

**SENECA ENTERPRISES LTD.**

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**SPRUCE BARK BEETLE REPORT
FH16DMK010**

POLYGON: BLA-058

HECTARES: 7.08

WALKTHROUGH DISTANCE: 600

ESTIMATED INFESTED PIXELS FROM
WALKTHROUGH (Code 1-4)

5 83.3%

SUMMARY OF CURRENT INFESTATION

Walkthrough shows Moderate attack throughout most of polygon as 80% of pixels infested. It is a heavy spruce stand (80%) with large diameter trees, 40-45cm average. Polygon carries a heavy sanitation rating, moderate attack density.

MODERATE ATTACK- 80% PIXELS

ACCESS

Access is 2WD down Finaly Nation. Walk in 400 m from the west to bottom of Polygon. (Walk off mainline from BLA-059)

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

Gentle slopes within Polygon 0-30%. From walkthrough estimate 80% spruce, DBH 45cm. Large wood,

SIZE, BOUNDARY and PATTERN OF INFESTATION

Moderate scattered attack throughout with 80% infested pixels.

INCIDENCE AND SEVERITY OF ATTACK

1 probe line established, 2 bark samples. Of the 3 samples, showing moderate attack density and all showing beetle on a 1 and 2 year life cycle. Attacked areas are scattered throughout polygon.

RISK OF BEETLE SPREAD

moderate to high.. With consistent attack and first and second year cycles, along with large diameter, high concentrated spruce stand, could spread throughout area.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Polygn has good access to the east with mainline Road 400m away. Slope is consistent and block runs from 800-900m. (25%-30%)

RECOMMENDATIONS**OPTION 1****/PROBE/CRUISING/ HARVEST**

If there are logging operations in area, easiest to schedule a cruise and Harvest in the spring of 2016. A probe may better stratify areas of attack, however 80% of polygon has infested pixels, and polygon has good access with little slope and minimal integrated resource management issues. (ALSO NEAR 2015-BLA-059)

OPTION 2**TRAP TREES/**

May schedule option for Trap Trees to hold attack until Logging becomes an option. Polygon OFF OF Main Line, up from BLA-059)

2015-BLA-058

SPRUCE BEETLE WALKTHROUGH

Legend

-  MODERATE ATTACK
-  PROBE

Finlay-Nation Forest Development Rd

POTBLA058
BS1BLA058
POCBLA058
POCPROBE1BLA058
BS2BLA058
POTPROBE1BLA058

Google earth

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Image © 2015 DigitalGlobe



600 m

Summary						
BLA-058	HEC	7.08	METERS WALKED	600	% TRAVERSED	8.5%
PIXELS COVERED BY WALKTHROUGH	6	INFESTED PIXELS	5	ESTIMATED % OF BLOCK INFESTED (From Walk through)		83.3%

TABLE 5- Spruce Beetle Infestation Summary Sheet

OF NOTE- Results taken from a 100m Probe Line established at 1 per 50 hectares to represent

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	9.9
25.1-30.0	5.3	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0
30.1-35.0	7.1	0	0.0	3.6	0.0	0.0	0.0	0.0	0
35.1-40.0	9.4	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0
40.1-45.0	11.6	104.4	0.0	0.0	0.0	0.0	0.0	0.0	0
45.1-50.0	13.8	41.4	0.0	6.9	0.0	0.0	13.8	0.0	0
50.1-55.0	16.2	32.4	16.2	8.1	0.0	8.1	32.4	0.0	0
55.1-60.0	18.7	37.4	0.0	0.0	0.0	0.0	18.7	0.0	0
60.1 +	25.3	25.3	25.3	0.0	0.0	0.0	50.6	0.0	0
TOTALS	482.7	299	41.5	18.55	0.0	8.1	115.5	0	9.9

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	
	< 3.9 SEVERE Attack Density			>24.9 EXTREME Mean Larval Density	
1.25			4.00		

TABLE 2- Spruce Beetle Management Options after Walkthrough

% 2015 ATTACK	12.4%	##	SANITATION AND SALVAGE HARVEST PRIORITY RATING			
% 2014 ATTACK	1.7%	##	LIGHT	0-599	LEAVE (Monitor, Trap Trees, Baits, etc)	1915.0
% 2013 ATTACK	23.9%	##	MODERATE	600-999	PROBE (To Obtain Further Info)	
% HOST IN STAND	98.0%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING	

1 probe line not reflective of entire stand but attacked areas carry a heavy rating, and spruce is greater than 80% throughout.

SUMMARY OF ALL CARDS
FS1111

NUMBER OF CARDS

1

ACCESS - Access is 2WD down Finaly Nation. Walk in 400 m from the west to bottom of Polygon. (Walk off mainline from BLA-059)

POLYGON FEATURES -

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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	3	0
25.1-30.0	5.3	2	0	0	0	0	0	0	0	0
30.1-35.0	7.1	0	0	1	0	0	0	0	0	0
35.1-40.0	9.4	4	0	0	0	0	0	0	0	0
40.1-45.0	11.6	9	0	0	0	0	0	0	0	0
45.1-50.0	13.8	3	0	1	0	0	1	0	0	0
50.1-55.0	16.2	2	1	1	0	1	2	0	0	0
55.1-60.0	18.7	2	0	0	0	0	1	0	0	0
60.1 +	25.3	1	1	0	0	0	2	0	0	0
TOTALS		26	2	3	0	1	6	0	3	0
BARK SAMPLES 15 cm x 15 cm	NO. ENTRAN CE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE ADULTS	NO. CALLOW	FRESH (GREEN) BLOWDOWN				
						Attacked Yr _____		Yr _____		Unattacked
4	5	7	16	0	8	0	0	0	0	

SIZE, BOUNDARY AND PATTERN OF THE INFESTATION

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INCIDENCE AND SEVERITY OF THE INFESTATION

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RISK OF BEETLE SPREAD

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BRITISH
COLUMBIA



BEETLE PROBE CARD

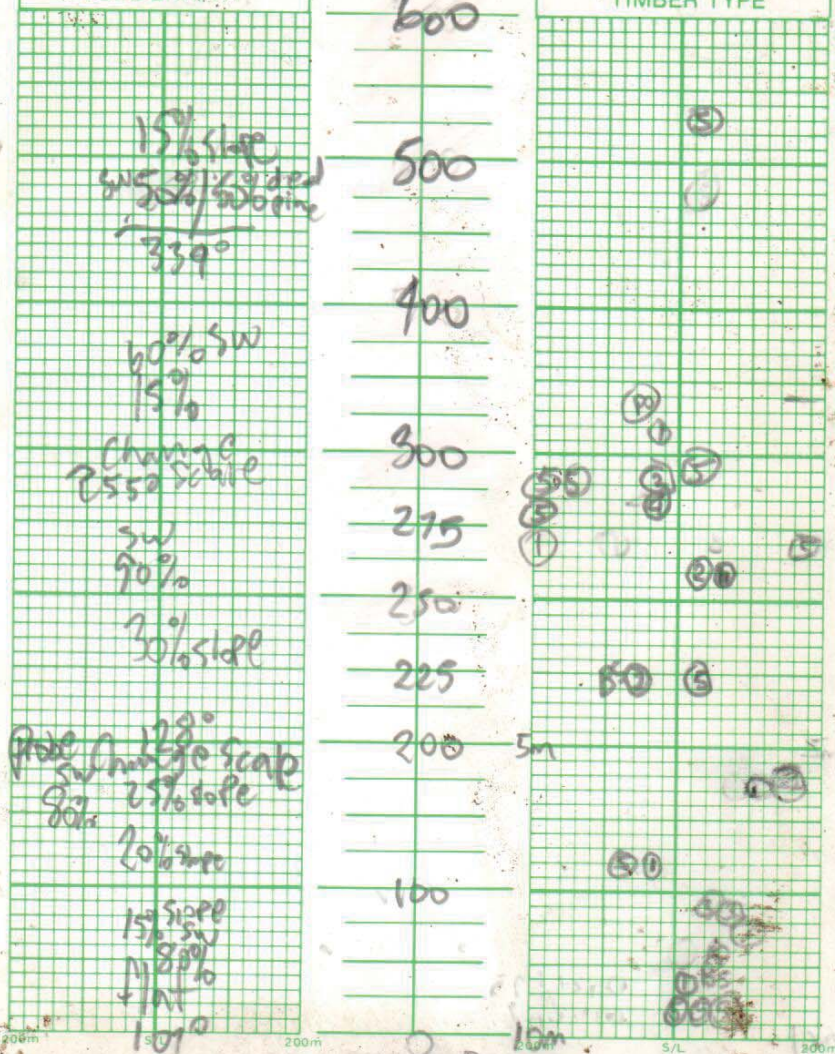
LOCATION				ELEVATION	LATITUDE		PAGE	OF			
BEARING 128°	STRIP LINE NO	STRIP WIDTH	DISTANCE	BEETLE SPECIES ☐ SB ☐ MPB ☐ DFB							
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES		
			1	2	3	4	5	6	MAIN	OTHER	
12.5 - 17.4	2.0										
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		26	23		1	6		3			
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN					
						Attacked	Unattacked				
N											
S											
COMMENTS: Code 2 large adults north side lots of pitch tubes soft mass galleries south side pg galleries through											
CREW NAMES Brandon Sparks						DATE Y 15 M 10 D 23					

MINISTRY OF FORESTS

COMPASS AND TRAVERSE SHEET

TOPOGRAPHY

TIMBER TYPE



C.P. No.

BLK

Box 8- 046310 142899