

Gypsy Moth Detection and Eradication Programs in Oregon - 2010

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Oregon Department of Agriculture (ODA) routinely conducts extensive survey programs for gypsy moth (GM, *Lymantria dispar*) and its Asian strain (Asian gypsy moth, AGM). Both moths can be detected with the same trap and lure.

ODA placed 12,559 GM and AGM traps throughout Oregon in 2010. Only one GM was caught in a nun moth trap in Beaverton, Washington County at a new site. Delimitation trapping will be conducted in 2011 around all 2009 and 2010 positive sites. No moths were found at four sites where single or double GMs were caught in 2008, including SW of Eugene (Lane County), NE and NW Portland (Multnomah and Washington counties). These sites are now declared free of GM. No moths were found at five sites where single or double GMs were caught in 2009. These include Aurora and Clackamas (Clackamas County) where single moth was detected at three sites each, and Portland (Multnomah County) where two moths were trapped in one site and a single moth was trapped in another. One more year of negative delimitation trapping is required before these sites are declared free of GM.

Three aerial treatments of *Bacillus thuringiensis* var. *kurstaki* (Btk) were applied by helicopter in spring 2009 to 626 acres in Eugene, Lane County, to eradicate a GM infestation. Delimitation trapping at this site in 2009 and 2010 did not detect any moths. The GM infestation in Eugene is now declared eradicated after two years of negative trapping.

AGM populations in Asia and the Russian Far East continue to pose a threat to the US and Oregon. International trade and commerce activities increase the likelihood of new introductions.

Oregon's AGM trapping program was expanded to include major cities, highways, and railroads receiving or transporting cargo and containers originating from Asia. We also incorporated the USDA APHIS AGM risk model into our trapping grid allocation. We placed 6,980 AGM traps in 2010. Major ports and waterways at risk from ships carrying AGM egg masses were also

trapped including about 90 miles of the Columbia River (from Astoria to Portland) and the port of Coos Bay (Coos County). Nine traps per square mile were placed for three miles inland from waterway margins, followed by four traps/mi² for another two miles inland. The port of Coos Bay was trapped at four traps/mi².

We do not anticipate a GM or AGM eradication spray program for 2011 because we did not detect any breeding population of GM or AGM this year. This year's catch of single GM is the lowest number of GM or AGM we have ever caught in the history of Oregon's GM/AGM program since 1979.

2010 Gypsy Moth Detection Summary				
County	City or Area	Previous Detection History	No. GMs 2010	2010 Trap Density
2008 detection sites				
Lane	Near Eugene, SW	2 moths in 2008 0 moth in 2009	0	16-25/mi ²
Multnomah	Portland, NE	1 moth in 2008 0 moth in 2009	0	16-25/mi ²
	Portland, NW	1 moth in 2008 0 moth in 2009	0	16-25/mi ²
Washington	Portland, NW	1 moth in 2008 0 moth in 2009	0	16-25/mi ²
2009 detection sites				
Clackamas	Aurora, Glass Rd	1 moth in 2009	0	25-49/mi ²
	Aurora, Rhoten Rd	1 moth in 2009	0	25-49/mi ²
	Clackamas, 84 th Ave	1 moth in 2009	0	25-49/mi ²
Multnomah	N Portland, Jantzen Beach	2 moths in 2009	0	25-49/mi ²
	NE Portland, Cameron Blvd	1 moth in 2009	0	25-49/mi ²
2010 Detection site				
Washington	Beaverton, Ivy Glenn St		1	2/mi ²
2009 eradication site				
Lane	Eugene, 3 applications of Btk by air to 626 acres	2 moths in 2007 7 moths in 2008 0 moth in 2009	0	16-25/mi ²
Total			1	