

SUMMARY OF CURRENT INFESTATION

Star probe shows 1 Code 1 Attacked tree. Extended line to see if attack extended, did not find more.

ACCESS

From Clearwater FSR, walk from truck 100m @ 90 degrees Right beside 2016-CLE-0062

SITE FEATURES (Topography, Terrain, Timber Types, Age)

Steep Slope 0-25% West as walk towards site. West edge runs along Mainline Road and Alder at 90m East. 60-80% SPRUCE, larger DBH

SIZE, BOUNDARY and PATTERN OF INFESTATION

Sporadic Code 1 attack in site. Seems to be moving up from the river where high susceptibility.

INCIDENCE AND SEVERITY OF ATTACK

1 probe line established representative of site. 1 CODE 1 found and large DBH tree which increased sanitation rating. Extended line to 200m and only one attack

RISK OF BEETLE SPREAD and SURROUNDING SITES

Site had moderate attack with a HIGH sanitation rating. Appears that the attack is coming up from the Clearwater river in this area and has large DBH susceptible spruce.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Adjacent to road. Alder at 90m East, steeper slopes.

RECOMMENDATIONS

OPTION 1

TRAP TREE TRAILS

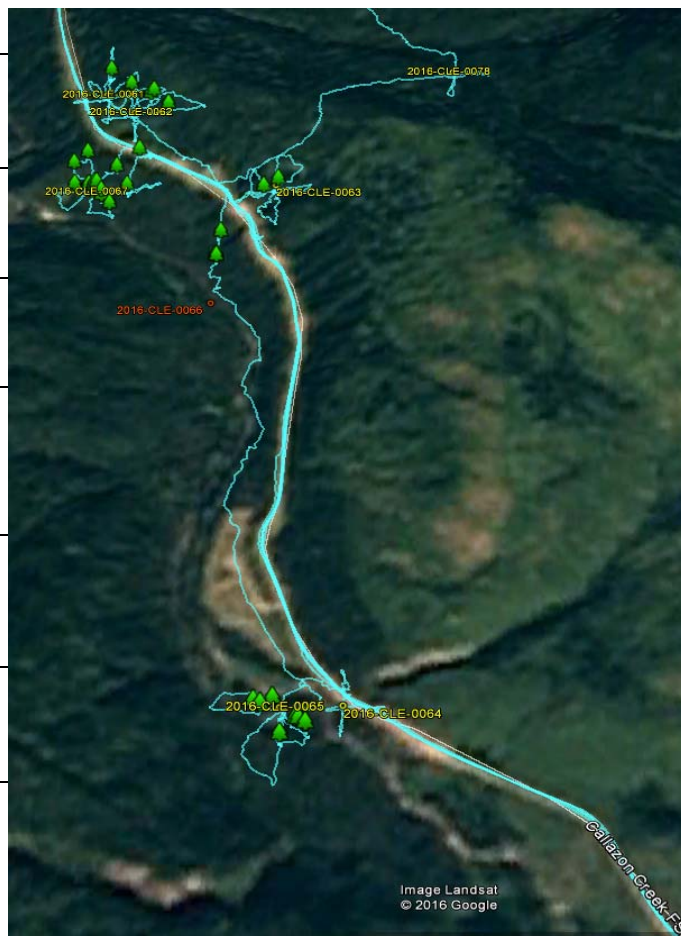
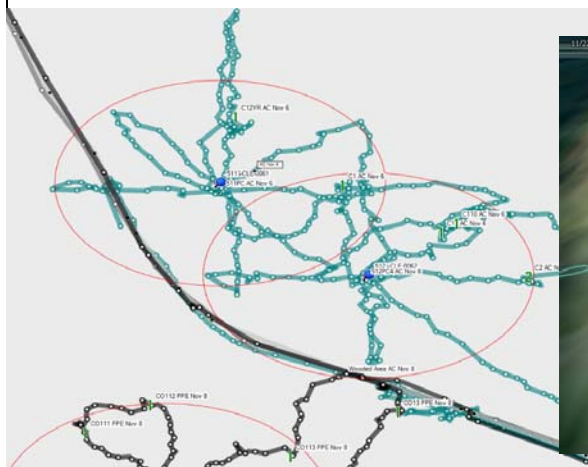
As access good, establish trap tree trail alongside road. Establish a couple others in surrounding sites.

OPTION 2

MONITOR/ EST. POLYGON

Monitor and/or create a polygon along east side of river to incorporate attack in area and better measure impact of attack.,

LIGHT/MOD ATTACK



Summary									
2016-CLE-0061					511				
TABLE 5- Spruce Beetle Infestation Summary Sheet									
OF NOTE- Results taken from a 100m Probe Line									
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES
			2015		2014		2013		
			1	2	3	4	5	6	
17.5-25.0	3.3	13.2	0.0	0.0	0.0	0.0	0.0	0.0	16.5
25.1-30.0	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	15.9
30.1-35.0	7.1	7.1	0.0	0.0	0.0	0.0	0.0	0.0	7.1
35.1-40.0	9.4	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0
40.1-45.0	11.6	23.2	0.0	0.0	0.0	0.0	0.0	0.0	0
45.1-50.0	13.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0
50.1-55.0	16.2	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0
55.1-60.0	18.7	0	0.0	0.0	0.0	0.0	0.0	0.0	0
60.1 +	25.3	25.3	25.3	0.0	0.0	0.0	0.0	0.0	0
TOTALS	134.4	109.1	25.3	0	0.0	0.0	0.0	0	39.5

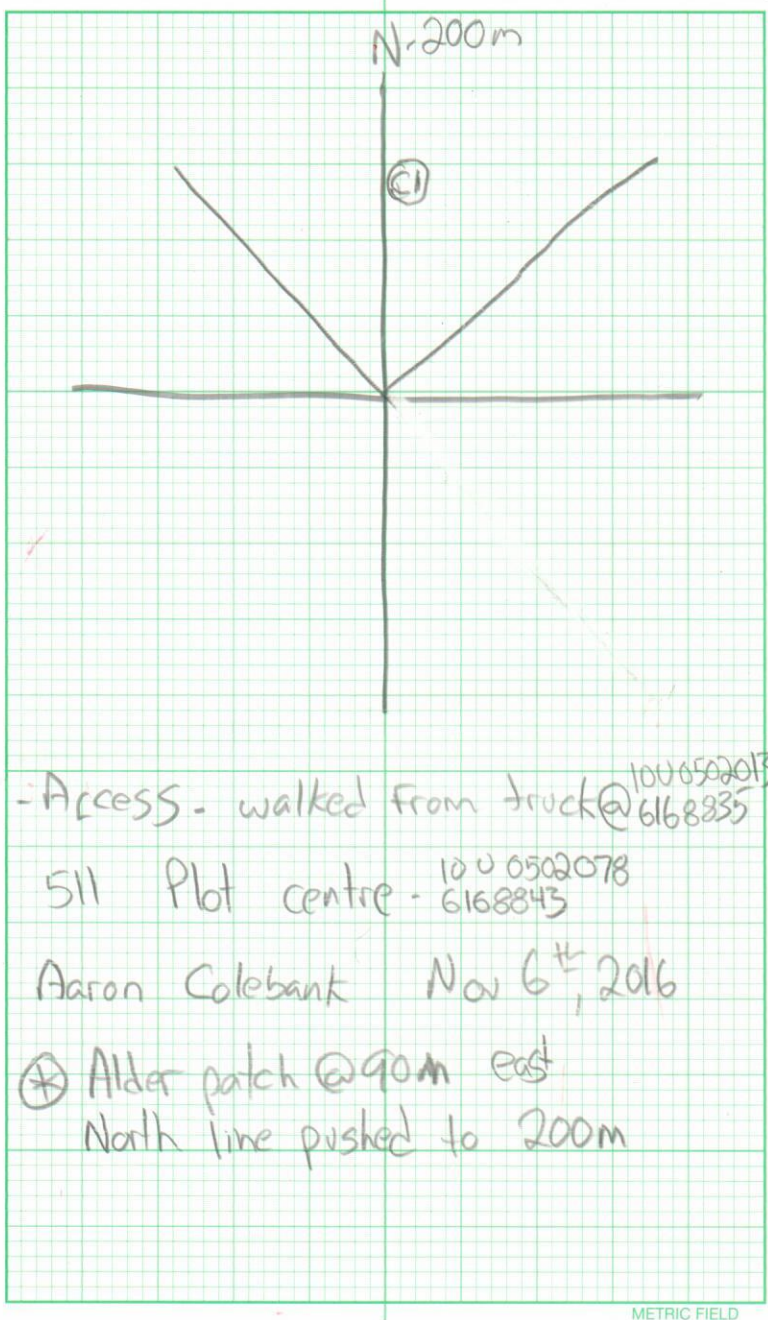
TABLE 4- Spruce Beetle Attack Density and Larval Density Rating			
MEAN NO. OF ENTRANCE HOLES PER 225 cm2 PHLOEM SAMPLE	< 1 LOW Attack Density	MEAN NO. OF LIVING LARVAE PER 225 cm2 PHLOEM SAMPLE	< 4.9 LOW Mean Larval Density
	1.0- 1.9 MOD Attack Density		5.0 - 14.9 MOD Mean Larval Density
	2.0 - 3.9 HIGH Attack Density		15-24.9 HIGH Mean Larval Density
1.50	< 3.9 SEVERE Attack Density	9.00	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough			
% 2016 ATTACK	18.8%	##	SANITATION AND SALVAGE HARVEST PRIORITY RATING
% 2015 ATTACK	0.0%	##	LIGHT 0-599 LEAVE (Monitor, Trap Trees, Baits, etc)
% 2014 ATTACK	0.0%	##	MODERATE 600-999 PROBE (To Obtain Further Info)
% HOST IN STAND	77.3%	##	HEAVY 1000+ RECOMMEND CRUISING/ LOGGING

SUMMARY OF ALL CARDS FS1111										NUMBER OF CARDS		1
ACCESS -		From Clearwater FSR, walk from truck 100m @ 90 degrees Right beside 2016-CLE-0062										
SITE FEATURES -		Steep Slope 0-25% West as walk towards site. West edge runs along Mainline Road and Alder at 90mEast. 60-80% SPRUCE, larger DBH										
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES			
			2015		2014		2013					
			1	2	3	4	5	6	BL	AT		
17.5-25.0	3.3	4	0	0	0	0	0	0	5	0		
25.1-30.0	5.3	1	0	0	0	0	0	0	3	0		
30.1-35.0	7.1	1	0	0	0	0	0	0	1	0		
35.1-40.0	9.4	2	0	0	0	0	0	0	0	0		
40.1-45.0	11.6	2	0	0	0	0	0	0	0	0		
45.1-50.0	13.8	0	0	0	0	0	0	0	0	0		
50.1-55.0	16.2	1	0	0	0	0	0	0	0	0		
55.1-60.0	18.7	0	0	0	0	0	0	0	0	0		
60.1 +	25.3	1	1	0	0	0	0	0	0	0		
TOTALS		12	1	0	0	0	0	0	9	0		
BARK SAMPLES 15 cm x 15 cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE ADULTS	NO. CALLOW	FRESH (GREEN) BLOWDOWN						
						Attacked Yr		Yr		Unattacked		
2	3	4	18	5	3	0		0		0		
SIZE, BOUNDARY AND PATTERN OF THE INFESTATION												
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INCIDENCE AND SEVERITY OF THE INFESTATION												
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511

R.D. PENHALL LTD. MADE IN VANCOUVER, CANADA
DUKSBAR WATERPROOF



METRIC FIELD

SPRUCE BEETLE PROBE CARD

LOCATION 511 North		1000502013 6168835		PAGE 1 OF 1	
EARING 0°		DISTANCE 0-100m		STRIP WIDTH 10m	

DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES
			1	2	3	4	5	6	
7.5 - 25.0	3.3	00							B
25.1 - 30.0	5.3	0							0
30.1 - 35.0	7.1	0							0
35.1 - 40.0	9.4	00							
40.1 - 45.0	11.6	00							
45.1 - 50.0	13.8								
50.1 - 55.0	16.2	0							
55.1 - 60.0	18.7								
60.1 +	25.3	0							
TOTALS			12	1					9

50K SAMPLES 5cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN	
						Attacked	Unattacked
North	00	0	0	0	0		
South	00	0	0	0	0		

REMARKS: ① - Bark sample

FIELD NAMES: Aaron Colebank	DATE: 2016 11 06
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111 RPG 2000/01 7530881048 (100/bdl)