

Vegetation Management Using Sheep

Summary of Forest Plantation Brushing with Sheep: Grazing Activity for 2004*

2004 Provincial Estimates		Funding Sources		Activity within Forest Regions		
		Licensee	MoFR	Coast	Southern Interior	Northern Interior
Total hectares treated	2 260 100%	1 900 85%	360 15%	0 0%	0 0%	2 260 100%
Number of contracts	7	6	1	0	0	7

Comments/Additional Information

Length of contracts	71-106 day terms	<ul style="list-style-type: none"> 275 ha were grazed twice in 2004 (spring & summer). Cost (\$/ha/pass) average \$340. Cost (\$/ha) and Production (ha/day) include the second treatment. 6 of 7 contracts had some treatment areas with rough access I.E. 4WD all-terrain-vehicle. Distances to camp range 1-4 km. 7 contracts had 15-90 km moves between treatment areas. <ul style="list-style-type: none"> Distance traveled (trailed) per day ranged from 8-30 km. contracts used livestock liners for distances greater than 40 km. Full season and multi-year contracts reduced costs.
Hectares per contract	Range: 80-530 Average: 320	
Production (ha/day)	Range: 1.6-6.5 Average: 4.6	
Cost (\$/ha)	Range: \$230-\$600 Average:\$0	
Brushing quality:	99%	<ul style="list-style-type: none"> 7 proponents used a visual walk-through and random plots to assess 2260 hectares (100% of total hectares treated). 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: 0.25-30% Average: 1.3%	<ul style="list-style-type: none"> Spruce and pine plantations were grazed. Crop tree species were mix-planted on 6 of 7 grazing contracts. A small, very steep area had 30% crop tree damage (basal scarring).

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

Table includes one herd of 560 goats.

Sheep numbers	8 010	<ul style="list-style-type: none"> Seven contracts were completed during 2004. <ul style="list-style-type: none"> One contract used sheep from BC only. One contract used sheep from BC and Alberta. Four contracts used sheep from Alberta only. One contracts used goats from Alberta only.
Total number of herds used	7	
Herd sizes	Range: 560-1550 Average: 1250	<ul style="list-style-type: none"> Number of producers per contract herd: Range:1– 7; Average: 3. 2 of the projects used herds of 800 and 900 sheep. 1 of the projects used herds of 1200 sheep. 3 1 of the projects used herds of 300-560 goats.
Sheep losses	33 out of 8 010 (0.004%) (<1/2 of 1%)	<ul style="list-style-type: none"> 2 contracts 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 (9) various (23) predator (1)	<ul style="list-style-type: none"> All contractors noted predators (bear, coyote, wolf, cougar). One loss to wolf occurred. Guard dogs ranged 2-6 per flock. 1 contract lost 16 sheep to pile-up.
Total cost of activity	\$856,000.00	<ul style="list-style-type: none"> Cost does not include proponent administration (planning, quality inspections or reporting).
Participating forest regions:		<ul style="list-style-type: none"> (1) Northern Interior
Participating forest districts:		<ul style="list-style-type: none"> (4) Mackenzie, Peace, Prince George.
Nearby town or landmark:		<ul style="list-style-type: none"> Chetwynd, Fort St. James, Mackenzie, McLeod Lake, Weedon Lake.
Percent of 2260 total hectares treated by Biogeoclimatic (BGC) Zone:		<ul style="list-style-type: none"> 02 % Boreal White and Black Spruce 31% Engelmann Spruce-Subalpine Fir 67% Sub-Boreal Spruce
Percent of 2260total hectares treated by types of vegetation grazed:		<ul style="list-style-type: none"> 10% /shrub (aspen, willow, alder, herb) 10% fireweed/shrub (fireweed, thimbleberry, raspberry, huckleberry, rhododendron) 80% fireweed/herb (fireweed, grasses, valerian)
Comments:		<ul style="list-style-type: none"> Good control of willow and alder by goats. Fair control of aspen by sheep and goats. Contractors and proponents report difficult access to treatment sites on de-activated roads (frequent, deep cross-ditches). 4 of 7 contracts trailed sheep to treatment sites from remote camp and night pens. 1 contract trailed sheep 4 km to sites from camp each day. 75% of areas had no site prep and dense slash; 15% was mounded. Slopes averaged 35-50%. Successful grazing of dense slash, steep slopes and less-preferred vegetation is contributed to skilled shepherding. All 7 contracts in 2004 were successfully completed by 7 brushing (livestock grazing) contractors.