

PINE BARK BEETLE

TRAPPING REPORT

UBC OKANAGAN CAMPUS GROUNDS

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UBC OKANAGAN PINE BEETLE TRAPPING REPORT – 2015

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, 2012, 2013 and 2014.

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 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 5 Traps were set up at nine sites.
- May 6 Traps were set up at site 10 and lures placed in all traps.
- 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 24 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 12,567 WPB and 1 red turpentine pine beetle (RTB) were collected. The numbers are down about 46 percent from the previous year and also below the numbers collected in previous years since trapping started in 2006. The majority of the beetles (10,574) were in the July 24 collection and only a small number (1,993) in the October 9 collection. Comparison of the 2015 collection with collections in previous years is shown on the attached table.

Summary

Pine beetle control using traps with WPB lures continues to be effective resulting in 12,567 western pine beetles and 1 red turpentine beetle collected which prevented a significant number of pine trees from being attacked. Most of the beetles entered the traps prior to July 24 which indicates that there was a residual population that emerged from pine trees in the area including neighboring properties.

The beetle population continues to trend downward with this year collection numbers being the lowest since trapping commenced in 2006. The 2015 collection numbers are down 46 % when compared with the 2014 numbers. There was a similar reduction last year in comparison with the 2013 collection.

There does not appear to be any obvious attacked trees on the campus when observing the trees from a distance. A survey in January 2016 will identify attacked trees.

Recommendations

The control measures using traps and verbenone repellents could be discontinued based on the reduced numbers collected this year and the downward population trend.

The pine beetle survey scheduled during January 2016 will provide current numbers of trees attacked. The survey results will help to determine the control measures that should be taken in 2016.

Trapping western pine beetles effectively has now been compromised. Suitable western pine beetle lures for the traps will now be difficult to get since they are no longer available from the previous supplier and the lures from an another supplier have not worked very well



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**UBCO PINE BEETLE CONTROL
LINDGREN FUNNEL TRAP COLLECTIONS - 2015**

SITE	TRAP COLLECTION DATES				TOTAL	
	JULY 24		OCTOBER 9		WPB	RTB
	WPB	RTB	WPB	RTB		
1	352		27		379	
2	597		53		650	
3	473		34		507	
4	656		178		834	
5	1,394		176		1,570	
6	2,454		672		3,126	
7	1,265		334		1,599	
8	628	1	42		670	1
9	796		253		1,049	
10	1,959		224		2,183	
TOTALS	10,574	1	1,993	0	12,567	1

2015 Collection Summary

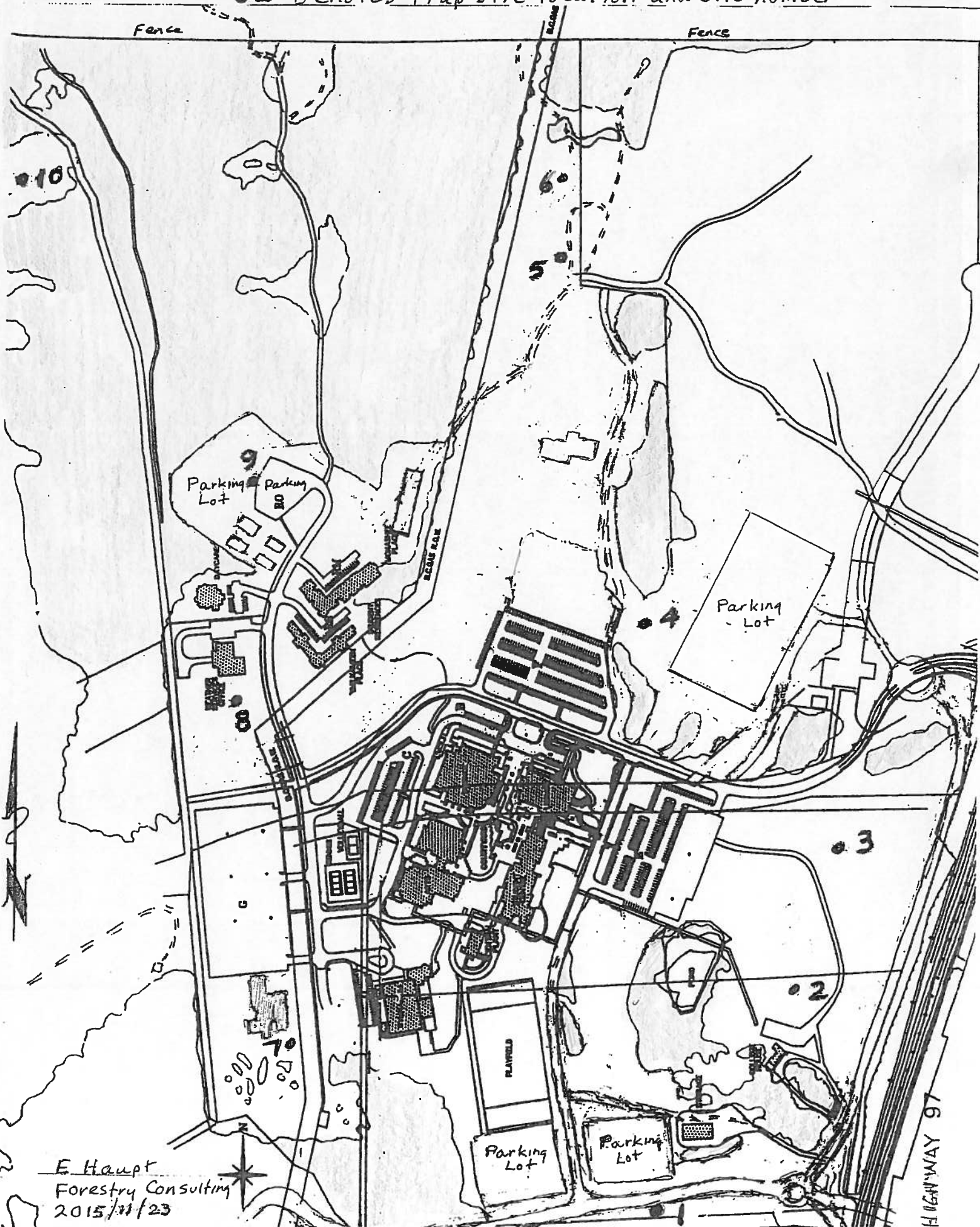
Western Pine Beetles (WPB)	12,567
Red Turpentine Beetles (RTB)	<u>1</u>
Total	12,568

Collection Comparisons

2015	12,568	(10 sites)
2014	23,231	(10 sites)
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 2014 UBCO PINE BEETLE TRAP SITES

● 2 - Denotes trap site location and site number



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