SENECA ENTERPRISES LTD.
PO BOX 1902, PRINCE GEORGE, BC, V2L 5E3
Phone: (250) 561-0890, Fax: (250) 564-3275

SPRUCE BARK BEETLE REPORT
FH17DPG218

STAR PROBE# **2016-PINN-0012** 595

NUMBER OF CODE 1-4 ATTACK 3

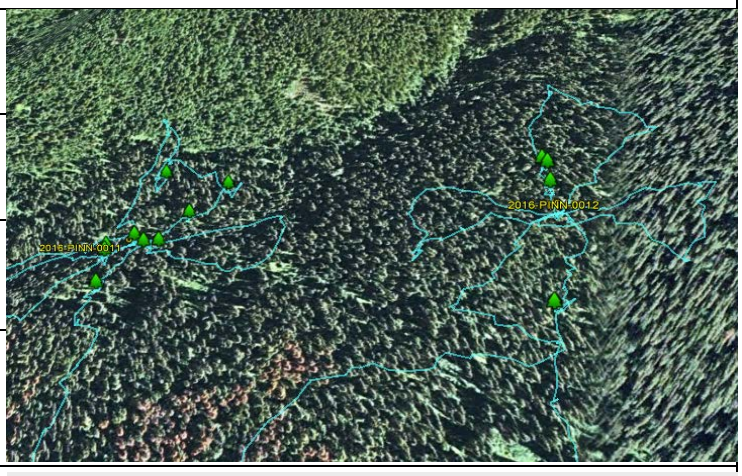
PROBE LINE YES

SUMMARY OF CURRENT INFESTATION **MODERATE/ HIGH ATTACK**

Probe Sites PINN-0011 and PINN-0012 had considerable recent attack with 10 recently attacked trees in 2016-PINN011 and 4 attacked trees in PIN-0012. Both sites have considerably steep access to them and are fairly open stands with 50% Spruce 50% Balsam. Moderate attack in both, as within 200m of each other and appears to be concentrated within sites as not much noticed on walk to them

ACCESS

Access from truck walk East 700m to sites.



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

Steep sites with most of attack in Site PINN-0011 down near drainage and likely moved to site PINN-0012. Both 1 and 2 year cycles noticed and beetles will fly 2017.

SIZE, BOUNDARY and PATTERN OF INFESTATION

Fairly concentrated attack, both 2015 and 2016 attack found within site, isolated sites with no other sites in immediate area. (Approaching Northeast District)

INCIDENCE AND SEVERITY OF ATTACK

Likely moderate/ high attack density and larval density as one probe line established in each where PNN001 ha donly one code 1.. Combined Sanitation priority is heavy between the two.

RISK OF BEETLE SPREAD and SURROUNDING SITES

Moderate to heavy attack, isolatd sites with good chances to move further east or south.

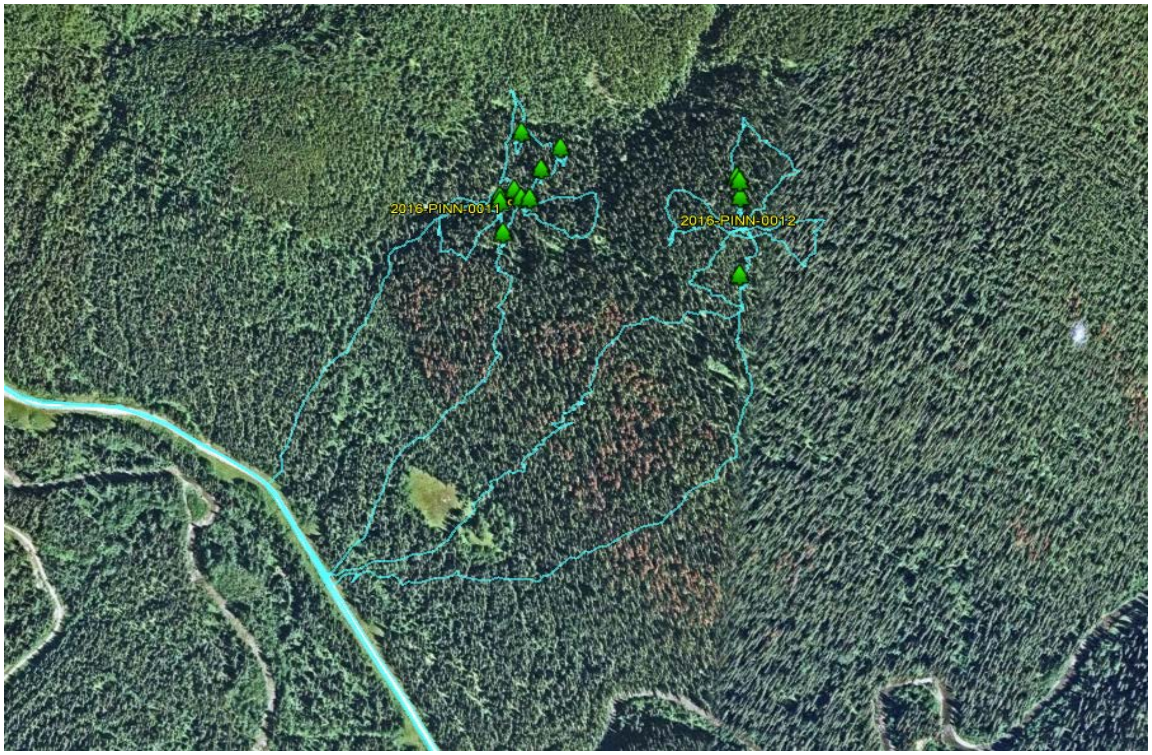
ACCESS, OPERABILITY and INTEGRATED RESOURCE MGMT ISSUES

Sites are very steep and difficult with some drainages through them.

RECOMMENDATIONS

OPTION 1 **TRAP TREES/ FALL AND BURN**

As isolated sites, a trap tree trail following in line probers walked in to center of polygon would be beneficial. Isolated sites, could lay down trees and schedule burning in winter 2017. Alternatively, a fall and burn treatment would be helpful as well with a couple of healthy trees laid down as trap trees.. If beetle moves or has moved, becomes more challenging with access.



Summary

2016-PINN-0011
2016-PINN-0012

COMBINED DATA

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	0	0.0	0.0	0.0	0.0	0.0	0.0	16.5
25.1-30.0	5.3	53	0.0	0.0	0.0	0.0	0.0	0.0	26.5
30.1-35.0	7.1	63.9	7.1	0.0	0.0	0.0	0.0	0.0	28.4
35.1-40.0	9.4	56.4	9.4	0.0	0.0	0.0	0.0	0.0	65.8
40.1-45.0	11.6	46.4	11.6	0.0	0.0	0.0	0.0	0.0	34.8
45.1-50.0	13.8	0	13.8	0.0	0.0	0.0	0.0	0.0	0
50.1-55.0	16.2	32.4	16.2	0.0	0.0	0.0	0.0	0.0	0
55.1-60.0	18.7	18.7	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	328.9	270.8	58.1	0	0.0	0.0	0.0	0	172

TABLE 4- Spruce Beetle Attack Density and Larval Density Rating

MEAN NO. OF ENTRANCE HOLES PER 225 cm2 PHLOEM SAMPLE		MEAN NO. OF LIVING LARVAE PER 225 cm2 PHLOEM SAMPLE	
	< 1 LOW Attack Density		< 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
1.75	< 3.9 SEVERE Attack Density	11.25	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough

% 2016 ATTACK	17.7%	##	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	65.7%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING

1159.9

SUMMARY OF ALL CARDS FS1111

NUMBER OF CARDS 2

ACCESS - Access from truck walk East 700m to sites.

SITE FEATURES - Steep sites with most of attack in Site PINN-0011 down near drainage and likely moved to site PINN-0012. Both 1 and 2 year cycles noticed and beetles will fly 2017.

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			2015		2014		2013			
			1	2	3	4	5	6	BL	AT
17.5-25.0	3.3	0	0	0	0	0	0	0	5	0
25.1-30.0	5.3	10	0	0	0	0	0	0	5	0
30.1-35.0	7.1	9	1	0	0	0	0	0	4	0
35.1-40.0	9.4	6	1	0	0	0	0	0	7	0
40.1-45.0	11.6	4	1	0	0	0	0	0	3	0
45.1-50.0	13.8	0	1	0	0	0	0	0	0	0
50.1-55.0	16.2	2	1	0	0	0	0	0	0	0
55.1-60.0	18.7	1	0	0	0	0	0	0	0	0
60.1 +	25.3	0	0	0	0	0	0	0	0	0
TOTALS		32	5	0	0	0	0	0	24	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 Y r	Y r ____	Unattacked
4	7	0	45	0	12	0	0	0

SIZE, BOUNDARY AND PATTERN OF THE INFESTATION

Fairly concentrated attack, both 2015 and 2016 attack found within site, isolated sites with no other sites in immediate area. (Approaching Northeast District)

INCIDENCE AND SEVERITY OF THE INFESTATION

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RISK OF BEETLE SPREAD

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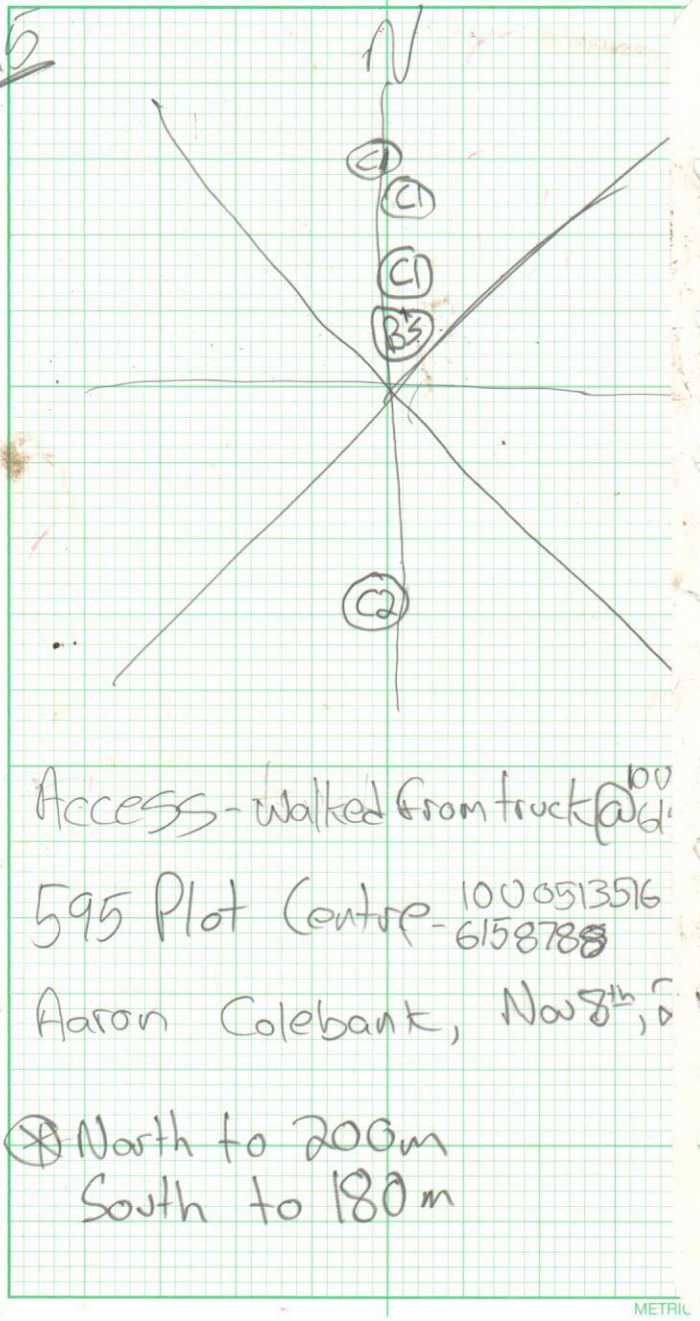
ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Sites are very steep and difficult with some drainages through them.

595



Access - walked from truck @ 100

595 Plot Centre - 10U0513516 6158788

Aaron Colebank, Nov 8th, 06

North to 200m
South to 180m

METRIC

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

BRITISH COLUMBIA

SPRUCE BEETLE PROBE CARD

LOCATION		PAGE	OF
595 North	10U0513516 6158788		
BEARING	DISTANCE	STRIP WIDTH	
0°	100 m	10 m	

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	B1
17.5 - 25.0	3.3								
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		2	4						6

BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN	
						Attacked	Unattacked
North			4		—		
South			~~1~~				

COMMENTS

⊙ - Bark Sample

CREW NAMES	DATE Y	M	D
Aaron Colebank	2006	11	08

FS 1111 RPG 2000/01 7530881048 (100/bdl)