

**SENECA ENTERPRISES LTD.**

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WALKTHROUGH DISTANCE:

1900**SPRUCE BARK BEETLE REPORT
FH17DPG218**POLYGON: **2016-TUDB-009**

HECTARES:

19.5ESTIMATED INFESTED PIXELS FROM
WALKTHROUGH (Code 1-4)**3****15.8%****SUMMARY OF CURRENT INFESTATION**

Walkthrough found 8 code 1 attacked trees within polygon. 7 of these were concentrated more to the north of the polygon and there is Boundary flag located throughout polygon. Northern portion could be harvested as would reduce the infestation and outside to the north of the polygon as well. Alternatively, with proximity to lake and highway, a trap tree trail would be effective as well coming in from the north access road. There are minimal scattered code 5 attack throughout polygon as well.

LIGHT SCATTERED ATTACK, MORE MODERATE CONCENTRATED IN NORTH

ACCESS

Polygon is strip between highway 97 and Tudyah Lake, accessed from the north on spur road,

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

NEW BOUNDARY FLAG SEEN THROUGHOUT THE MAJORITY OF POLYGON. Polygon has slopes that drop down to the lake, areas within of heavy blowdown. 50% Spruce Balsam stand,

SIZE, BOUNDARY and PATTERN OF INFESTATION

Polygon is 20 hectares with the northern portion showing more concentrated attack. There was an isolated single attack noticed towards the south. There are code 5 attacked trees also within.

INCIDENCE AND SEVERITY OF ATTACK

To the north more concentrated and 2 probe lines only represented one attacked tree in each, with high attack density and low larval density. As probe lines only had single attack, led to a light sanitation priority rating but northern portion likely higher.

RISK OF BEETLE SPREAD

Polygon is bounded by Tudyah lake to the west and minimal amounts of spruce to the north and south. There are scattered code 5 attacked trees throughout and has a moderate risk of spread to the east across highway.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access, minimal slopes and has access to the north. As it has both lake to the west and main highway to the east, will need to access this way.

RECOMMENDATIONS**OPTION 1****TRAP TREES**

Sanitation and Salvage Rating is low from 2 probe lines, However north section more concentrated attack and would benefit from trap tree trail there as good access off of northern access road. Is cutblock flag located throughout and unsure if plans to harvest are there.

OPTION 2**MONITOR**

Most of the trees appear to be in the first year of a two year cycle, and could wait and reevaluate in fall of 2017.

Summary					
2016-TUDB-009	19.5	METERS WALKED	1900	% TRAVERSED	9.7%
PIXELS COVERED BY WALKTHROUGH	19	INFESTED PIXELS	3	ESTIMATED % OF BLOCK INFESTED (From Walk through)	15.8%

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	0	0.0	0.0	0.0	0.0	0.0	0.0	0
25.1-30.0	5.3	0	0.0	0.0	0.0	0.0	0.0	0.0	47.7
30.1-35.0	7.1	56.8	0.0	0.0	0.0	0.0	0.0	0.0	63.9
35.1-40.0	9.4	56.4	0.0	0.0	0.0	0.0	0.0	0.0	56.4
40.1-45.0	11.6	34.8	23.2	0.0	0.0	0.0	0.0	0.0	34.8
45.1-50.0	13.8	41.4	0.0	0.0	0.0	0.0	0.0	0.0	13.8
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	212.6	189.4	23.2	0	0.0	0.0	0.0	0	216.6

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
	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
2.83	< 3.9 SEVERE Attack Density		1.33 >24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough				
% 2015 ATTACK	10.9%	##	SANITATION AND SALVAGE HARVEST PRIORITY RATING	
% 2014 ATTACK	0.0%	##	LIGHT 0-599	LEAVE (Monitor, Trap Trees, Baits, etc)
% 2013 ATTACK	0.0%	##	MODERATE 600-999	PROBE (To Obtain Further Info)
% HOST IN STAND	49.5%	##	HEAVY 1000+	RECOMMEND CRUISING/ LOGGING

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SUMMARY OF ALL CARDS FS1111		NUMBER OF CARDS	2
ACCESS -	Polygon is strip between highway 97 and Tudyah Lake, accessed from the north on spur road,		
POLYGON FEATURES -	NEW BOUNDARY FLAG SEEN THROUGHOUT THE MAJORITY OF POLYGON. Polygon has slopes that drop down to he lake, areas within of heavy blowdown. 50% Spruce Balsam stand,		

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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	0	0
25.1-30.0	5.3	0	0	0	0	0	0	0	9	0
30.1-35.0	7.1	8	0	0	0	0	0	0	9	0
35.1-40.0	9.4	6	0	0	0	0	0	0	6	0
40.1-45.0	11.6	3	2	0	0	0	0	0	3	0
45.1-50.0	13.8	3	0	0	0	0	0	0	1	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		20	2	0	0	0	0	0	28	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	
6	17	2	8	0	0	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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ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES
Good access, minimal slopes and has access to the north. As it has both lake to the west and main highway to the east, will need to access this way.



300 m

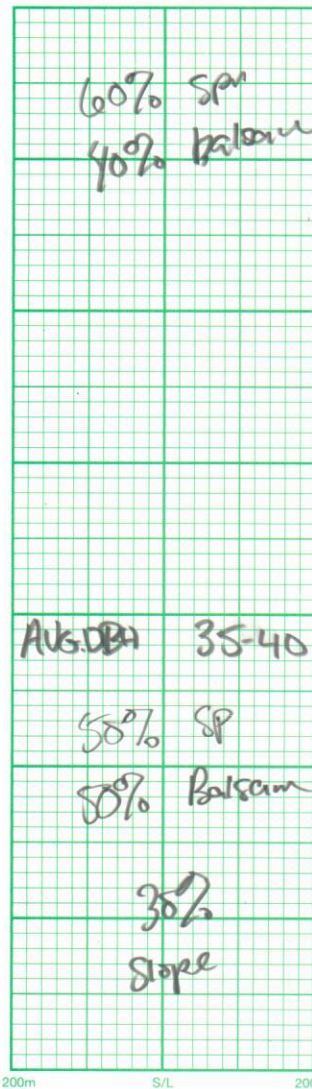
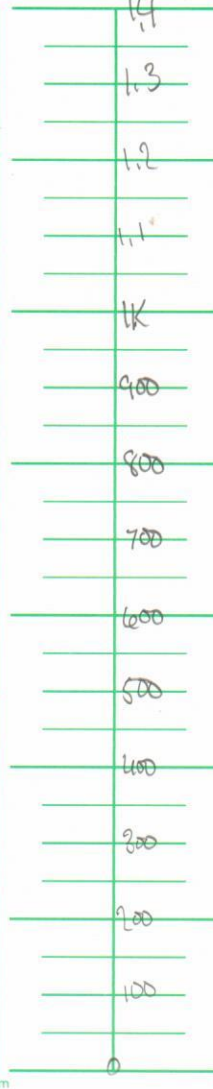
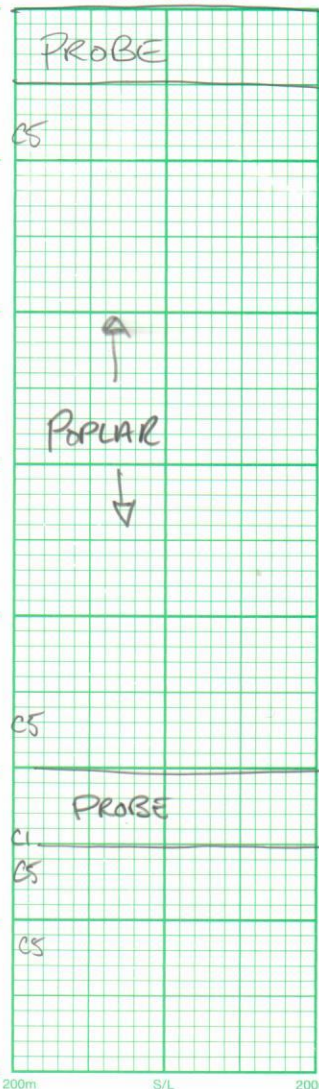


TOPOGRAPHY

STRIP No.

TJDB-2009

TIMBER TYPE



STRIP NO.:

0m

DIRECTION:

North

START STRIP:

JOB NO.:

DATE:

Nov. 15 2016

CREW:

Darryl

REMARKS:



www.irisupplies.com
Ph: 1-800-663-6843

TIMBER TYPE

STRIP NO.: _____ DIRECTION: NE _____

START STRIP: _____

JOB NO.: _____ DATE: _____

CREW: _____

REMARKS: _____

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SPRUCE BEETLE PROBE CARD

LOCATION 55°04'48.0" 123°01'05.8"		PAGE OF					
BEARING North		DISTANCE 100m					
Diameter Class		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						
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		10	1	10			
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN	
						Attacked	Unattacked
N	5	1	3				
S	5	1	2				
COMMENTS BS							
CREW NAMES Darryl Dorthue						DATE 16 11 15	

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

SPRUCE BEETLE PROBE CARD

LOCATION 55°04'17.0" 123°01'11.7"		PAGE OF					
BEARING N		DISTANCE 100m					
Diameter Class		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						
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		10	1	7			
BARK SAMPLES 5cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN	
						Attacked	Unattacked
N	4	0	3				
S	3	0	0				
COMMENTS BS							
CREW NAMES Darryl Dorthue						DATE 16 11 15	

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