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SPRUCE BARK BEETLE REPORT FH17DPG218

STAR PROBE# **2016-PHI-0172** 281

NUMBER OF CODE 1-4 ATTACK 1

PROBE LINE YES

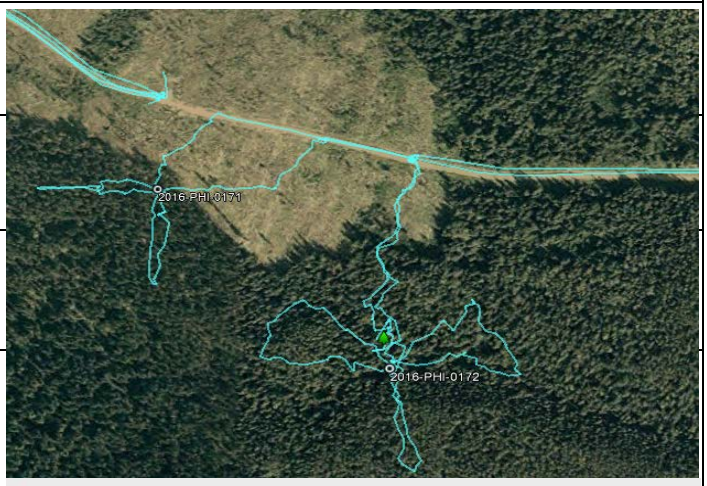
SUMMARY OF CURRENT INFESTATION

LIGHT ATTACK

Grouping of sites PHI-0166, 0167, 0168, 0171 and 0172. All sites south of road, sites 0171 and 0172 edge of cutblock just off mainline with one strip attack code 2 in site 0172 Site 0171 had some unsuccessful attack (Pitchouts). Further southwest, Site 0166 (1 Code 3 Attack) Site 0168 (2 Code 3, 3 Code 5 older Attack). These sites also with light scattered attack, no real risk of spread with light sanitation ratings. (<200)

ACCESS

From truck, walk 100m to sites 0171-0172 beside cutblock. Sites 0166, 0167 and 0168 walk south 900m to 1.6km.



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

Sites 0171 and 0172 adjacent to cutblock. Flat sites, 70% Spruce, 30% Balsam. Sites 166,167 and 168 are Balsam, Pine Spruce stands, with Spruce 30% of stand. Open stands, flat 0-10% slopes.

SIZE, BOUNDARY and PATTERN OF INFESTATION

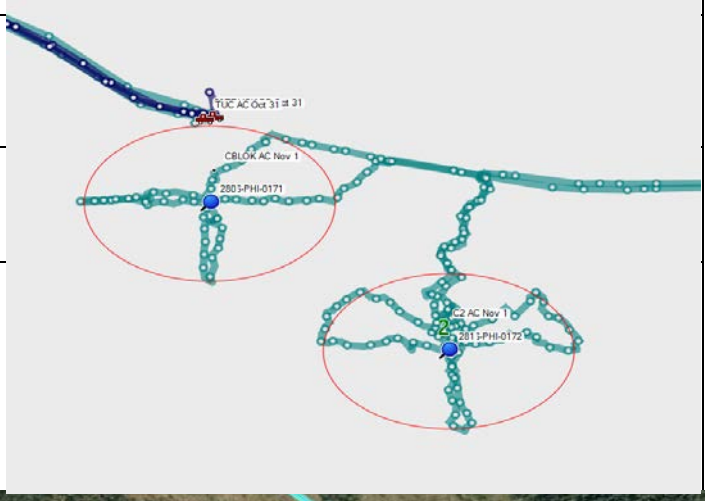
Light scattered attack in and around all sites. Sites 0171, 0172 had one strip attack, and some pitchouts. Sites 0166,0167,0168 has 3 code 3 attack (Flight 2017) and 3 code 5 old attack.

INCIDENCE AND SEVERITY OF ATTACK

Light scattered attack in and around all sites. Sites 0171, 0172 had one strip attack, and some pitchouts. Sites 0166,0167,0168 has 3 code 3 attack (Flight 2017) and 3 code 5 old attack. Low incidence and severity with light priority rating from 3 probe lines.

RISK OF BEETLE SPREAD and SURROUNDING SITES

Light sanitation priority rating and attackdenisties in all sites. Low rate of spread within area as to the south, minimal spruce components



ACCESS, OPERABILITY and INTEGRATED RESOURCE MGMT ISSUES

From truck, walk 100m to sites 0171-0172 beside cutblock. Sites 0166, 0167 and 0168 walk south 900m to 1.6km, flat with slopes 0-10%. A few small drainages to cross with access.

RECOMMENDATIONS

OPTION 1 **NO ACTION**

Light scattered with very low ratings. Low spruce component so attack will be concentrated if flight to a few trees. Poor access with light priority rating. Could fall and burn single trees if time permits as will be flight in 2017 represntde by callow adults. But lower attack densities. Monitor area, walkthrough 2017

OPTION 1 **MONITOR**

Summary

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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	29.7	0.0	0.0	0.0	0.0	0.0	0.0	6.6
25.1-30.0	5.3	74.2	0.0	0.0	0.0	0.0	0.0	0.0	15.9
30.1-35.0	7.1	42.6	0.0	0.0	0.0	0.0	0.0	0.0	28.4
35.1-40.0	9.4	18.8	0.0	0.0	0.0	0.0	0.0	0.0	9.4
40.1-45.0	11.6	23.2	0.0	5.8	0.0	0.0	0.0	0.0	34.8
45.1-50.0	13.8	13.8	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	208.1	202.3	0.0	5.8	0.0	0.0	0.0	0	95.1

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
1.00	< 3.9 SEVERE Attack Density	3.00	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough

% 2016 ATTACK	2.8%	2.8	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	68.6%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING

191.3

SUMMARY OF ALL CARDS FS1111

NUMBER OF CARDS: 1

ACCESS - From truck, walk 100m to sites 0171-0172 beside cutblock. Sites 0166, 0167 and 0168 walk south 900m to 1.6km.

SITE FEATURES - Sites 0171 and 0172 adjacent to cutblock. Flat sites, 70% Spruce, 30% Balsam. Sites 166,167 and 168 are Balsam, Pine Spruce stands, with Spruce 30% of stand. Open stands, flat 0-10% slopes.

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	PL
17.5-25.0	3.3	9	0	0	0	0	0	0	2	0
25.1-30.0	5.3	14	0	0	0	0	0	0	3	0
30.1-35.0	7.1	6	0	0	0	0	0	0	4	0
35.1-40.0	9.4	2	0	0	0	0	0	0	1	0
40.1-45.0	11.6	2	0	1	0	0	0	0	3	0
45.1-50.0	13.8	1	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		34	0	1	0	0	0	0	13	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
1	1	1	3	0	0	0	0	0

SIZE, BOUNDARY AND PATTERN OF THE INFESTATION

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RISK OF BEETLE SPREAD

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ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

From truck, walk 100m to sites 0171-0172 beside cutblock. Sites 0166, 0167 and 0168 walk south 900m to 1.6km, flat with slopes 0-10%. A few small drainages to cross with access.

281 Nov 1ST

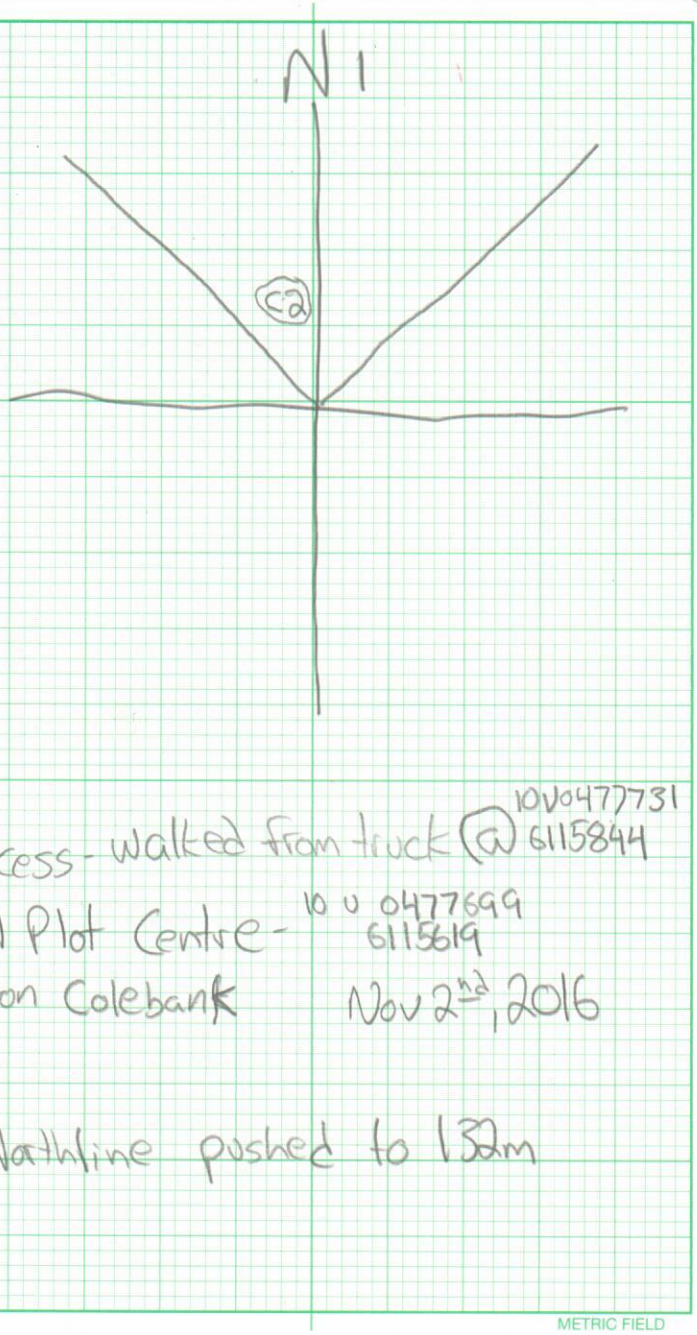
AC

Attack - One C2

Access - 225m @ 190° from roadside.

Features - 70% Sx 30% BJ No slopes. Close to plantation.

281



Access - walked from truck @ 10V0477731 6115844

281 Plot Centre - 10 U 0477699 6115619

Aaron Colebank Nov 2nd, 2016

* Nathline pushed to 132m

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

METRIC FIELD

SPRUCE BEETLE PROBE CARD

LOCATION		PAGE	OF
281 North	10U 0478930 6116379	elev: 1031m	
BEARING	DISTANCE	STRIP WIDTH	
0°	100m	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	BI
17.5 - 25.0	3.3	21							••
25.1 - 30.0	5.3	8							•• •
30.1 - 35.0	7.1	7							•• ••
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		34		1					13

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, code 2

CREW NAMES	DATE Y	M	D
Aaron Colebank	2016	11	01

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