

## Bruce Spanworm Egg Survey

**Objective:** To get an idea of Bruce spanworm population levels prior to spring larval surveys so that suppression planning can be done in advance. Moderate to high counts should be confirmed by spring larval surveys when spanworms are present on expanding sugar maple leaves.

**Time of Year:** December through April when eggs are orange in color.

**Equipment needed:** Magnifier to search for eggs and template for measuring a standard area each time. A 10x Optivisor is highly recommended over a hand-held magnifying glass. A small canning jar lid (2.15 inches - inside diameter) works well for a template.

**Data Sheets Needed:** Bruce Spanworm Egg Survey form.

**Procedure:** Randomly select pole-size sugar maple scattered throughout the sugarbush to be surveyed or section of concern. Place the template on the north side of the tree bole at a height between 3 and 6 feet above the ground. Examine the bark area within the template area and record the number of eggs seen. Do the same for the other four cardinal directions on the tree. Continue to survey in this manner until 30 trees have been examined. Divide total number of eggs by 30 to get average number of eggs per tree. Then divide by area surveyed per tree (0.10 sq. ft. for small canning jar lid) to get eggs per square feet.

**Interpreting Results:** This procedure should be considered preliminary since it has not been widely tested (has been tried on about a dozen Vermont sugarbushes). In the past, egg counts in excess of 10 per square foot have always resulted in moderate to heavy defoliation and fewer than 4 per square foot have always resulted in light defoliation. Counts between 4 and 10 per square foot have had variable defoliation results.

Bruce Spanworm Egg Survey      Date \_\_\_\_\_      Owner \_\_\_\_\_  
 Town \_\_\_\_\_      Remarks \_\_\_\_\_

Tree #	N	E	S	W	Total	Eggs/sq. ft.	Remarks
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
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19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
Total							
Eggs/sq. ft							
Ave.							