

UBC OKANAGAN PINE BEETLE TRAPPING REPORT – 2013

Lindgren funnel traps were set up again this year as a pine bark beetle control measure to attract and collect western pine beetles (WPB) rather than have them attack ponderosa pine trees on UBCO campus property. Traps were previously used in 2006, 2007, 2008, 2010, 2011 and 2012.

Traps were set up with the purpose of attracting residual WPB in Campus trees as well as beetles flying onto UBCO Campus from surrounding properties. This report provides details and results of this years trapping program.

Trap Sites

Ten clusters of three Lindgren funnel traps totaling thirty traps were set up at basically the same locations as the previous year. Refer to the attached map for site locations and site numbers.

Lures Used

WPB lures were used in all thirty Lindgren funnel traps. Mountain pine beetle lures were previously tried but were ineffective so their use has been discontinued.

Placement and Removal Dates

- May 7 Traps were set up at seven sites.
- May 9 Traps were set up at the remaining three sites..
- October 9 Traps were removed and placed in wooden storage boxes in the Quonset Maintenance Yard after the insects were collected.

Trap Monitoring and Insect Collections

Traps were checked and insects collected on July 30 and October 9. It would have been beneficial to check the traps more often. The collected insects were dried if necessary, sorted and pine beetles counted. The attached table shows the sites, collection dates and the number of pine beetles counted.

Collection Comments

The traps continue to be very effective. A total of 42,911 WPB and 1 red turpentine pine beetle (RTB) were collected. The numbers are down considerably from the previous year and also below the numbers collected in 2011 and 2010. The majority of the beetles (39,208) were in the July 30th collection and only a small number (3,702) in the October 9th collection. Comparison of the 2013 collection with collections in previous years is shown on the attached table.

Summary

Pine beetle control using traps with WPB lures was a success with 42,911 western pine beetles and 1 red turpentine beetles collected which prevented a large number of pine trees from being attacked. Most of the beetles entered the traps prior to July 30th which probably indicates that there was a significant residual population that emerged from previously attacked trees that were not removed from the area prior to beetle flights. The

beetle population appears to be trending downward since this years collection is well below 2012 numbers and also below the 2011 and 2010 numbers.

Recommendations

Although the pine beetle population appears to be trending downwards based on this years collection, it is recommended that the trapping program be continued in 2014 to reduce tree infestations and determine the population trend for at least one more year. Continue using WPB lures at the same ten sites and at additional sites if funding permits. Have traps inspected and insects collected at least twice and more often if possible. Suggest not setting up traps with MPB lures because they are relatively ineffective.

Carry out pine beetle surveys to inspect trees for pine beetle attack and identify infested trees for removal. I strongly recommend that inspections be made during the summer as well as during the winter. During the summer there are many flights of WPB and if the newly attacked trees are identified and removed promptly there would be less trees lost. Ensure infested trees are removed from the area as soon as possible when observed during the beetle flight period and no later than April 15, 2014 if identified after the beetle flight period.

Continue with placement of pine beetle Verbenone repellents on high value tree areas around buildings and main roads.

It would be very beneficial to encourage the neighboring property owners to remove their infested trees prior to beetle flights to reduce the threat to UBCO Campus trees.



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Forest Health Consultant

December 10, 2013

**UBCO PINE BEETLE CONTROL
LINDGREN FUNNEL TRAP COLLECTIONS – 2013**

SITE	TRAP COLLECTION DATES				TOTAL	
	JULY 30		OCTOBER 9		WPB	RTB
	WPB	RTB	WPB	RTB		
1	1,294	1	152		1,446	1
2	2,338		204		2,542	
3	1,765		179		1,944	
4	2,518		238		2,756	
5	5,263		475		5,738	
6	7,645		1,104		8,749	
7	4,257		655		4,912	
8	2,248		76		2,324	
9	3,426		208		3,634	
10	8,454		412		8,866	
TOTALS	39,208	1	3702		42,911	1

2012 Collection Summary

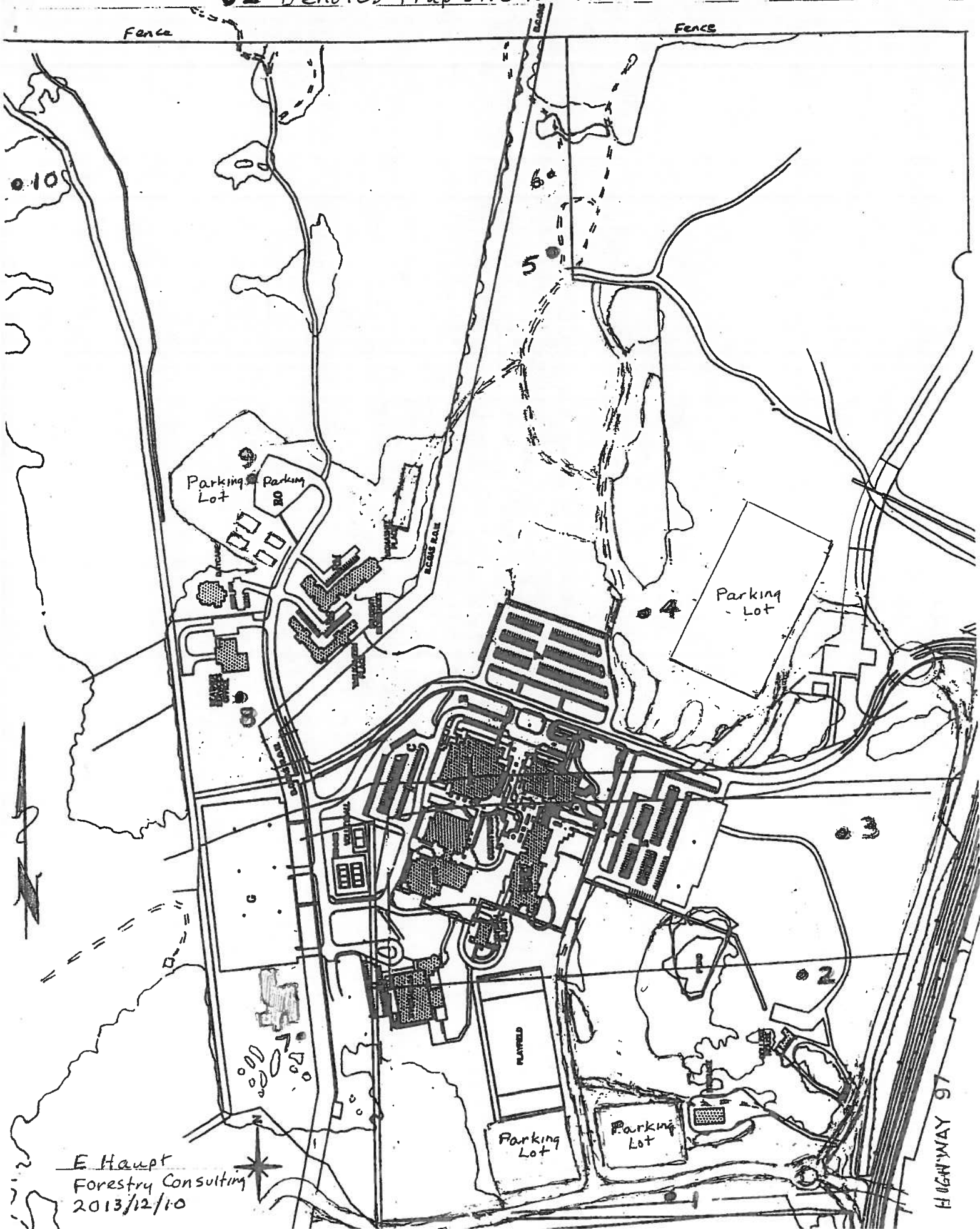
Western Pine Beetles (WPB)	42,911
Red Turpentine Beetles (RTB)	<u>1</u>
Total	42,912

Collection Comparisons

2013	42,912	(10 sites)
2012	75,560	(10 sites)
2011	48,324	(10 sites)
2010	41,022	(10 sites)
2008	38,644	(13 sites)
2007	31,499	(13 sites)
2006	28,079	(9 sites)

MAP OF 2013 UBCO PINE BEETLE TRAP SITES

● 2 - Denotes trap site location and site number



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2013/12/10

HIGHWAY 97