STAR PROBE# **2016-CLE-0065** 515

PROBE LINE YES

MODERATE ATTACK

Star Probe with 7 Code 1 trees on other side of river, North line stops at steep drop off to river.

Off Mainline, have to cross river to access (Difficult)

River divides site, Steep dropoff into site. Difficult to access.

No attack.

1 probe line shows moderate attack density, moderate karval density and moderate sanitation rating. Site to the east of attack along river had no sign of attack (2016-CLE-0064

Beetle attack moving east and off of creek. 50% spruce stand with low DBH spruce. Difficult to cross creek and may move west.

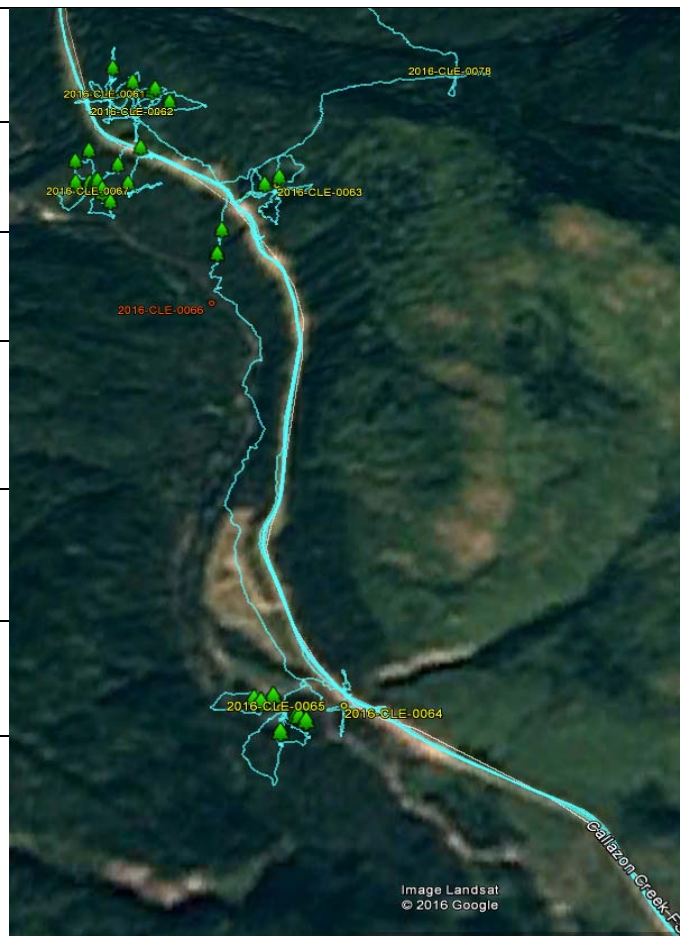
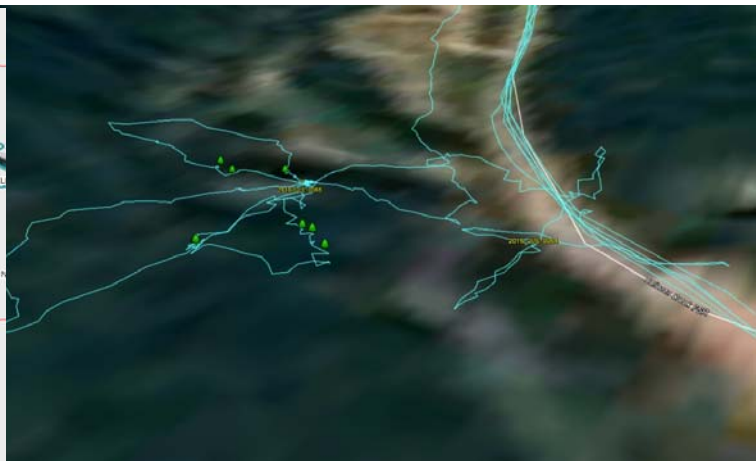
Adjacent to road. River runs through it.

OPTION 1

As access good, establish trap tree trail alongside road to catch beetle coming up from River

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.,



Summary

2016-CLE-0065

515

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	9.9	0.0	0.0	0.0	0.0	0.0	0.0	6.6
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	0	7.1	0.0	0.0	0.0	0.0	0.0	14.2
35.1-40.0	9.4	0	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	23.2
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	0	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	0	0.0	0.0	0.0	0.0	0.0	0.0	0
TOTALS	45.5	38.4	7.1	0	0.0	0.0	0.0	0	59.9

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	14.50	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough

% 2016 ATTACK	15.6%	##	SANITATION AND SALVAGE HARVEST PRIORITY RATING			
% 2015 ATTACK	0.0%	##	LIGHT	0-599	LEAVE (Monitor, Trap Trees, Baits, etc)	673.6
% 2014 ATTACK	0.0%	##	MODERATE	600-999	PROBE (To Obtain Further Info)	
% HOST IN STAND	43.2%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING	

SUMMARY OF ALL CARDS FS1111

NUMBER OF CARDS

1

ACCESS -

Off Mainline, have to cross river to access (Difficult)

SITE FEATURES -

River divides site, Steep dropoff into site. Difficult to access.

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	3	0	0	0	0	0	0	2	0
25.1-30.0	5.3	1	0	0	0	0	0	0	3	0
30.1-35.0	7.1	0	1	0	0	0	0	0	2	0
35.1-40.0	9.4	0	0	0	0	0	0	0	0	0
40.1-45.0	11.6	2	0	0	0	0	0	0	2	0
45.1-50.0	13.8	0	0	0	0	0	0	0	0	0
50.1-55.0	16.2	0	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	0	0	0	0	0	0	0	0	0
TOTALS		6	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	0	29	2	1	0	0	0

SIZE, BOUNDARY AND PATTERN OF THE INFESTATION

No attack.

INCIDENCE AND SEVERITY OF THE INFESTATION

1 probe line shows moderate attack density, moderate karval density and moderate sanitation rating. Site to the east of attack along river had no sign of attack (2016-CLE-0064_

RISK OF BEETLE SPREAD

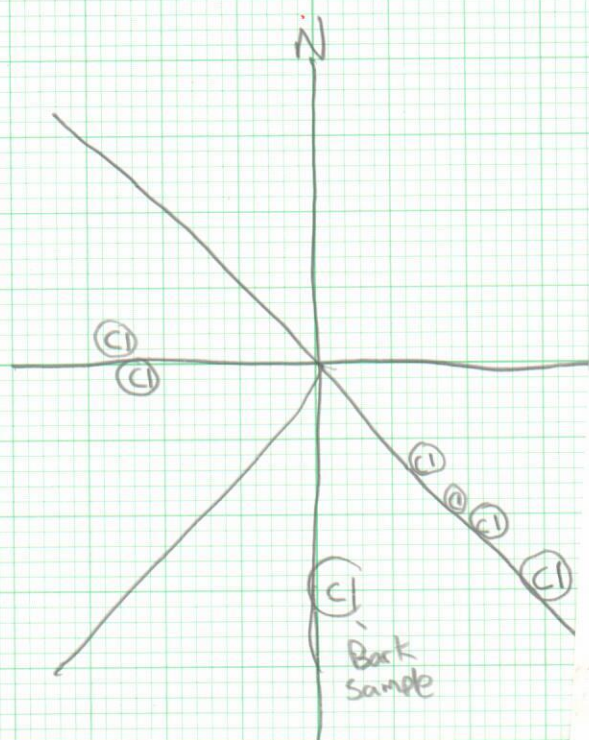
Beetle attack moving east and off of creek. 50% spruce stand with low DBH spruce. Difficult to cross creek and may move west.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Adjacent to road. River runs through it.

515

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



Access - walked from truck @ 100 0502653
6166904

515 Plot Centre - 10 0502653
6166904

Aaron Colebank Nov 6th, 2016

* South pushed 200m

North line stops @ River 50m

SPRUCE BEETLE PROBE CARD

LOCATION 515 South		100 0502653 6166904		PAGE OF Elev 968m					
BEARING 180°		DISTANCE 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	
17.5 - 25.0	3.3	•							B1
25.1 - 30.0	5.3	•							•
30.1 - 35.0	7.1	•							•
35.1 - 40.0	9.4								
40.1 - 45.0	11.6	•							•
45.1 - 50.0	13.8								
50.1 - 55.0	16.2								
55.1 - 60.0	18.7								
60.1 +	25.3								
TOTALS		6	•						9
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN			
						Attacked	Unattacked		
North	•		•	•					
South	•		•						
COMMENTS • Bark Sample									
CREW NAMES Aaron Colebank						DATE 2016 11 06			