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SPRUCE BARK BEETLE REPORT
FH17DPG218

STAR PROBE# **2016-MIS-0047** 308

NUMBER OF CODE 1-4 ATTACK 3

PROBE LINE YES

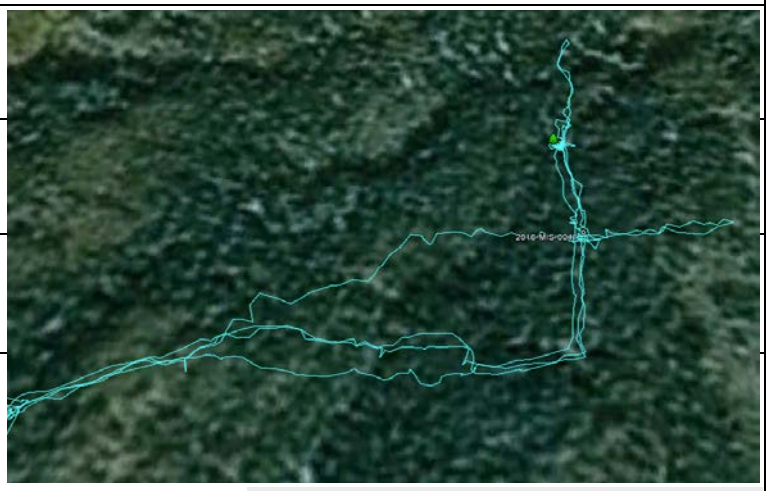
SUMMARY OF CURRENT INFESTATION

LIGHT ATTACK

Five grouped sites all with similar results. Light scattered single attack in MIS047 (3 code 3 attacked trees), old single attack in MIS0039, no attack in MIS0033, 0042 and 0045. Small DBH spruce stands with minimal beetle spread anticipated.

ACCESS

From truck,walk 300m to 1.1 km to access sites (site 0045 has a river through it, site 0047 in a ravine)



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

All of the sites in have steep slopes 0-50%, and with varied terrain. All sites had very small Spruce (60%) Balsam (40%) mix with average 20cm DBH.

SIZE, BOUNDARY and PATTERN OF INFESTATION

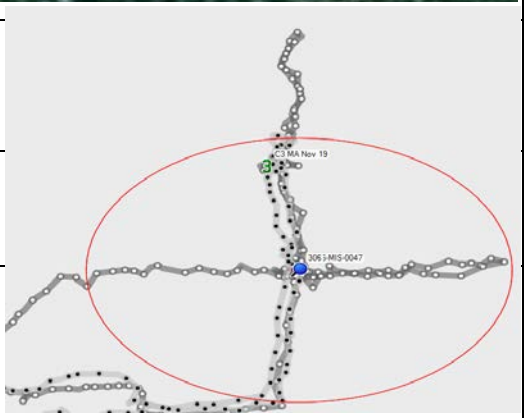
Light scattered attack in site MIS0047 with a light Sanitation rating. Site had code 3 trees, other sites had no current attack, all sites smaller DBH spruce.

INCIDENCE AND SEVERITY OF ATTACK

While 3 code 3 attacked trees found in MIS0047, light sanitation rating and lower attack and larval densities. Other sites had no currnet attack.

RISK OF BEETLE SPREAD and SURROUNDING SITES

Minimal, site that had code 3 attack has light sanitation rating but thick stand with low DBH spruce. May move slightly but minimal impact on area.



ACCESS, OPERABILITY and INTEGRATED RESOURCE MGMT ISSUES

From truck,walk 300m to 1.1 km to access sites (site 0045 has a river through it, site 0047 in a ravine) All of the sites in have steep slopes 0-50%, and with varied terrain.

RECOMMENDATIONS

OPTION 1 **NO ACTION**

Light scattered single attack in MIS047, old single attack in MIS0039, no attack in MIS0033, 9942 and 0045. Access poor with creeks and ravines, no action with light sanitation rating.

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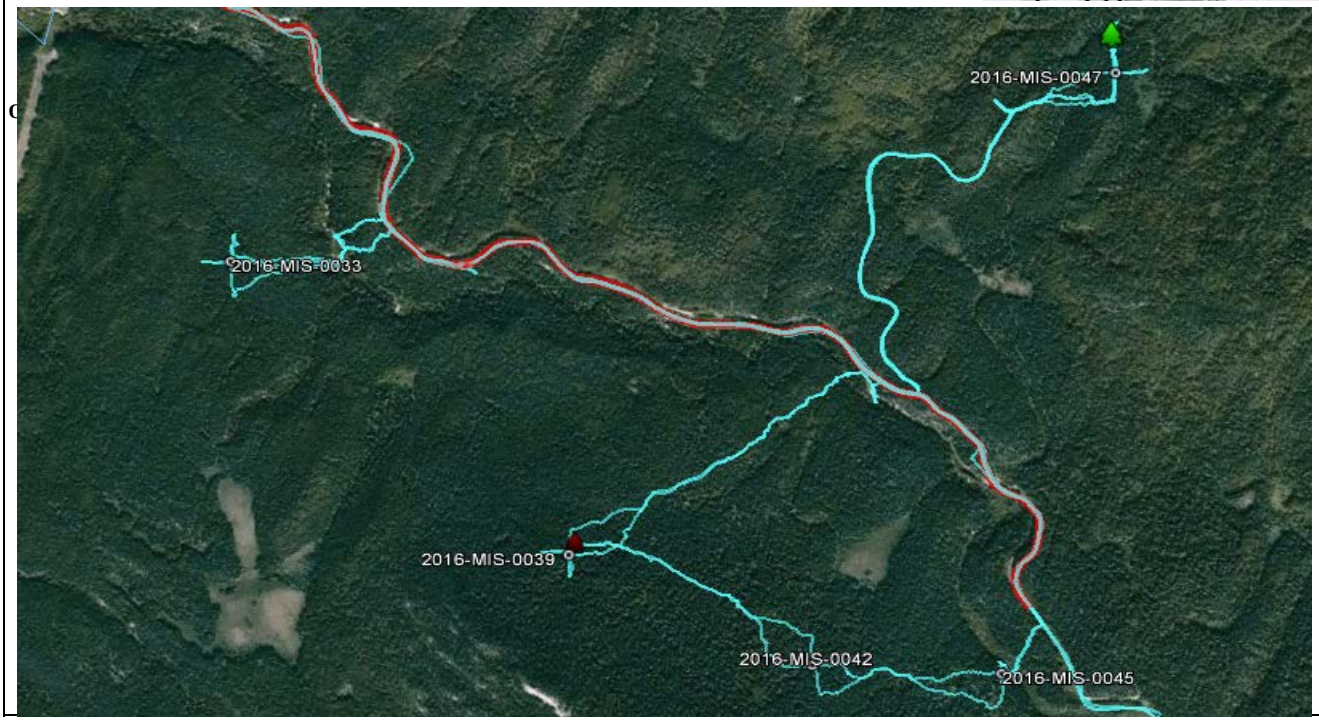

Summary

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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	9.9	0.0	0.0	0.0	0.0	0.0	0.0	3.3
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	21.3	0.0	0.0	0.0	0.0	0.0	0.0	0
35.1-40.0	9.4	56.4	0.0	0.0	0.0	0.0	0.0	0.0	9.4
40.1-45.0	11.6	34.8	0.0	0.0	0.0	0.0	0.0	0.0	69.6
45.1-50.0	13.8	41.4	0.0	0.0	13.8	0.0	0.0	0.0	41.4
50.1-55.0	16.2	48.6	0.0	0.0	0.0	0.0	0.0	0.0	32.4
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	25.3	0.0	0.0	0.0	0.0	0.0	0.0	0
TOTALS	280.8	267	0.0	0	13.8	0.0	0.0	0	156.1

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
3.50	< 3.9 SEVERE Attack Density	2.50	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough

% 2016 ATTACK	0.0%	0.0	SANITATION AND SALVAGE HARVEST PRIORITY RATING		
% 2015 ATTACK	4.9%	##	LIGHT	0-599	LEAVE (Monitor, Trap Trees, Baits, etc)
% 2014 ATTACK	0.0%	##	MODERATE	600-999	PROBE (To Obtain Further Info)
% HOST IN STAND	64.3%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING
					210.6

SUMMARY OF ALL CARDS FS1111

NUMBER OF CARDS: 1

ACCESS - From truck,walk 300m to 1.1 km to access sites (site 0045 has a river through it, site 0047 in a ravine)

SITE FEATURES - All of the sites in have steep slopes 0-50%, and with varied terrain. All sites had very small Spruce (60%) Balsam (40%) mix with average 20cm DBH.

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	1	0
25.1-30.0	5.3	2	0	0	0	0	0	0	0	0
30.1-35.0	7.1	3	0	0	0	0	0	0	0	0
35.1-40.0	9.4	6	0	0	0	0	0	0	1	0
40.1-45.0	11.6	3	0	0	0	0	0	0	6	0
45.1-50.0	13.8	3	0	0	1	0	0	0	3	0
50.1-55.0	16.2	3	0	0	0	0	0	0	2	0
55.1-60.0	18.7	1	0	0	0	0	0	0	0	0
60.1 +	25.3	1	0	0	0	0	0	0	0	0
TOTALS		25	0	0	1	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
2	7	5	5	0	4	0	0	0

SIZE, BOUNDARY AND PATTERN OF THE INFESTATION

Light scattered attack in site MIS0047 with a light Sanitation rating. Site had code 3 trees, other sites had no current attack, all sites smaller DBH spruce.

INCIDENCE AND SEVERITY OF THE INFESTATION

While 3 code 3 attacked trees found in MIS0047, light sanitation rating and lower attack and larval densities. Other sites had no curmet attack.

RISK OF BEETLE SPREAD

Minimal, site that had code 3 attack has light sanitation rating but thick stand with low DBH spruce. May move slightly but minimal impact on area.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

From truck,walk 300m to 1.1 km to access sites (site 0045 has a river through it, site 0047 in a ravine) All of the sites in have steep slopes 0-50%, and with varied terrain.

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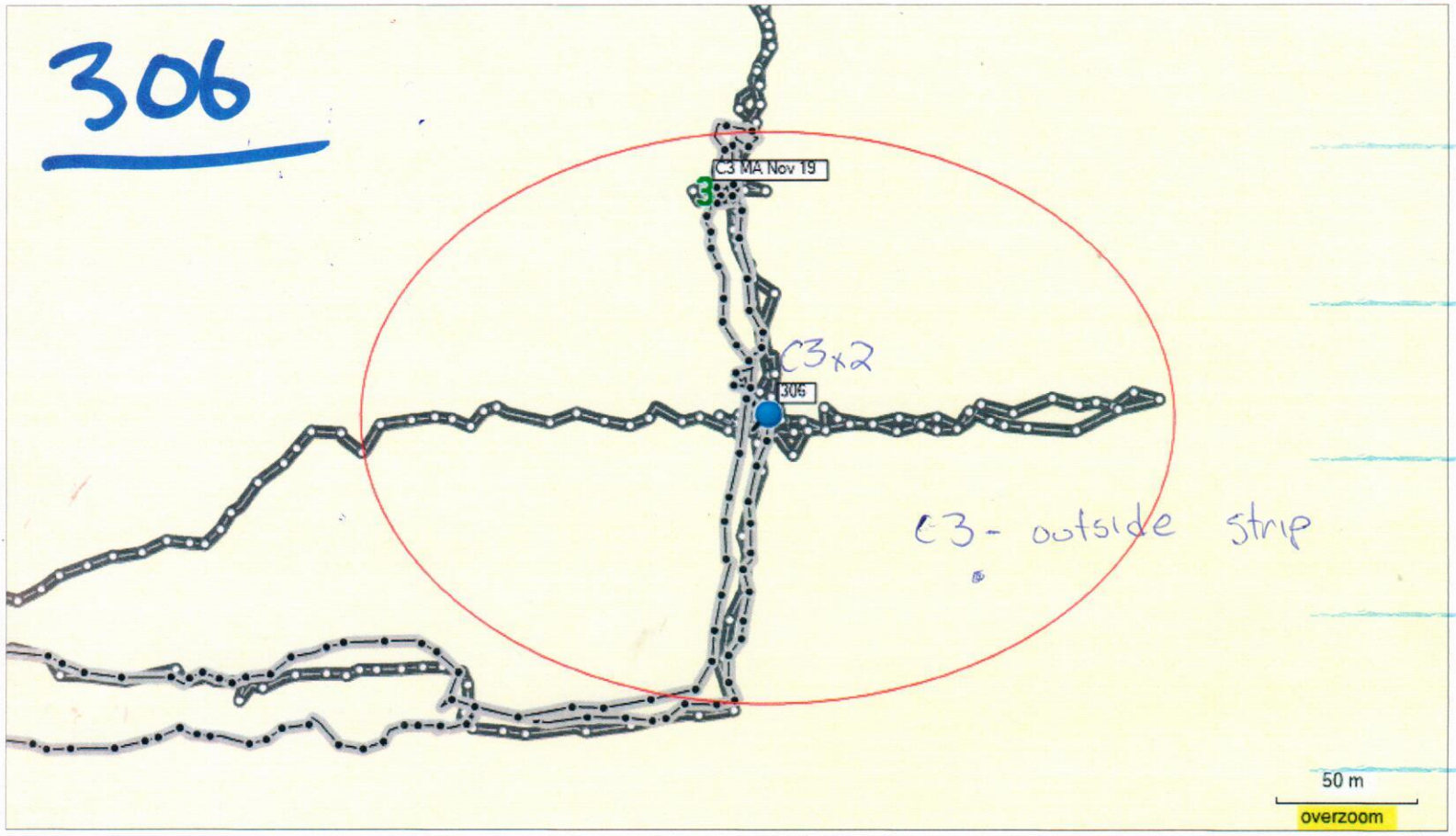


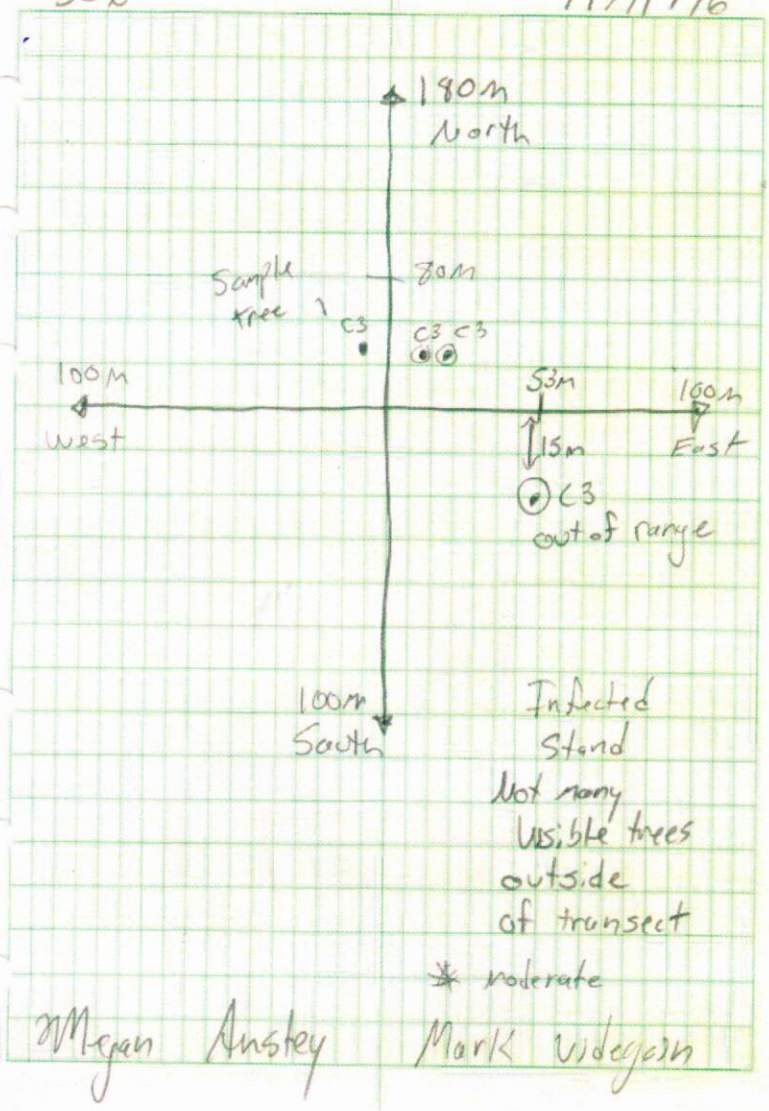
Attack - C3 = 3

Access - From quad, walk 360m @ 70°

Features - Site located in ravine.

- BI 30%
- 5x 70%

306 19/11/16



Megan Anstey Mark Widegain

SPRUCE BEETLE PROBE CARD

LOCATION		PAGE	OF
306			
BEARING	DISTANCE	STRIP WIDTH	
360 N	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	
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		25			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
N	4	3	5				
S	3	2			4		

COMMENTS
⊙ sample tree

CREW NAMES Mark Videgain Megan Anstey

DATE Y 18 M 11 D 19

FS 1111 RPG 2000/01 7530681048 (100/bd)