## **M.O.,** 1996

Minister's Order 9501399 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 1996-1997 fiscal year.
- 2. The values of such silvicultural treatments are those established in Schedule II.
- **3.** This Minister's Order of the Minister of Natural Resources replaces the Regulation respecting the value of silvicultural treatments made by Minister's Order 94-286 of the Minister of Natural Resources dated 2 March 1995 and published in Part 2 of the *Gazette officielle du Québec* of 15 March 1995.
- **4.** This Minister's Order of the Minister of Natural Resources comes into force on 1 April 1996.

GUY CHEVRETTE, Minister of Natural Resources

#### SCHEDULE I

(s. 1)

SILVICULTURAL TREATMENTS ADMITTED FOR THE 1996-1997 FISCAL YEAR

## **DIVISION I**

ALL FOREST AREAS

- 1. Site preparation: site preparation comprises any of the following 5 operations:
- (1) scarifying: 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 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 so as 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 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 in order 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 MAINLY FOR THE 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 MAINLY FOR THE 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 that takes into account all the species and diameter classes of trees in a stand, as well as the strength and quality of those trees. A balanced selection structure must be obtained or maintained in the stand by ensuring the necessary cultivation of growing trees 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 MAINLY FOR THE 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 that takes into account all the species and diameter classes of trees in a stand, as well as the strength and quality of those trees. A structure conducive to selection must be obtained in the stand by ensuring the necessary cultivation of growing trees and by favouring seed establishment.
- 12. Enrichment planting: the introduction or increase in the number of white pine, red oak, American ash or yellow birch in a stand.

### DIVISION V

FOREST AREAS INTENDED MAINLY FOR THE 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 and leaving an uncut strip at least equal in width 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 and leaving an uncut strip at least equal in width 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 that takes into account all the species and diameter classes of trees in a stand, as well as the strength and quality of those trees. A balanced selection structure must be obtained or maintained in the stand by ensuring the necessary cultivation of growing trees 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 that takes into account all the species and diameter classes of trees in a stand, as well as the strength and quality of those trees. A structure conducive to selection must be obtained in the stand by ensuring the necessary cultivation of growing trees and by favouring seed establishment.

SCHEDULE II			— Without site preparation		
(s. 2)			Bare-root seedlings	Conventional size	\$225/1 000
VALUE OF SILVICULT				Large size	seedlings \$260/1 000
ADMITTED AS PAYME 1996-1997 FISCAL YEAR		THE	Container seedlings	67-50:	seedlings \$180/1 000
DIVISION I				45-110:	seedlings \$190/1 000
ALL FOREST AREAS				25-200:	seedlings \$245/1 000 \$330/1 000
<ol> <li>SITE PREPARATION</li> <li>Scarifying</li> </ol>				45-340 and 25-350-A:	seedlings
Anchor chains		\$100/ha	3. NATURAL REGENERATION	DEINEODCEMENT DI /	NTING
Shark-fin barrels and chains		\$280/ha	With site preparation	KEINFUKCEMENT FLA	MINING
Hydraulic cone trenchers		,	Bare-root seedlings	Conventional size	\$225/1 000
(Wadell type)		\$225/ha	Date-100t seedings	Conventional Size	seedlings
Hydraulic disk trenchers				Large size	\$260/1 000
(TTS hydraulic and Donaren types	)	\$180/ha		24150 0120	seedlings
Batch scarifier (Bracke), disk			Container seedlings	67-50:	\$180/1 000
trencher (TTS type)		\$130/ha	2		seedlings
Batch scarifier mounder				45-110:	\$190/1 000
(Bracke mounder)		\$175/ha			seedlings
"V" blade batch scarifier				25-200:	\$245/1 000
(Bracke) or disk trencher		\$355/ha			seedlings
Cutter-type portable scarifier,		<b>***</b>		45-340 and 25-350-A:	\$330/1 000
forest mattock		\$315/1 000			seedlings
F (1 (D 101)	`	microsites	<ul> <li>Without site preparation</li> </ul>		
Forest harrows (Rome and Crabe t	ypes)	\$205/ha	Bare-root seedlings	Conventional size	\$240/1 000
Single pass Double pass		\$205/ha \$365/ha			seedlings
Létourneau tree crusher		\$303/11a \$225/ha		Large size	\$275/1 000
— Winter shear-blading with a		\$223/11a	C	67 FO	seedlings
shear-blade-equipped crawler tract	or	\$410/ha	Container seedlings	67-50:	\$195/1 000
— Clearing	.01	φ <del>+</del> 10/11α		45 110.	seedlings
Rake-equipped crawler tractor		\$400/ha		45-110:	\$205/1 000
Rake-equipped skidder		\$340/ha		25-200:	seedlings \$260/1 000
Modified "V" blade models C and	Н	\$170/ha		23-200.	seedlings
— Ploughing and harrowing		,		45-340 and 25-350-A:	\$345/1 000
Forest plough (Lazure type) + fore	st			43-340 and 23-330-A.	seedlings
harrow (Rome and Crabe types)		\$1 100/ha			
<ul> <li>Prescribed burning</li> </ul>		\$375/ha	4. RELEASE TREATMENT		
2. PLANTING			— Mechanical		
			Coniferous or boreal forest zone		\$550/ha
<ul><li>With site preparation</li><li>Bare-root seedlings</li></ul>	Conventional size	\$210/1 000	Mixed and hardwood forest zones		\$630/ha
Date-100t seedings	Conventional Size	seedlings	— Herbicides		00.40.4
	Large size	\$245/1 000	Ground spraying		\$340/ha
	Large size	seedlings	Aerial spraying		\$205/ha
Container seedlings	67-50:	\$165/1 000	5. PRECOMMERCIAL THINNIN	JG	
Container securings	seedlings		<ul> <li>Priority production of softwood</li> </ul>		
	45-110 or cuttings:	\$175/1 000	predominantly softwood stands		
		seedlings	4 000 to 6 999 t/ha		\$355/ha
	25-200:	\$230/1 000	7 000 to 10 999 t/ha		\$550/ha
		seedlings	11 000 to 14 999 t/ha		\$695/ha
	45-340 and 25-350-A:	\$315/1 000	15 000 to 19 999 t/ha		\$810/ha
		seedlings	20 000 and over t/ha		\$910/ha

<ul> <li>Priority production of intolerant hardwoods and mixed predominantly intolerant hardwood stands</li> <li>Priority production of tolerant hardwoods and mixed predominantly tolerant hardwood stands</li> </ul>	\$795/ha \$760/ha
6. COMMERCIAL THINNING  — Softwoods  — Mixed with tolerant and intolerant hardwoods  — Tolerant and intolerant hardwoods	\$500/ha \$370/ha \$235/ha
7. DRAINAGE Cleared areas (without prior felling) Wooded areas (with prior felling)	\$1.45/m or m <sup>3</sup> \$1.80/m or m <sup>3</sup>

## **DIVISION II**

# FOREST AREAS INTENDED MAINLY FOR THE PRODUCTION OF SOFTWOODS

8. PINE SEEDING	
— Aerial seeding	\$35/ha
— Ground seeding	\$130/ha
— Funnels	\$285/1 000 seeded microsites

## **DIVISION III**

FOREST AREAS INTENDED MAINLY FOR THE 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	\$215/ha
10. IMPROVEMENT CUTTING	
— Tolerant hardwoods	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$215/ha

## **DIVISION IV**

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

11 PRESENCE COMICAL CUSTOMARIA	
<ul><li>11. PRESELECTION CUTTING</li><li>— Tolerant hardwoods</li></ul>	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$215/ha
12. ENRICHMENT AND REINFORCEMENT PLANTING OF HARDWOODS AND PINE	\$495/1 000 seedlings

## **DIVISION V**

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

13. PROGRESSIVE SEED CUTTING — Softwoods	\$500/ha
— Mixed with tolerant and intolerant hardwoods	\$235/ha
— Tolerant and intolerant hardwoods	\$235/ha
14. STRIP CUTTING WITH REGENERATION AND SOIL PROTECTION (except in mixed stands)	\$200/ha
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

16. STRIP CUTTING WITH REGENERATION AND SOIL PROTECTION	\$200/ha
17. SELECTION CUTTING  — Tolerant hardwoods	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$215/ha

<ul><li>18. IMPROVEMENT CUTTING</li><li>Tolerant hardwoods</li></ul>	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$215/ha
<ul><li>19. PRESELECTION CUTTING</li><li>Tolerant hardwoods</li></ul>	\$235/ha
— Mixed with tolerant hardwoods	\$235/ha
— Cedar	\$215/ha

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

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