Species and groups of species	Quality ¹	Price index ²	Reference price index ³
ALL HARDWOODS (EXCEPT POPLAR/ASPEN)	С	Lumber, hardwood (D691502)	104.7
	D	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 %)	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.

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M.O., 1997

Order number 9600537 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 administration of the Forest Act for the 1997-1998 fiscal year.
- **2.** The values of such silvicultural treatments are those 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 1 April 1997.

GUY CHEVRETTE, Minister of State for Natural Resources

SCHEDULE I

(s. 1)

SILVICULTURAL TREATMENTS ADMITTED FOR THE 1997-1998 FISCAL YEAR

DIVISION IALL 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 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.

- 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.

\$210/1 000

seedlings

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 mounder	
	(Bracke mounder)	\$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 type	· .
	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

2.

		SIZC	secumings
		Large size	\$245/1 000
			seedlings
	Container seedlings	67-50:	\$170/1 000
	_		seedlings
		45-110 or	\$175/1 000
		cuttings:	seedlings
		25-200:	\$230/1 000
			seedlings
		45-340 and	\$315/1 000
		25-350-A:	seedlings
_	Without site prepara	tion	_
	Bare-root seedlings	Conventional	\$225/1 000
	_	size	seedlings
		Large size	\$260/1 000
		· ·	seedlings
	Container seedlings	67-50:	\$185/1 000
	· ·		seedlings
		45-110:	\$190/1 000
			seedlings
		25-200:	\$245/1 000
			seedlings
		45-340 and	\$330/1 000
		25-350-A:	seedlings
			C

3.	NATURAL REGENEI REINFORCEMENT P		
	 With site preparation 		
	Bare-root seedlings	Conventional	\$225/1 000
	S	size	seedlings
		Large size	\$260/1 000
		8	seedlings
	Container seedlings	67-50:	\$180/1 000
			seedlings
		45-110:	\$190/1 000
		1101	seedlings
		25-200:	\$245/1 000
		23 200.	seedlings
		45-340 and	\$330/1 000
		25-350-A:	seedlings
	 Without site prepara 		secumgs
	Bare-root seedlings	Conventional	\$240/1 000
	Bare-root seedings	size	seedlings
		Large size	\$275/1 000
		Large size	seedlings
	Container seedlings	67.50.	
	Container seedlings	67-50:	\$195/1 000
		45 110.	seedlings
		45-110:	\$205/1 000
		25, 200	seedlings
		25-200:	\$260/1,000
		45 240 1	seedlings
		45-340 and	\$345/1 000
		25-350-A:	seedlings
4.	RELEASE TREATME	ENT	
	 Mechanical 		
	Coniferous or boreal	forest zone	\$555/ha
	Mixed and hardwood	d forest zones	\$630/ha
	 Herbicides 		
	Ground spraying		\$340/ha
	Aerial spraying		\$205/ha
	1 , 5		
5.	PRECOMMERCIAL 7	THINNING	
٥.	 Priority production of 		mived
	predominantly softw	ood stands	IIIIXCU
	4 000 to 6 999 t/ha	oou stanus	\$355/ha
	7 000 to 10 999 t/ha		\$550/ha
	11 000 to 14 999 t/ha		\$550/11a \$695/ha
	15 000 to 19 999 t/h		\$815/ha
	20 000 and over t/ha		\$910/ha
	 Priority production of 	of intolerant	
	hardwoods and mixe		
	intolerant hardwood		\$795/ha
	 Priority production of 		
	hardwoods and mixe		
	tolerant hardwood st	ands	\$760/ha

6. COMMERCIAL THINNING

Softwoods

Average DPH of felled trees (cm)	Value with tree marking (\$/ha)	Value without tree marking (\$/ha)
10 to 10.9	1 205	1 065
11 to 11.9	1 005	865
12 to 12.9	850	710
13 to 14.9	680	540
15 or more	520	380
- Mixed with	tolerant and intoleran	nt
hardwoods		\$545/ha
 Tolerant and 	d intolerant hardwood	ls \$235/ha

7. DRAINAGE

Cleared areas (without prior felling) \$1.40/m or m³ Wooded areas (with prior felling) \$1.75/m or m³

DIVISION II

FOREST AREAS INTENDED FOR THE PRIORITY PRODUCTION OF SOFTWOODS

3.	PINE	SEE	DING

 Aerial seeding 	\$35/ha
 Ground seeding 	\$130/ha
- Funnels	\$295/1 000 seeded
	microsites

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	
 Tolerant hardwoods 	\$235/ha
 Mixed with tolerant hardwoods 	\$235/ha
– Cedar	\$220/ha
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

11. PRESELECTION CUTTING

 Tolerant hardwoods 	\$235/ha
 Mixed with tolerant hardwoods 	\$235/ha
Cedar	\$220/ha

12. ENRICHMENT AND	
REINFORCEMENT	\$495/1 000
PLANTING OF HARDWOODS	seedlings
AND PINE	

DIVISION V

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

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

DIVISION VI

SILVICULTURAL TREATMENTS FOR THE PROTECTION OF FOREST RESOURCES

16. STRIP CUTTING WITH REGENERA AND SOIL PROTECTION	TION \$205/ha
17. SELECTION CUTTING	
 Tolerant hardwoods 	\$235/ha
 Mixed with tolerant hardwoods 	\$235/ha
– Cedar	\$220/ha
18. IMPROVEMENT CUTTING	
 Tolerant hardwoods 	\$235/ha
 Mixed with tolerant hardwoods 	\$235/ha
– Cedar	\$220/ha
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.