

## Farm Bill Survey Accomplishment Report

### 2017 - Asian Gypsy Moth Delimiting in Washington State

<b>Year:</b>	2017
<b>State:</b>	Washington
<b>Cooperative Agreement Name:</b>	Asian Gypsy Moth Delimiting in Washington State
<b>Cooperative Agreement Number:</b>	AP17PPQFO000C496
<b>Project Funding Period:</b>	April 1 2017 – March 31, 2018
<b>Project Report:</b>	<b>Farm Bill Survey Report</b>
<b>Project Document Date:</b>	June 20, 2018
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Quarterly Report	<input type="checkbox"/>
Semi-Annual Accomplishment Report	<input type="checkbox"/>
Annual Accomplishment Report	<input checked="" type="checkbox"/>

- A. Write a brief narrative of work accomplished. Compare actual accomplishments to objectives established as indicated in the work plan. If reporting on a combined surveys work plan, report accomplishments by survey. When the output can be quantified, a computation of cost per unit is required when useful.**

**Objectives Summary** - The primary objective of the Asian gypsy moth (AGM) survey is to protect Washington State's natural and agricultural resources. The survey is integral to the success of WSDA's efforts to keep gypsy moth from finding a permanent home in Washington State. Early detection is critical in preventing establishment through the timely implementation of an eradication program. When these populations are identified at an early stage, the task of eradication is less costly and greatly increases the chances for a successful eradication.

The AGM Delimiting trapping survey is being conducted as a post treatment response to the AGM detections in 2015 and subsequent eradication treatments in the spring of 2016. The AGM captures were found in Kent (2), Gig Harbor (1), Tacoma (4), Nisqually/Lacey (2), and Vancouver (1). Following recommendations from the Technical Working Group, WSDA will conduct three years of delimitation trapping following Btk treatments that took place in April and May 2016; this is the second year of the survey.

**Accomplishment Summary** – A total of 11,126 traps were deployed in the delimiting grids. The AGM delimiting traps captured 4 moths at 3 sites (Kent, Tacoma, and Lacey); DNA genotyping confirmed all 4 moths were of the North American variety of EGM.

**Funding Summary** - All gypsy moth survey activities in Washington State (EGM Detection, EGM Delimiting, AGM Detection, AGM Delimiting, and Asian Defoliators) are combined in order to efficiently use all available resources. Funding and trap numbers for all surveys statewide have been combined to calculate an accurate cost per unit.

<b>AGM Delimiting Funding Amount, 2017</b>	<b>Total Number of Traps for AGM Delimiting Survey, 2017</b>	<b>Approximate Cost Per Unit for AGM Delimiting Survey, 2017</b>
Proposed = \$309,000	Proposed = 11,000	Proposed= \$28.09/trap

<b>Total Gypsy Moth Funding Amount, 2017</b>	<b>Total Number of Traps for all Gypsy Moth Surveys, 2017</b>	<b>Approximate Cost Per Unit, 2017</b>
\$796,079	30,758	\$25.88/trap

#### **1. Survey methodology (trapping protocol):**

A total of 11,126 green delta traps baited with gypsy moth string lure were deployed in 2017 for the AGM delimiting survey. Trap installation began on June 6 and was completed by July 25. Traps were deployed at a density of 36 traps per square mile centered on the catch site for the first three-mile radius (core zone) and 25 trap per square mile for an additional three-mile radius (extended zone).

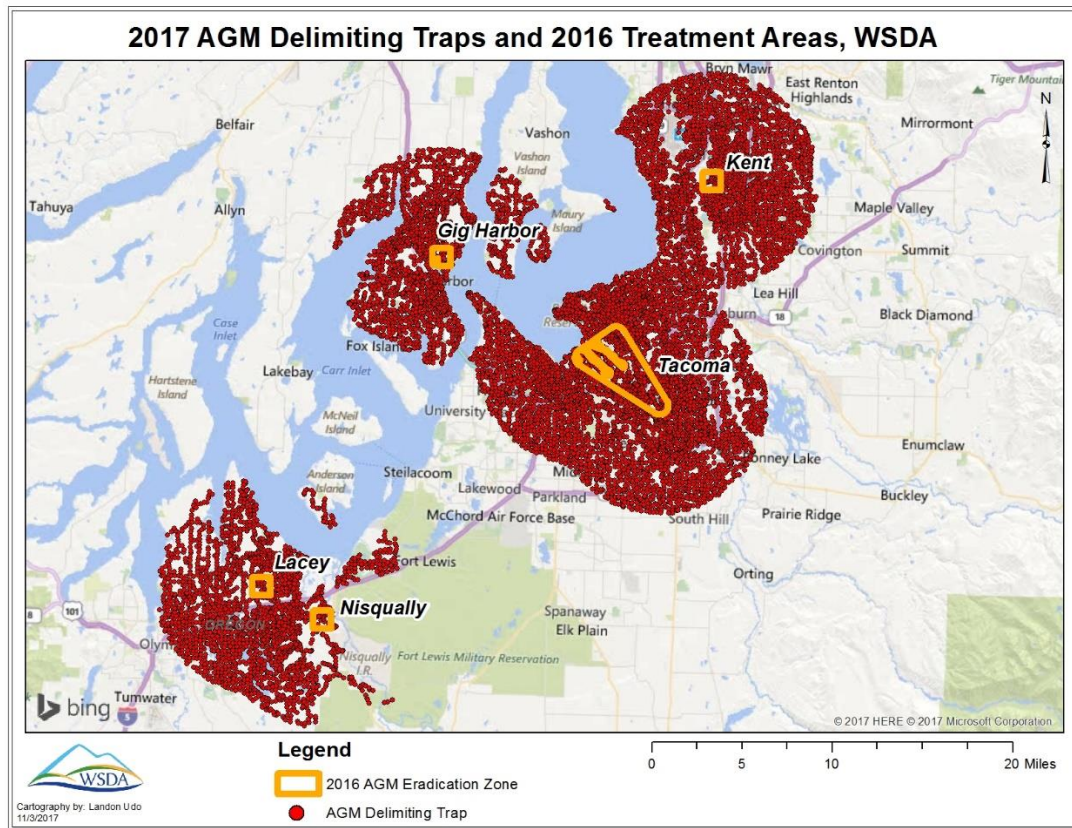


Figure 1. DELIMITATION TRAP PLACEMENT FOR ASIAN GYPSY MOTH– Gig Harbor, Nisqually, Lacey, Tacoma, and Kent grids

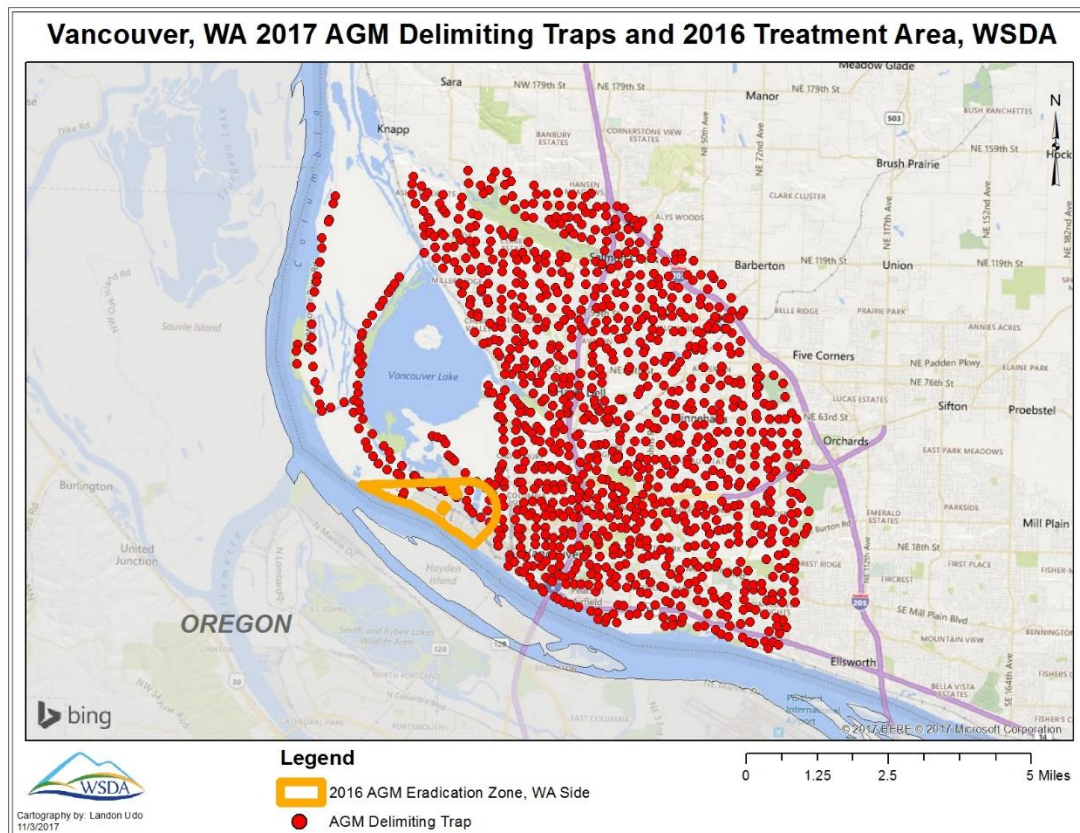


Figure 2. DELIMITATION TRAP PLACEMENT FOR ASIAN GYPSY MOTH– Vancouver, Clark County grid

	<b>Common Name</b>	<b>Scientific Name</b>
<b>Pest:</b>	Asian gypsy moth	<i>Lymantria dispar asiatica</i>

	<b>Proposed</b>	<b>Actual</b>
<b>Sites (Locations):</b>	Gig Harbor (Pierce and Kitsap County), Nisqually (Pierce and Thurston County), Tacoma (Pierce County), Kent (King County), Vancouver (Clark County)	Gig Harbor (Pierce and Kitsap County), Nisqually (Pierce and Thurston County), Tacoma (Pierce County), Kent (King County), Vancouver (Clark County)
<b>Traps:</b>	11,000	11,126

<b>Number of Counties:</b>	5
<b>Counties:</b>	Clark, King, Kitsap, Pierce, Thurston

## 2. Survey dates:

	<b>Proposed</b>	<b>Actual</b>
<b>Survey Dates:</b>	June 6 – September 29	June 6 – September 29
<b>Trap Install:</b>	June 6 – July 10	June 6 – July 25
<b>Trap Inspection:</b>	July 10 – August 31	July 6 – August 31*
<b>Trap Removal:</b>	September 1 – September 28	August 31 – September 28

Each delimiting trap was checked for the presence or lack of presence of gypsy moth on an 8-10 day rotation during the trap inspection period.

Trap removal began on September 5 and was completed on September 28 with trapper check out.

## 3. Benefits and results of survey:

Four gypsy moths were captured in the AGM delimiting traps in 2017; all were confirmed to be the North American variety of EGM. No AGM were found in 2017.

	<b>Positive</b>	<b>Negative</b>	<b>Total Number</b>
<b>Total Traps</b>	<b>4 (confirmed EGM)</b>	<b>11,122</b>	<b>11,126</b>
Clark County	0	1,122	1,122
King County	2	3,457	3,459
Kitsap County	0	198	198
Pierce County	1	4,495	4,496
Thurston County	1	1,850	1,851

### 2017 WSDAGYPSY MOTH CAPTURES IN AGM DELIMITING TRAPS

<b>County</b>	<b>Trap ID</b>	<b>Detection Date</b>	<b>Total Moths</b>	<b>Moth Species</b>
Thurston	1650798	7/24/2017	1	<i>Lymantria dispar dispar</i>
King	1648822	8/2/2017	1	<i>Lymantria dispar dispar</i>
King	1648664	8/7/2017	1	<i>Lymantria dispar dispar</i>
Pierce	1594211	8/10/2017	1	<i>Lymantria dispar dispar</i>

**4. Database submissions:**

Asian gypsy moth delimiting data was entered in NAPIS on January 3, 2018. All negative records were entered at the subspecies level – *Lymantria dispar asiatica*. The four traps positive for European gypsy moth were entered at the subspecies level - *Lymantria dispar dispar*.

**B. If appropriate, explain why objectives were not met.\***

All objectives of the survey were met by the end of the award, March 31, 2018.

**C. Where appropriate, explain any cost overruns or unobligated funds in excess of \$1,000. \***

The financial plan was created using the fringe benefit calculations from the previous year. An unanticipated decrease in the cost of fringe benefits and the change in benefit eligibility for the Agricultural Adie classification resulted in \$7,121.50 in unobligated funds.

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*\*indicates information is required per 7 CFR 3016.40 and 7 CFR 3019.51*