.01

ECONOMIC INDICATORS FOR QUÉBEC'S FOREST PRODUCTS INDUSTRY, 1997

	Jobs	Salaries and wages	Value of shipments and other revenue	Value added to total activity
	(no.)	(\$, 000s)	(\$, 000s)	(\$, 000s)
Logging (Gr. 04)	11 387	329 600	2 349 600	705 800
Wood industry (Gr. 25)	36 515	1 069 792	6 885 396	2 769 022
Paper and related products industry (Gr. 27)	35 095	1 763 188	10 411 525	4 174 232
TOTAL (forest sector)	82 997	3 162 580	19 646 521	7 649 054
Overall manufacturing activity in Québec	500 906	17 768 659	113 079 195	46 859 109

ECONOMIC IMPORTANCE OF QUÉBEC'S FOREST PRODUCT EXPORTS, 1998 AND 1999

	1998	1999
	(\$, millions)	(\$, millions)
Raw wood, sawn timber and lumber	3 889.5	4 549.9
Pulp, paper and paperboard	6 920.4	6 975.1
TOTAL (forest sector)	10 809.9	11 525.0

QUÉBEC'S BALANCE OF TRADE ¹ IN THE FOREST PRODUCTS SECTOR AND FOR ALL PRODUCTS, 1999 ²

	Imports	Exports	Balance of trade
	(\$, millions)	(\$, millions)	(\$, millions)
Wood, charcoal and wood products	699.7	4 549.9	3 850.2
Pulp, paper and paperboard	1 018.5	6 975.1	5 956.6
TOTAL (forest products sector)	1 718.2	11 525.0	9 806.8
All products	60 263.0	61 987.5	1 724.5

¹ Based on customs figures

² Product descriptors drawn from the Harmonized Commodity Description and Coding System (World Customs Organization)

GROSS DOMESTIC PRODUCT (GDP) AT FACTOR COST BY ECONOMIC ACTIVITY, 1998 ¹

	(\$, millions)	(% of GDP)
Logging and forestry services	963.1	0.6
Wood industry	1 678.3	1.1
Paper industry	2 028.2	1.3
TOTAL for forest products	4 669.6	3.1
Economy as a whole	151 730.8	100.0

¹ In 1992 dollars

VALUE OF QUÉBEC'S SHIPMENTS, PRINCIPAL FOREST PRODUCTS, 1998 AND 1999

	1998	1999
	(\$, millions)	(\$, millions)
Sawn timber and planing mills	3 931.0	4 317.0
Veneer and plywood	318.0	360.0
Oriented strand board (OSB)	363.0	500.0
Wooden doors and windows	387.0	454.0
Wooden boxes and pallets	119.0	134.0
Coffins	62.0	73.0
Lumber	572.0	720.0
Pulp	1 055.0	1 123.0
Newsprint	4 486.0	4 093.0
Paperboard	983.0	1 103.0
Cardboard boxes and paper bags	1 168.0	1 253.0

THE FOREST SECTOR IN QUÉBEC'S ECONOMY

Highlights (cont'd)

11.00.01

FINANCIAL INDICATORS, 1998 AND 1999

	1998	1999
Average exchange rate (C\$/US\$)	1.483	1.486
Average exchange rate (C\$/£)	2.459	2.404
Average exchange rate (C\$/DM)	0.845	0.810
Average exchange rate (C\$/¥)	0.011	0.013
Average discount rate		
• Canada (%)	5.19	4.94
• United States (%)	4.90	4.60
Average prime rate		
• Canada (%)	6.69	6.44
• United States (%)	8.31	7.98
Stock market index (forest product market prices, Montreal Exchange)	2 068	2 892

CONSTRUCTION STARTS IN CANADA AND THE UNITED STATES, 1998 AND 1999

	1998 (no. of units)	1999 (no. of units)
Canada	140 342	148 608
United States	1 621 167	1 673 917

AVERAGE PRICE OF PRINCIPAL FOREST PRODUCTS, 1998 AND 1999

	1998	1999
Softwood lumber, Toronto green (composite price) (C\$/000 bd ft)	359.3	378.6
Softwood lumber, Columbus dry (composite price) (C\$/000 bd ft)	504.0	552.2
Hardwood lumber, Montreal Exchange (weighted price) (C\$/000 bd ft)	664.4	644.1
Plywood (12.5 mm) (C\$/000 sq. ft.)	469.0	566.0
Waferboard 7/16" (C\$/000 sq. ft.)	298.0	383.0
Bleached softwood kraft pulp (US\$/mt)	537.5	554.0
Bleached hardwood kraft pulp (US\$/mt)	491.2	524.0
Newsprint (US\$/mt)	592.5	500.0

ESTIMATED REVENUE FROM WOOD CHIPS IN QUÉBEC, 1998 AND 1999

	1998 (C\$/000 bd ft)	1999 (C\$/000 bd ft)
	90.0	91.0

PROFITS MADE BY CANADA'S FOREST PRODUCTS INDUSTRY, 1998

Profits (\$, millions)	287
Profits/sales (%)	1.5

SHARE OF PAPER MILL-INTEGRATED SAWMILLS IN ROUNDWOOD CONSUMPTION

1987	28.9% of total consumption
1998	53.9% of total consumption

BUDGET ALLOCATED TO THE SECTEUR DES FORÊTS AND THE SECTEUR DES SERVICES RÉGIONAUX, MINISTÈRE DES RESSOURCES NATURELLES (MRN), 1999-2000

	(\$, 000s)
Research and development	11 970.0
Forestry policies and programs	54 976.9
Forest management planning and monitoring	88 642.5
Seedling production	35 600.0
Internal management and support	1 034.8
Forestry loans	1 255.5
TOTAL	193 479.7

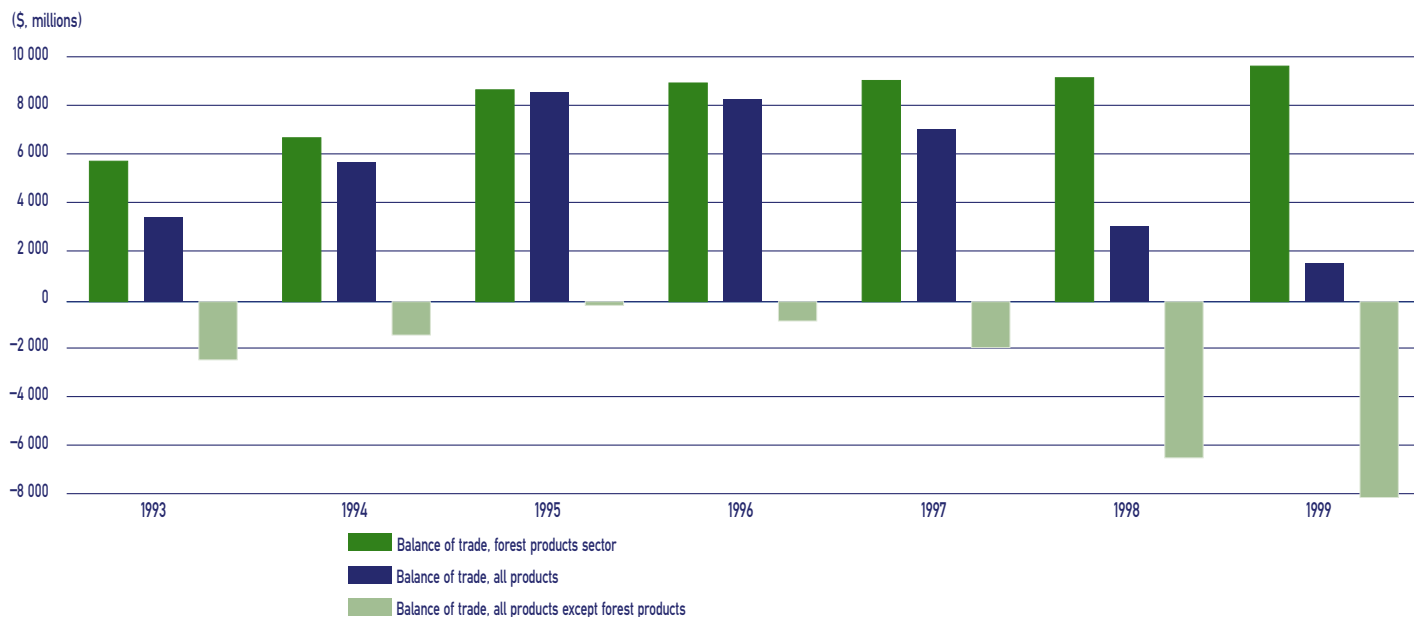


THE FOREST SECTOR IN QUÉBEC'S ECONOMY

Economic and Financial Indicators

QUÉBEC'S BALANCE OF TRADE ¹ IN THE FOREST PRODUCTS SECTOR AND FOR ALL PRODUCTS ²

11.01.13



¹ Based on customs figures

² Product descriptors drawn from the Harmonized Commodity Description and Coding System (World Customs Organization)

Source: Institut de la statistique du Québec

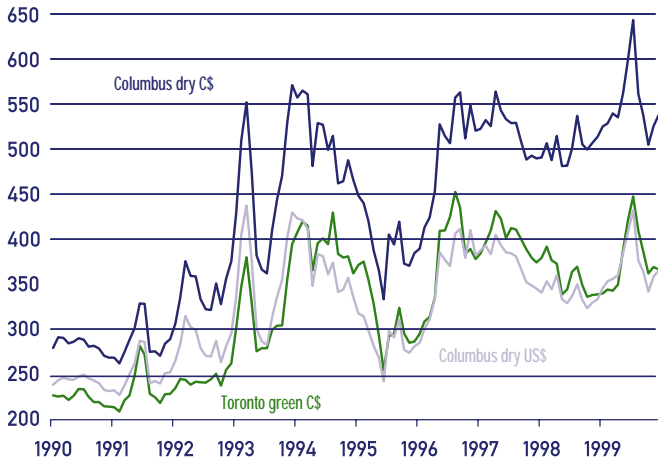
THE FOREST SECTOR IN QUÉBEC'S ECONOMY

Economic and Financial Indicators (cont'd)

PRICE TRENDS

11.01.36

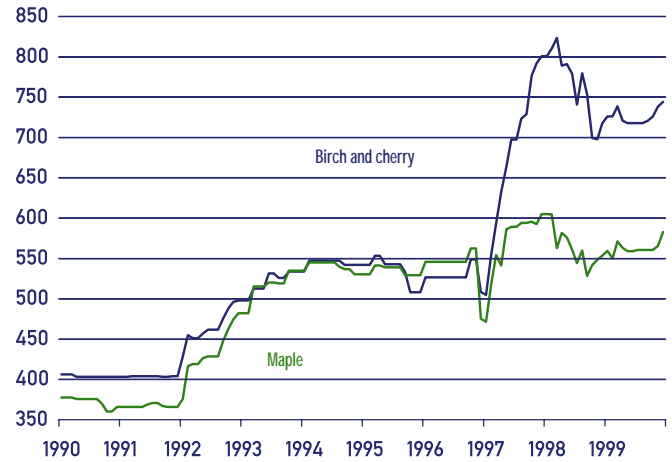
1) SOFTWOOD LUMBER (composite price)
(\$/000 bd ft)



Source: Pribec

11.01.37

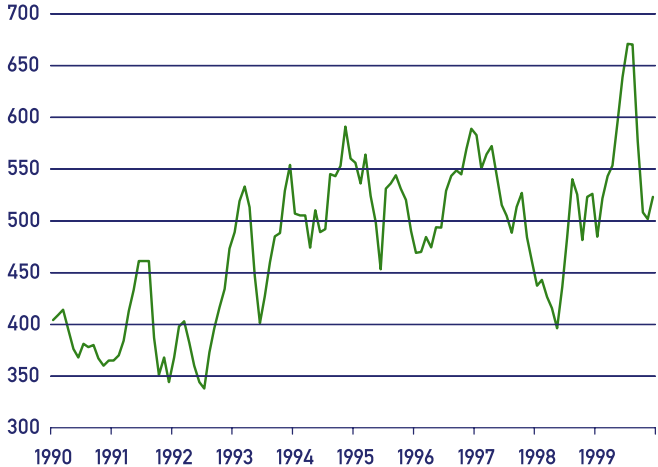
2) HARDWOOD LUMBER (weighted price)^{1, 2}
(\$/000 bd ft)



1 4/4 raw, FOB Montreal, valid to November 1996
2 4/4 raw, FOB mill, beginning 1997
Source: Pribec

11.01.38

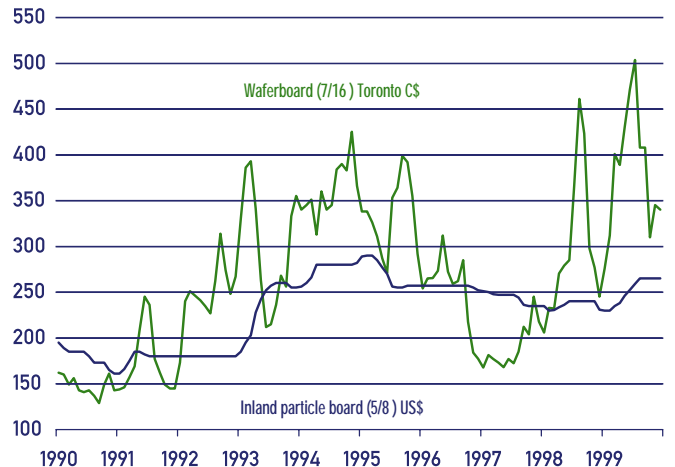
3) PLYWOOD (12.5 mm)
(C\$/000 bd ft)



Source: Madison's Canadian Lumber Reporter

11.01.39

4) BOARDS
(\$/000 bd ft)



Source: Random Lengths



THE FOREST SECTOR IN QUÉBEC'S ECONOMY

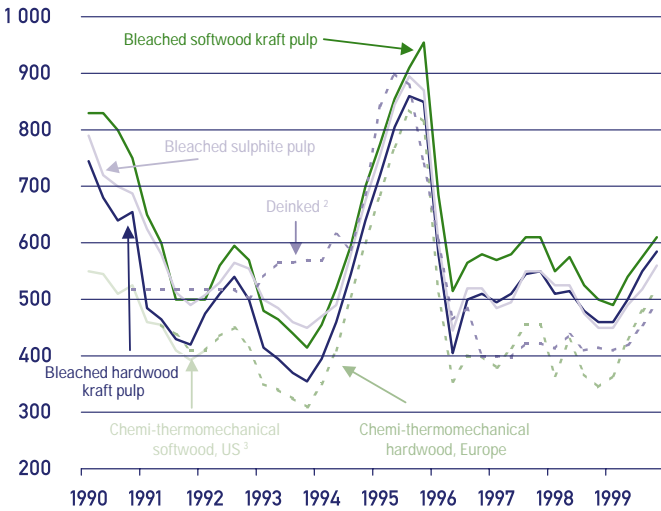
Economic and Financial Indicators (cont'd)

PRICE TRENDS (CONT'D)

11.01.40

5) MARKET PULP¹

(US\$/mt)

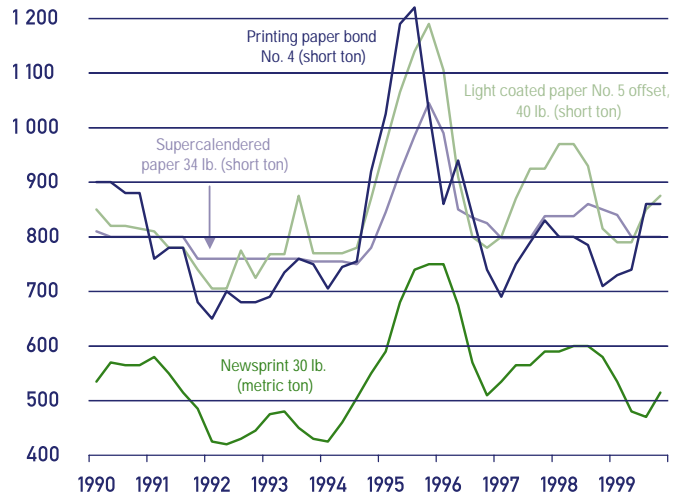


1 Price at end of quarter
 2 1992: 20% post-consumer (paper recovered from consumers)
 1993: (1st and 2nd quarters): 75% post-consumer
 1993: (3rd and 4th quarters), 1994 and 1995: 100% post-consumer
 3 Data not available as of 2nd quarter 1992
 Source: Pulp & Paper Week

11.01.41

6) PAPER¹

(US\$)

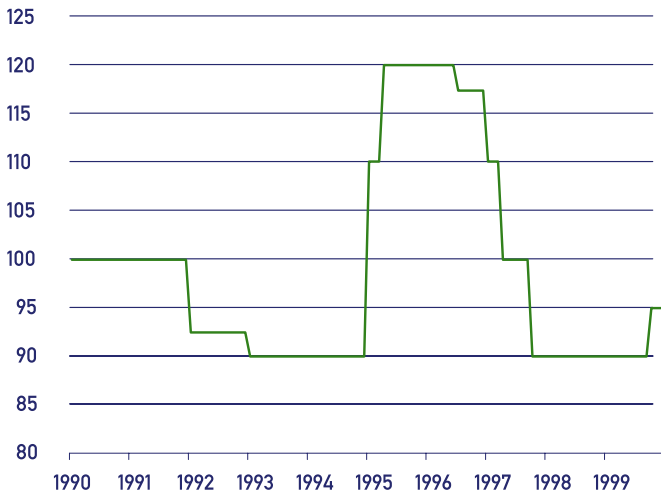


1 Price at end of quarter
 Source: Pulp & Paper Week

11.01.42

7) REVENUE FROM CHIPS¹

(C\$/000 bd ft)



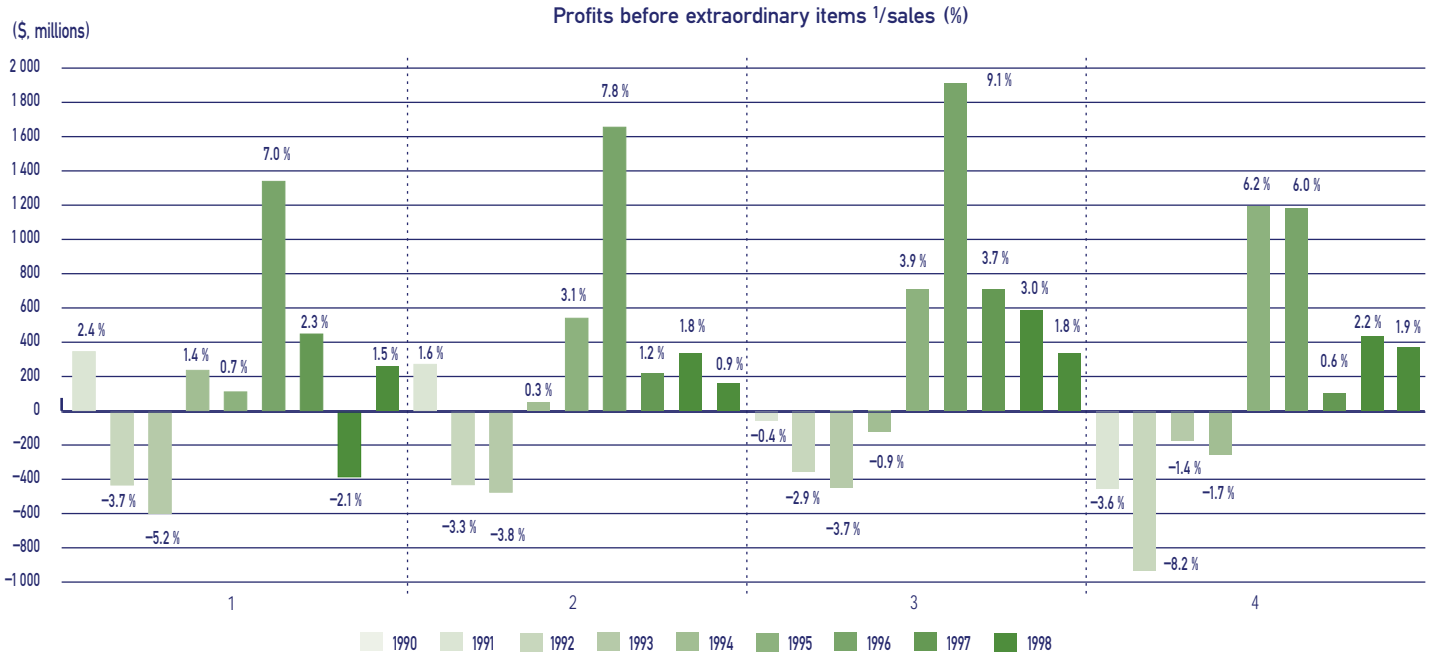
1 Estimates
 Sources: Pribec and Ministère des Ressources naturelles (MRN)

THE FOREST SECTOR IN QUÉBEC'S ECONOMY

Economic and Financial Indicators (cont'd)

11.01.43

QUARTERLY PROFITS WOOD AND PAPER (CANADA)



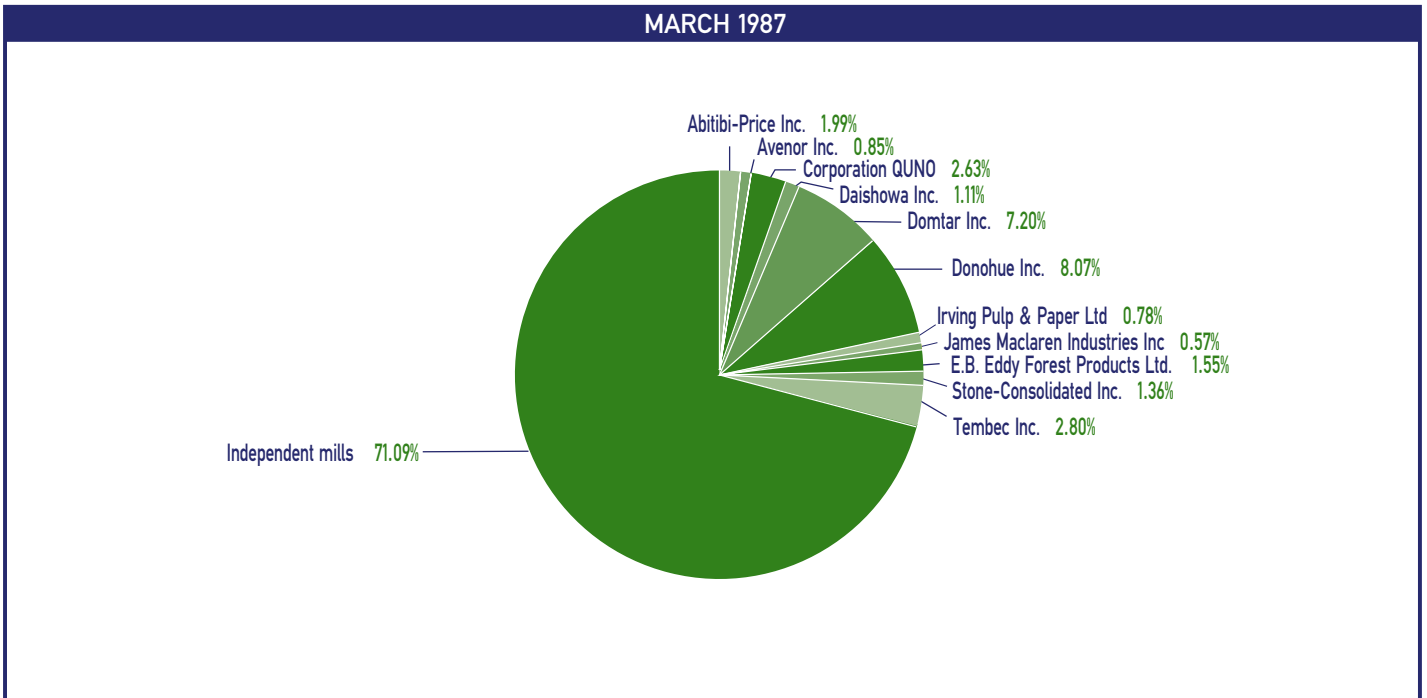
¹ Profits before extraordinary items means profits before taxes, capital expenses and amortization.

THE FOREST SECTOR IN QUÉBEC'S ECONOMY

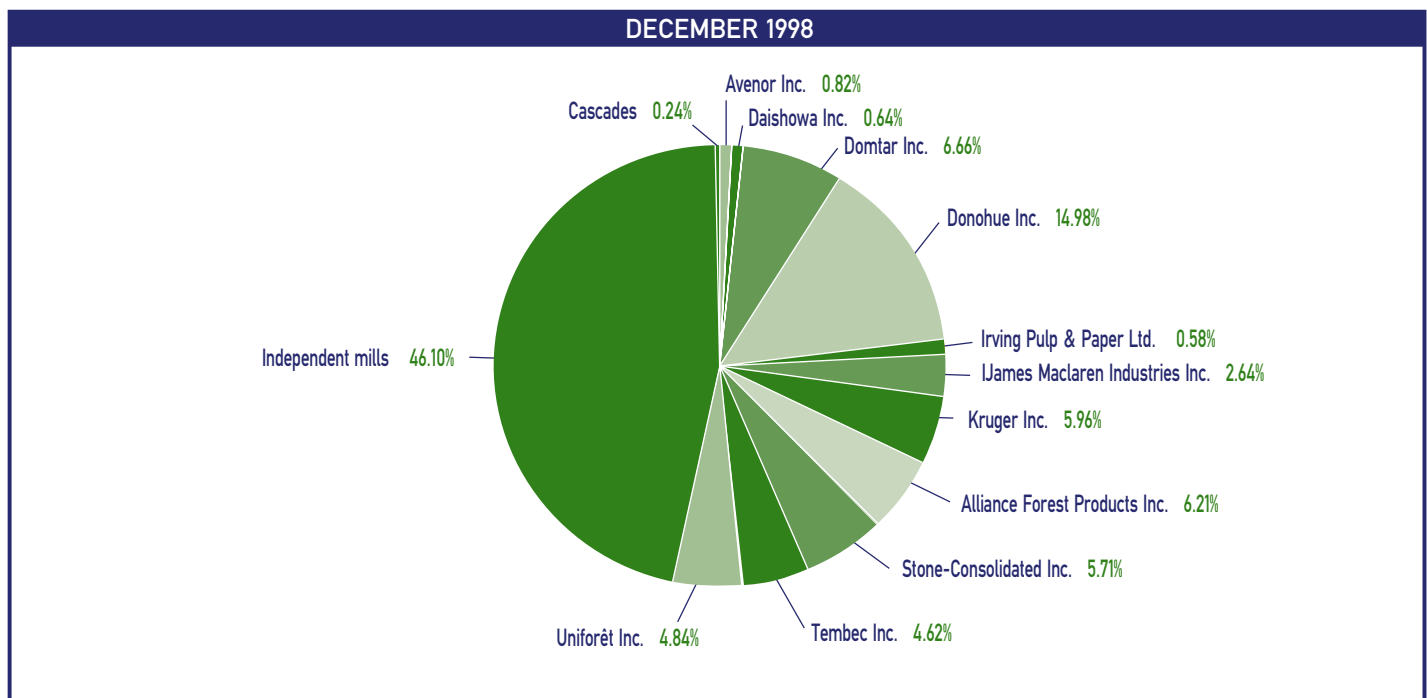
Economic and Financial Indicators (cont'd)

SHARE OF PAPER MILL-INTEGRATED SAWMILLS IN QUÉBEC'S AUTHORIZED ROUNDWOOD CONSUMPTION (%)

11.01.45



11.01.46





STATISTICS

730,2 301,8 458,31 1 231,710 2 775
 21,208 78,56 45,0 66,39 12,335 3,474
 11 078 18 526 29 604 39 800 25 289 8 520 4 994 780

730,2 301,8 458,31 1 231,710 2 775
 21,208 78,56 45,0 66,39 12,335 3,474

78,56 Côte-Nord 39 12,335 3,474
 11 078 18 526 29 604 39 800 25 289 8 520 4 994 780