

Vegetation Management Using Sheep

Summary of Forest Plantation Brushing with Sheep: Grazing Activity for 2001*

2001 Provincial Estimates		Funding Sources			Activity within Forest Regions			
		Licensee	MoF– SB	FRBC	Cariboo	Kamloops	Prince George	Prince Rupert
Hectares treated:	4 360	2 720 62%	925 22%	715 16%	1 030 24%	150 3%	2 380 55%	800 18%
Number of contracts:	16	10	5	1	6	1	7	2
Comments/Additional Information								
Length of contracts	12–90 day terms	<ul style="list-style-type: none"> • Several contracts had moves between treatment areas. Distance travelled (trailed) ranged from 10–30 km. • Livestock liners were also used for distances greater than 30 km. Liner moves increased treatment costs. • Full season and multi-year contracts reduced costs. 						
Hectares per contract	Range: 50–715 Average: 270							
Production (ha/day)	Range: 3.1–10.7 Average: 5.3							
Cost (\$/ha)	Range: \$290–695 Average: \$385							
Brushing Quality: Approved for payment:	>95% 100%	<ul style="list-style-type: none"> • 66% of proponents used visual "walk-thru" assessments. • 34% used Brushing Quality Inspections Plots. 						
Crop tree damage	Range: 0.3–12.0% Average: <1.9%	<ul style="list-style-type: none"> • Spruce, pine, Douglas-fir, cedar, balsam and larch were grazed. • Flushing pine <50 cm had no damage due to good herding. • Flushing pine >1 m (grazed for fillplant) had 6% rubbing damage. • Duff-planted spruce (1–2 yrs) had 5–12% leaning damage. 						

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

Sheep numbers:	19 150	<ul style="list-style-type: none"> Contract herds consisted of sheep that had grazed together on contracts in previous years. Number of producers per contract herd ranged from 1 to 4; average = 2. 9 of the projects used herds of 1000–1200 sheep. 4 of the projects used herds of 1600–1900 sheep. 3 of the projects used herds of 900, 3000 and 3600 sheep.
Total number of herds used	13	
Herd sizes	Range: 900–3600 Average: 1470	
Sheep losses	50 out of 19 150 0.0028% (¼ of 1%)	<ul style="list-style-type: none"> Hellebore poisoning of lambs (versus ewes) on 5 contracts. Monkshood poisoning of 8 ewes on 1 contract. Various losses include cast, trucking, lame, pneumonia, fever. 6 contracts had no sheep losses of any type. Of the 16 contracts, only 1 sheep was lost to a predator (grizzly).
Cause of sheep losses	poison (15) predator (1) various (34)	
Total cost of activity:	\$1,681,500.00	<ul style="list-style-type: none"> Cost does not include planning, supervision or quality inspections by proponents.
Participating forest regions:		<ul style="list-style-type: none"> (4) Cariboo, Kamloops, Prince George, Prince Rupert.
Participating forest districts:		<ul style="list-style-type: none"> (11) 100 Mile, Horsefly, Quesnel, Clearwater, Dawson Creek, Fort St. James, Fort St. John, MacKenzie, Prince George, Houston, Terrace.
Nearby town or landmark:		<ul style="list-style-type: none"> Barkerville, Bear Lake, Buckhorn, Cottonwood House North, Cottonwood House South, Dawson Creek, Fort St. James, Granisle, Horsefly River, MacKenzie, Meziadin Junction, Pine Pass, Quesnel Lake, Vavenby, Wells, Wonowon.
Percent of 4360 total hectares treated by Biogeoclimatic (BGC) Zone:		<ul style="list-style-type: none"> 21% Boreal White and Black Spruce (BWBS mw1-01) 26% Engelmann Spruce-Subalpine Fir (ESSF wk1-03, 04, 07) (ESSF wk2) 15% Interior Cedar-Hemlock (ICH wk1) (ICH wk4-01, 04, 06, 07, 08) 38% Sub-Boreal Spruce (SBS mc2) (SBS mk1) (SBS wk1-01, 03, 10) (SBS wk2).
Percent of 4360 total hectares treated by types of vegetation grazed:		<ul style="list-style-type: none"> 44% fireweed/shrub (fireweed, thimbleberry, raspberry, huckleberry, elderberry) 23% fireweed/herb (fireweed, grasses, valerian) 12% fireweed/deciduous (fireweed, aspen, poplar) 21% Calamagrostis (calamagrostis, shrub, herb).
Comments:		<ul style="list-style-type: none"> 100% removal of Devil's Club leaves reported on two contracts grazed in June–July. 35% of area had no site prep and was slashy; 15% was mounded; all were successfully treated. All 16 contracts in 2001 were successfully completed by 9 brushing (sheep grazing) contractors.