

PINE BARK BEETLE

TRAPPING REPORT

UBC OKANAGAN CAMPUS GROUNDS

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November 16, 2016

UBC OKANAGAN PINE BEETLE TRAPPING REPORT – 2016

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, 2014 and 2015.

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 2 | Traps were set up and lures placed at five sites.. |
| May 3 | Traps were set up and lures placed at remaining five sites. |
| October 12 | 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 18 and October 12. 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 24,472 WPB and 0 red turpentine pine beetle (RTB) were collected. The numbers collected are almost double the 12,568 beetles collected in 2015 and 1,241 above the 2014 collection but still below all other prior collections. The July 18th collection was 11,500 and the October 12th collection was 12,972 beetles. Site 6 traps collected the most beetles, almost double the numbers trapped at other sites. Comparison of the 2016 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 24,472 western pine beetles being trapped which prevented a significant number of pine trees from being attacked. More beetles were trapped this year than last year. The

number trapped was almost double the 2015 count and similar to the 2014 count but less than other years collection going back to 2006.

The July count of 11,500 was less than the October count of 12,972 beetles. Trapping more beetles in the later collection is a concern. A second brood of beetles probably developed and took flight after the July 18th collection date suggesting an increasing population.

A few beetle attacked trees were identified in early summer but obvious attacked trees were not seen while making the October 12th trap collections. A survey in January 2017 will identify trees that are attacked.

Recommendations

The control measures using traps and verbenone repellents may possibly be discontinued even though the trap count increased this year but will depend on the results of a campus beetle survey.

The pine beetle survey scheduled during January 2017 will provide current numbers of trees attacked. The survey results will help to determine the control measures that should be taken in 2017.



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UBCO PINE BEETLE CONTROL
LINDGREN FUNNEL TRAP COLLECTIONS – 2016

	TRAP COLLECTION DATES					
SITE	JULY 18		OCTOBER 12		TOTAL	
	WPB	RTB	WPB	RTB	WPB	RTB
1	348		726		1,074	
2	465		69		534	
3	409		122		531	
4	418		1,078		1,496	
5	1,367		1,848		3,215	
6	3,030		3,507		6,537	
7	1,388		2,206		3,594	
8	639		545		1,184	
9	1,005		2,054		3,059	
10	2,431		817		3,248	
TOTALS	11,500	0	12,972	0	24,472	0

2015 Collection Summary

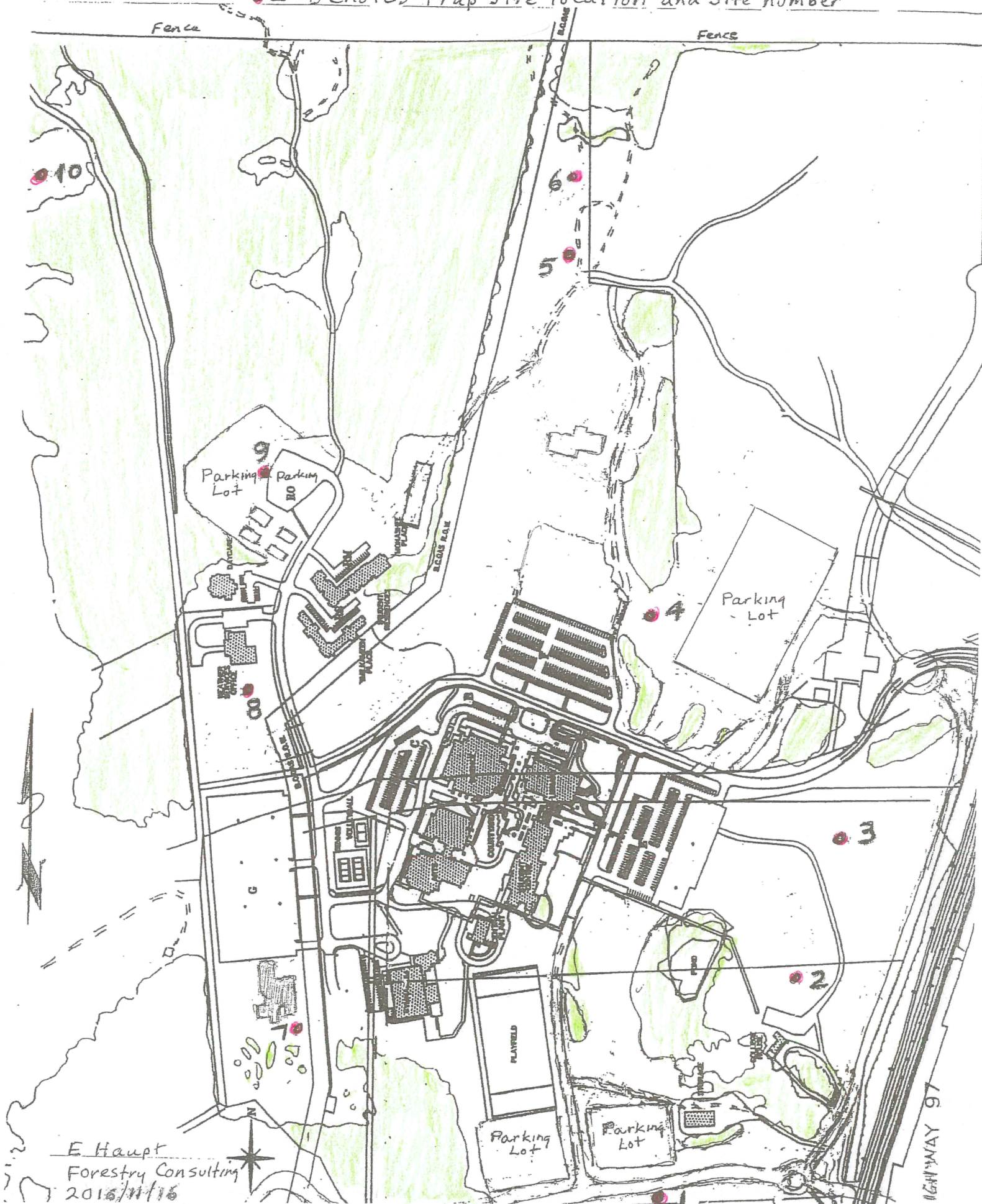
Western Pine Beetles (WPB)	24,472
Red Turpentine Beetles (RTB)	0
Total	24,472

Collection Comparisons

2016	24,472 (10 sites)
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 2016 UBCO PINE BEETLE TRAP SITES

2 - Denotes trap site location and site number



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