

Vegetation Management Using Sheep

Summary of Forest Plantation Brushing with Sheep: Grazing Activity for 2005*

Table includes one herd of 725 goats

2005 Provincial Estimates		Funding Sources		Activity within Forest Regions		
		Licensee	MoFR BCTS	Coast	Southern Interior	Northern Interior
Total hectares treated	1 950 100%	1 270 65%	680 35%	0 0%	0 0%	1 950 100%
Number of contracts	6	4	2	0	0	6

Comments/Additional Information

Length of contracts	40-98 day terms	<ul style="list-style-type: none"> 36 ha were grazed twice in 2005 (spring & summer). Cost (\$/ha) and Production (ha/day) include the second treatment. One contract used 2150 sheep for 60 days with good results. 5 of 6 contracts had some treatment areas with rough access I.E. 4WD all-terrain-vehicle. Three contracts had 20-40 km moves between treatment areas. <ul style="list-style-type: none"> Distance traveled (trailed) per day ranged from 8-30 km. 1 contract used livestock liners 4 times for distances of 50-100 km. Full season and multi-year contracts reduced costs.
Hectares per contract	Range: 150-450 Average: 325	
Production (ha/day)	Range: 1.57 - 8.25 Average: 5.1	
Cost (\$/ha)	Range: \$300 – 465 Average: \$350	
Brushing quality:	>98%	<ul style="list-style-type: none"> 6 proponents used a visual walk-through and random plots to assess 1950 hectares. 100% brushing quality required 75-85% removal of (edible) target vegetation with nil damage to crop trees.
Approved for payment:	100%	
Crop tree damage	Range: 0-5% Average: 1.8%	<ul style="list-style-type: none"> Spruce, pine and Douglas-fir crop trees were treated. Spruce and pine were mix-planted on 6 of 6 grazing contracts. 2% damage (basal scarring) on steep, wet slopes. 5% damage (trampling, rubbing of pine) on 1 block. Target species: aspen.

* Source of information: Brushing (sheep grazing) contractors and proponents (Ministry of Forests and Licensees).

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Sheep numbers	8 200	<ul style="list-style-type: none"> Six contracts were completed during 2005. <ul style="list-style-type: none"> a. One contract used sheep from BC and Alberta b. Five contracts used sheep from Alberta only. Number of producers per contract herd ranged from 1 -5; average: 3. <ul style="list-style-type: none"> 3 of the projects used herds of 1200–1500 sheep. 1 of the projects used 2150 sheep. 1 of the projects used 1050 sheep and 25 goats. Good results. 1 of the projects used 20 sheep and 725 goats.
Total number of herds used	6	
Herd sizes	Range: 725-2150 Average: 1500	
Sheep losses	26 of 8 200 (0.003%) (1/3 of 1%)	<ul style="list-style-type: none"> 1 contract had no sheep losses of any type. Hellebore poisoning on 3 contracts. Various losses include trucking deaths, injury, cast and pile-up.
Cause of sheep losses	poison (10) various (14) predator (2)	<ul style="list-style-type: none"> All contractors noted predators (bear, coyote, wolf, cougar). 2 sheep were destroyed after predator interaction (black bear, wolf). No feeding occurred and guard dogs prevented further interaction. Guard dogs ranged 2-6 per flock.
Total cost of activity	\$765,000.00	<ul style="list-style-type: none"> Cost does not include proponent administration (planning, quality inspections or reporting).
Participating forest regions:	(1) Northern Interior	
Participating forest districts:	(4) Fort St. James, Mackenzie, Peace, Prince George	
Nearby town or landmark:	Bear Lake, Carp Lake, Chetwynd, Fort St. James, Mackenzie-Rainbow	
Percent of 1950 total hectares treated by Biogeoclimatic (BGC) Zone:	<ul style="list-style-type: none"> 45% Engelmann Spruce-Subalpine Fir (ESSF wk1) (ESSF wk2) 55% Sub-Boreal Spruce (SBS mc2) (SBS mk1) (SBS wk1) (SBS wk2). 	
Percent of 1950 total hectares treated by types of vegetation grazed:	<ul style="list-style-type: none"> 15% fireweed/shrub (fireweed, thimbleberry, raspberry, huckleberry, elderberry) 70% fireweed/herb (fireweed, grasses, valerian) 15% deciduous/herb (aspen, alder, willow, fireweed,) 	
Comments:	<ul style="list-style-type: none"> All contracts had some difficult access to treatment sites on de-activated roads (frequent, deep cross-ditches). 55% of areas had no site prep and dense slash; 15% was mounded. Cool, wet summer. Some hail. Foot problems late in season. All 6 contracts in 2005 were successfully completed by 6 brushing (sheep grazing) contractors. 	