

Species and groups of species	Quality <sup>1</sup>	Price index <sup>2</sup>	Reference price index <sup>3</sup>
<b>ALL HARDWOODS (EXCEPT POPLAR/ASPEN)</b>	C D	Lumber, hardwood (D691502) Pulp and paper index, hardwood Newsprint paper (D691618; 0.8 %) Paper board (D693067; 11.0 %) Woodpulp, sulphate, bleached, domestic (D691604; 73.0 %) Other paper for printing (D691621; 15.2 %)	104.7 100.0

- 1 The letters A, B, C and D correspond respectively to the superior, intermediate and inferior quality levels determined on the basis of the assessment of cuts according to species, diameter, length and imperfections observed on crosscuts and trunks.
- 2 The source of the price indexes and the relative weight of each are indicated in parentheses. The price indexes from Statistics Canada are indicated according to the Cansim number appearing in catalogue 62-011.
- 3 The reference price index corresponds to the average of the price indexes calculated between 1 April 1995 and 31 March 1996. The weighting for the composite index Poplar/Aspen, Quality B, is preliminary. The final result will be printed in the Regulation of March 1997.

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### Draft Minister's Order

Forest Act  
(R.S.Q., c. F-4.1)

#### Value of silvicultural treatments

Notice is hereby given that the Order of the Minister of Natural Resources respecting the value of silvicultural treatments, the text of which appears below, may be made by the Minister, with or without amendment, at the expiry of 45 days following this publication.

Any person having comments to make on this matter is asked to send them in writing, before the expiry of the 45-day period, to Mr. Jacques Robitaille, Associate Deputy Minister for Forests, Ministère des Ressources naturelles, 880, chemin Sainte-Foy, 10<sup>e</sup> étage, Québec (Québec), G1S 4X4.

GUY CHEVRETTE,  
*Minister of State for Natural Resources*

**M.O., 1996**

#### Minister's Order 96-347 of the Minister of Natural Resources respecting the value of silvicultural treatments

Forest Act  
(R.S.Q., c. F-4.1, ss. 73.1 and 73.3)

**1.** The silvicultural treatments described in Schedule I shall be admitted as payment of the dues prescribed by the Minister responsible for the application of the Forest Act for the 1997-1998 fiscal year.

**2.** The value of those silvicultural treatments is established in Schedule II.

**3.** This Minister's Order replaces Minister's Order 9501399 of the Minister of Natural Resources, published in Part 2 of the *Gazette officielle du Québec* of 27 March 1996.

**4.** This Minister's Order of the Minister of Natural Resources comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*.

#### SCHEDULE I

(s. 1)

#### SILVICULTURAL TREATMENTS ADMITTED FOR THE 1997-1998 FISCAL YEAR

##### DIVISION I ALL FOREST AREAS

1. Site preparation: site preparation consists of any of the following five operations:

(1) scarification: loosening the soil to promote natural or artificial regeneration of desired species of trees;

(2) clearing: windrowing or piling non-commercial ligneous matter to facilitate the planting of seedlings or the passage of a scarifier;

(3) winter shear-blading: clearing frozen ground with a shear-blade-equipped tractor in order to eliminate all vegetation and remove excessively thick organic matter;

(4) ploughing and harrowing: loosening the soil by means of a plough and a harrow to promote the planting of tolerant hardwoods or hybrid poplars;

(5) prescribed burning: intentional burning of forest fuels left lying in a forest management area after the felling of commercial timber carried out in weather conditions that enable fire to spread freely within the selected area.

2. Planting: the setting in the soil of cuttings, sets, bare-root seedlings or container seedlings in order to produce ligneous matter.

3. Natural regeneration reinforcement planting: the planting of seedlings in an area where natural regeneration is insufficient, in order to obtain a number of evenly distributed trees of the principal species in that area.

4. Release treatment: the controlling of competing vegetation by spraying herbicides registered for forestry, such as glyphosate, or by using mechanical means such as circular saws, chain saws or shears, in order to promote the natural or artificial regeneration of desired species.

5. Precommercial thinning: the felling of trees that impede the growth of selected trees in a young stand, by equalizing the spacing between them.

6. Commercial thinning: the felling or harvesting of trees in an even-aged stand that has not yet reached cutting age, in such a way as to accelerate the diameter growth of the remaining trees and to improve the quality of the stand.

7. Drainage: the digging of ditches to lower soil humidity by draining away surface run-off and seepage, in order to improve tree growth and to promote natural and artificial regeneration.

**DIVISION II**  
FOREST AREAS INTENDED FOR PRIORITY  
PRODUCTION OF SOFTWOODS

8. Pine seeding: the aerial or ground seeding of jack pine seed or the seeding of jack pine or white pine in funnels.

**DIVISION III**  
FOREST AREAS INTENDED FOR THE PRIORITY  
PRODUCTION OF TOLERANT HARDWOODS,  
WHITE PINE, RED PINE, CEDAR AND MIXED  
STANDS WITH TOLERANT HARDWOODS

9. Selection cutting: the periodic felling or harvesting of trees selected individually or in small groups in an uneven-aged high forest, taking into account all the species and diameter classes of trees in a stand, as well as their strength and quality. A balanced selection structure must be obtained or maintained in the stand by ensuring that growing trees receive the necessary tending and by favouring seed establishment.

10. Improvement cutting: the felling or harvesting of trees in a degraded uneven-aged high forest whose diameter is equal to or greater than the diameter determined for each species, while maintaining the percentage of the basal area of Quality 1 trees after treatment.

**DIVISION IV**  
FOREST AREAS INTENDED FOR THE PRIORITY  
PRODUCTION OF TOLERANT HARDWOODS,  
WHITE PINE, RED PINE AND MIXED STANDS  
WITH TOLERANT HARDWOODS

11. Preselection cutting: the felling or harvesting of trees selected individually or in small groups in an uneven-aged high forest, taking into account all the species and diameter classes of trees in a stand, as well as their strength and quality. A structure conducive to selection must be obtained in the stand by ensuring that growing trees receive the necessary tending and by favouring seed establishment.

12. Enrichment planting: the introduction of or an increase in the number of white pine, red oak, American ash or yellow birch in a stand, through planting.

**DIVISION V**  
FOREST AREAS INTENDED FOR THE PRIORITY  
PRODUCTION OF SOFTWOODS, TOLERANT  
HARDWOODS, WHITE PINE, RED PINE AND  
MIXED STANDS

13. Progressive seed cutting: the felling or harvesting of trees at the time of the first of a series of successive regeneration cuts in an even-aged stand that has reached cutting age, thus permitting the opening of the forest cover and the elimination of overtopped trees, and promoting natural regeneration from seeds produced by dominant and codominant trees left as seed bearers.

14. Strip cutting with regeneration and soil protection: felling or harvesting in a stand, in strips no more

than 60 metres wide, leaving a distance between each strip at least equal to the width of the strip harvested. In the strips, all trees of commercial species whose diameter has reached 10 centimetres or more at 1.30 metres above the highest ground level are harvested. Cutting must allow the harvesting of not less than 75 % of the basal area or the reduction of the forest cover to less than 25 %. Felling or hauling roads must be spaced and every precaution must be taken to avoid damaging advance regeneration and to protect the soil.

15. Fertilization: the application of chemical or organic fertilizers to increase the production capacity of the soil.

#### **DIVISION VI** SILVICULTURAL TREATMENTS FOR THE PROTECTION OF FOREST RESOURCES

16. Strip cutting with regeneration and soil protection: felling or harvesting in a stand, in strips no more than 60 metres wide, leaving a distance between each strip at least equal to the width of the strip harvested. In the strips, all trees of commercial species whose diameter has reached 10 centimetres or more at 1.30 metres above the highest ground level are harvested. Cutting must allow the harvesting of not less than 75 % of the basal area or the reduction of the forest cover to less than 25 %. Felling or hauling roads must be spaced and every precaution must be taken to avoid damaging advance regeneration and to protect the soil.

17. Selection cutting: the periodic felling or harvesting of trees selected individually or in small groups in an uneven-aged high forest, taking into account all the species and diameter classes of trees in a stand, as well as their strength and quality. A balanced selection structure must be obtained or maintained in the stand by ensuring that growing trees receive the necessary tending and by favouring seed establishment.

18. Improvement cutting: the felling or harvesting of trees in a degraded uneven-aged high forest whose diameter is equal to or greater than the diameter determined for each species, while maintaining the percentage of the basal area of Quality 1 trees after treatment.

19. Preselection cutting: the felling or harvesting of trees selected individually or in small groups in an uneven-aged high forest, taking into account all the species and diameter classes of trees in a stand, as well as their strength and quality. A structure conducive to selection must be obtained in the stand by ensuring that growing trees receive the necessary tending and by favouring seed establishment.

### **SCHEDULE II**

(s. 2)

#### VALUE OF SILVICULTURAL TREATMENTS ADMITTED AS PAYMENT OF DUES FOR THE 1997-1998 FISCAL YEAR

##### **DIVISION I** ALL FOREST AREAS

###### 1. SITE PREPARATION

— Scarification	
Anchor chains	\$100/ha
Shark-fin barrels and chains	\$290/ha
Hydraulic cone trenchers (Wadell type)	\$230/ha
Hydraulic disk trenchers (TTS hydraulic and Donaren types)	\$185/ha
Batch scarifier (Bracke), disk trencher (TTS type)	\$130/ha
Batch scarifier moulder (Bracke moulder)	\$180/ha
“V” blade batch scarifier (Bracke) or disk trencher	\$360/ha
Cutter-type portable scarifier, forest mattock	\$320/1 000 microsites
Forest harrows (Rome and Crabe types)	
Single pass	\$205/ha
Double pass	\$370/ha
Létourneau tree crusher	\$225/ha
— Winter shear-blading with a shear-blade-equipped crawler tractor	\$415/ha
— Clearing	
Rake-equipped crawler tractor	\$410/ha
Rake-equipped skidder	\$345/ha
Modified “V” blade models C and H	\$175/ha
— Ploughing and harrowing	
Forest plough (Lazure type) + forest harrow (Rome and Crabe types)	\$1 120/ha
— Prescribed burning	\$375/ha

###### 2. PLANTING

— With site preparation	
Bare-root seedlings Conventional size	\$210/1 000 seedlings
Large size	\$245/1 000 seedlings
Container seedlings 67-50:	\$170/1 000 seedlings
45-110 or cuttings:	\$175/1 000 seedlings
25-200:	\$230/1 000 seedlings
45-340 and 25-350-A:	\$315/1 000 seedlings

— Without site preparation		11 000 to 14 999 t/ha	\$695/ha
Bare-root seedlings Conventional size	\$225/1 000 seedlings	15 000 to 19 999 t/ha	\$815/ha
Large size	\$260/1 000 seedlings	20 000 and over t/ha	\$910/ha
Container seedlings 67-50:	\$185/1 000 seedlings	— Priority production of intolerant hardwoods and mixed predominantly intolerant hardwood stands	\$795/ha
45-110:	\$190/1 000 seedlings	— Priority production of tolerant hardwoods and mixed predominantly tolerant hardwood stands	\$760/ha
25-200:	\$245/1 000 seedlings		
45-340 and 25-350-A:	\$330/1 000 seedlings		
<b>3. NATURAL REGENERATION REINFORCEMENT PLANTING</b>			
— With site preparation			
Bare-root seedlings Conventional size	\$225/1 000 seedlings	Average DSH of felled trees (cm)	Value with tree marking (\$/ha)
Large size	\$260/1 000 seedlings	12 to 12.9	1 016
Container seedlings 67-50:	\$180/1 000 seedlings	13 to 13.9	871
45-110:	\$190/1 000 seedlings	14 to 15.9	705
25-200:	\$245/1 000 seedlings	16 to 17.9	549
45-340 and 25-350-A:	\$330/1 000 seedlings	18 or more	440
— Mixed with tolerant and intolerant hardwoods			
— Tolerant and intolerant hardwoods			
<b>7. DRAINAGE</b>			
— Without site preparation		Cleared areas (without prior felling)	\$1.40/m or m <sup>3</sup>
Bare-root seedlings Conventional size	\$240/1 000 seedlings	Wooded areas (with prior felling)	\$1.75/m or m <sup>3</sup>
Large size	\$275/1 000 seedlings		
Container seedlings 67-50:	\$195/1 000 seedlings		
45-110:	\$205/1 000 seedlings		
25-200:	\$260/1 000 seedlings		
45-340 and 25-350-A:	\$345/1 000 seedlings		
<b>4. RELEASE TREATMENT</b>			
— Mechanical			
Coniferous or boreal forest zone	\$555/ha		
Mixed and hardwood forest zones	\$630/ha		
— Herbicides			
Ground spraying	\$340/ha		
Aerial spraying	\$205/ha		
<b>5. PRECOMMERCIAL THINNING</b>			
— Priority production of softwoods and mixed predominantly softwood stands			
4 000 to 6 999 t/ha	\$355/ha		
7 000 to 10 999 t/ha	\$550/ha		
<b>6. COMMERCIAL THINNING</b>			
— Softwoods			
<b>DIVISION II</b>			
<b>FOREST AREAS INTENDED FOR THE PRIORITY PRODUCTION OF SOFTWOODS</b>			
<b>8. PINE SEEDING</b>			
— Aerial seeding			\$35/ha
— Ground seeding			\$130/ha
— Funnels			\$295/1 000 seeded microsites
<b>DIVISION III</b>			
<b>FOREST AREAS INTENDED FOR THE PRIORITY PRODUCTION OF TOLERANT HARDWOODS, WHITE PINE, RED PINE, CEDAR AND MIXED STANDS WITH TOLERANT HARDWOODS</b>			
<b>9. SELECTION CUTTING</b>			
— Tolerant hardwoods			\$235/ha
— Mixed with tolerant hardwoods			\$235/ha

— Cedar	\$220/ha
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10. IMPROVEMENT CUTTING	
— Tolerant hardwoods	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$220/ha

**DIVISION IV**

FOREST AREAS INTENDED FOR THE PRIORITY PRODUCTION OF TOLERANT HARDWOODS, WHITE PINE, RED PINE AND MIXED STANDS WITH TOLERANT HARDWOODS

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11. PRESELECTION CUTTING	
— Tolerant hardwoods	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$220/ha
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12. ENRICHMENT AND REINFORCEMENT PLANTING OF HARDWOODS AND PINE	\$495/1 000 seedlings

**DIVISION V**

FOREST AREAS INTENDED FOR THE PRIORITY PRODUCTION OF SOFTWOODS, TOLERANT HARDWOODS, WHITE PINE, RED PINE AND MIXED STANDS

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13. PROGRESSIVE SEED CUTTING	
— Softwoods	\$505/ha
— Mixed with tolerant and intolerant hardwoods	\$235/ha
— Tolerant and intolerant hardwoods	\$235/ha
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14. STRIP CUTTING WITH REGENERATION AND SOIL PROTECTION (except in mixed stands)	\$205/ha
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15. FERTILIZATION	
— Softwoods and mixed stands with tolerant hardwoods	\$355/ha
— Tolerant hardwoods	\$355/ha

**DIVISION VI**

SILVICULTURAL TREATMENTS FOR THE PROTECTION OF FOREST RESOURCES

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16. STRIP CUTTING WITH REGENERATION AND SOIL PROTECTION	\$205/ha
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17. SELECTION CUTTING	
— Tolerant hardwoods	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$220/ha
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18. IMPROVEMENT CUTTING	
— Tolerant hardwoods	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$220/ha
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19. PRESELECTION CUTTING	
— Tolerant hardwoods	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$220/ha

Note: The expression “tolerant hardwoods” includes white pine and red pine.

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