

Update: 2015-2016 Asian gypsy moth eradication project

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**Oregon Department
of Forestry**

*Promoting and Practicing
Sustainable Forestry*

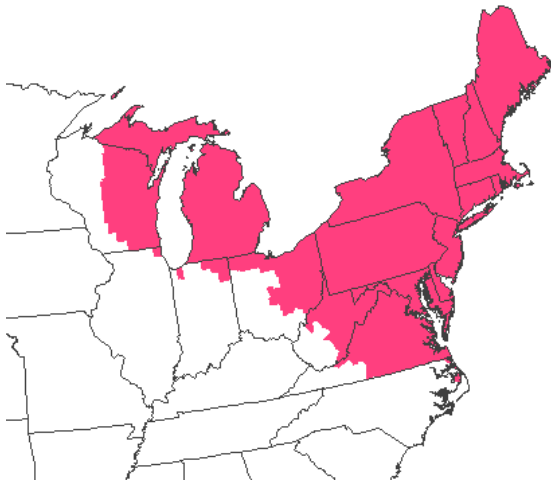
Gypsy moth (*Lymantria dispar*)



Gypsy moth (*Lymantria dispar*)

European GM

- In eastern U.S. since 1869
- 20 states, 4 provinces
- 80+ million acres defoliated
- >\$260M suppression costs



Asian GM

- Not established in U.S.
- In Oregon traps 1991, 2000, 2006 and 2015
- **Females can fly**
- International cargo, vessels



Great tools for early detection

- Trapping in OR since 1979



2015 Gypsy Moth – Southern OR



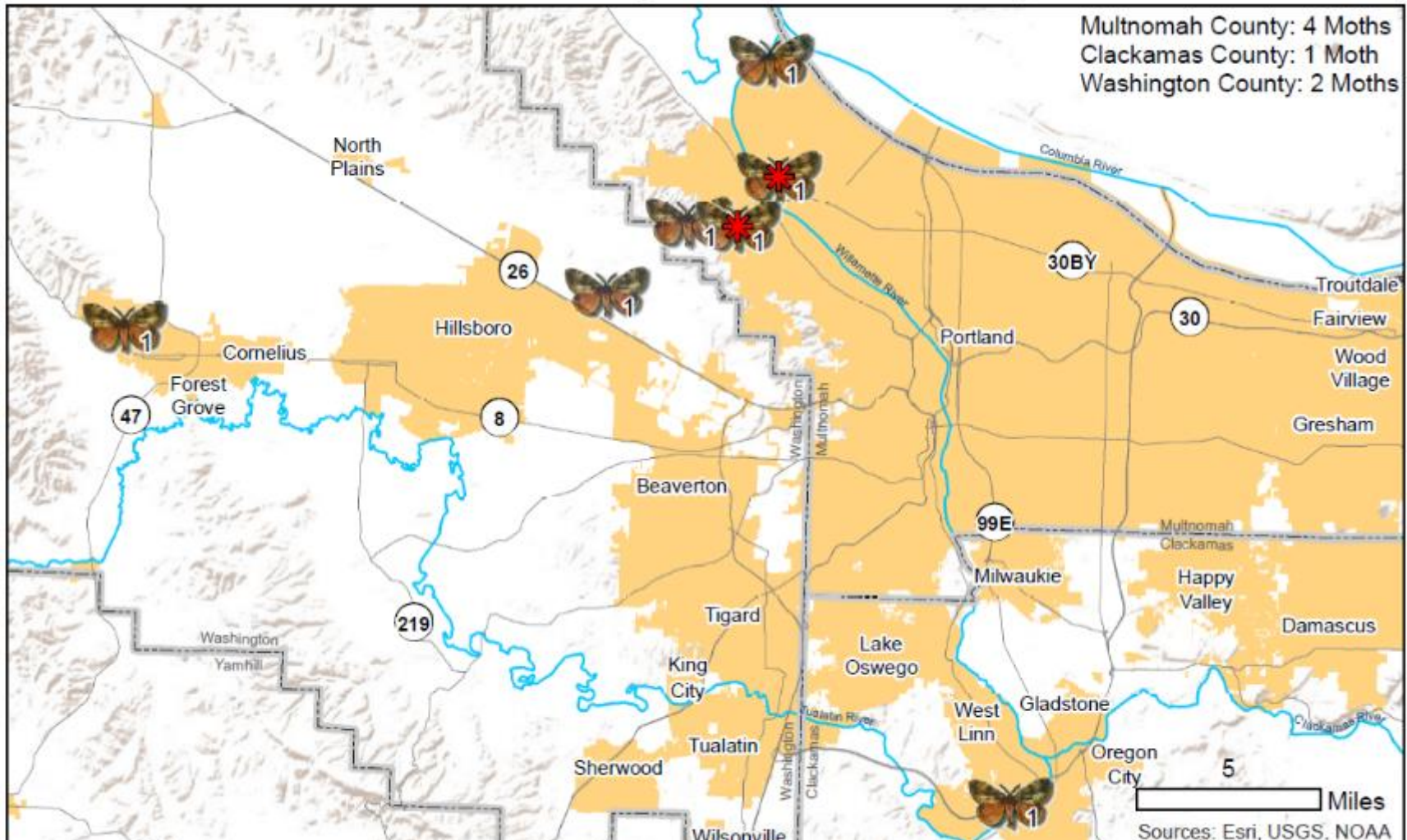
Positive Gypsy Moth Trap



Confirmed Asian Gypsy Moth



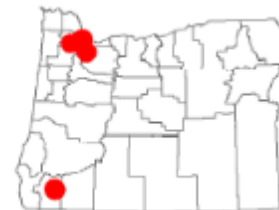
2015 Gypsy Moth – Northern OR



Positive Gypsy Moth Trap



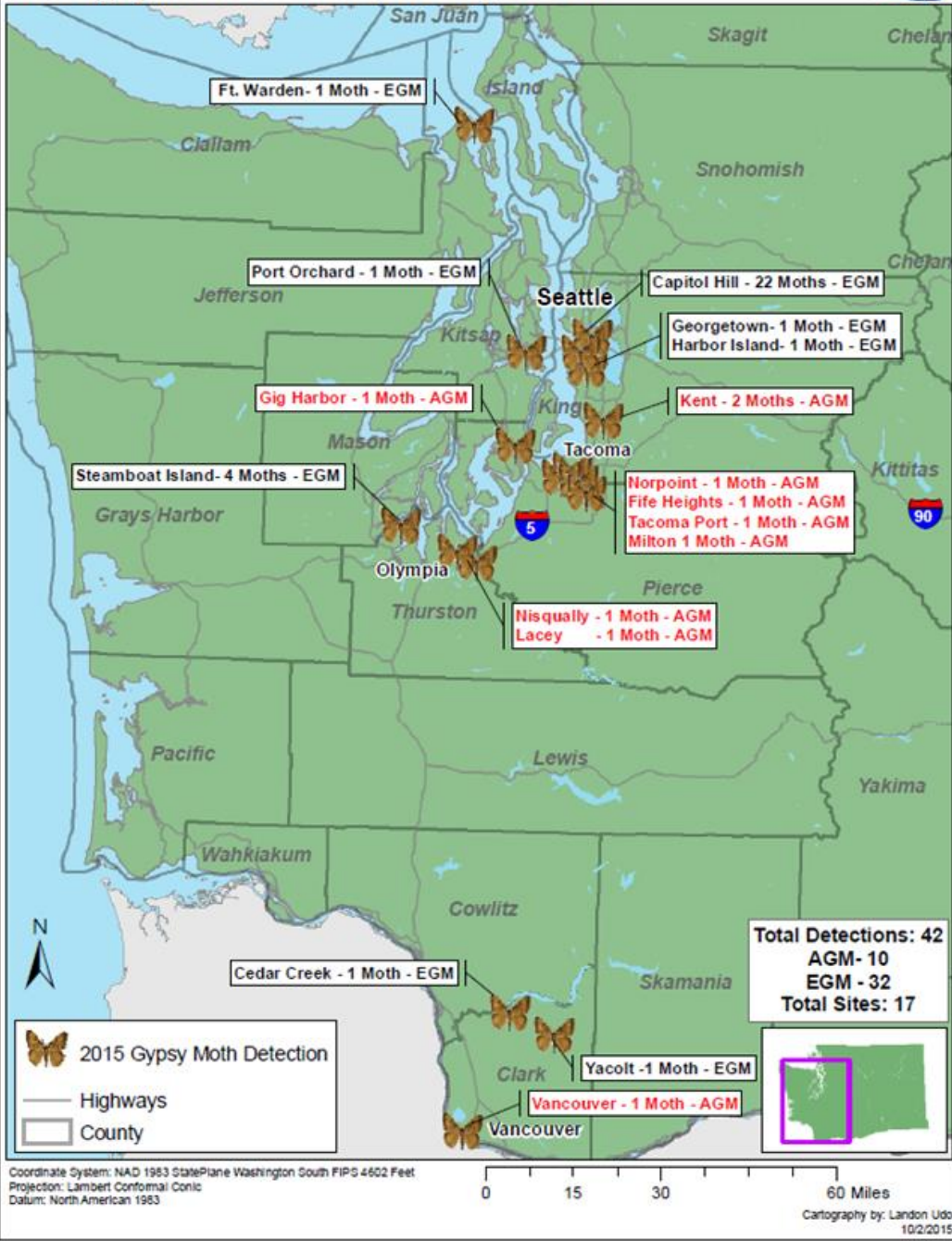
Confirmed Asian Gypsy Moth



GypsyMothStatusMap.mxd
KAS 8-27-15
Oregon Lambert Projection NAD 83
Data Source: Esri, Oregon Department of Agriculture, ODOT, NOAA, USGS

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

2015 Gypsy Moth Detections, Washington State



2015 Gypsy moth Washington

Summary of OR and WA:

Oregon:

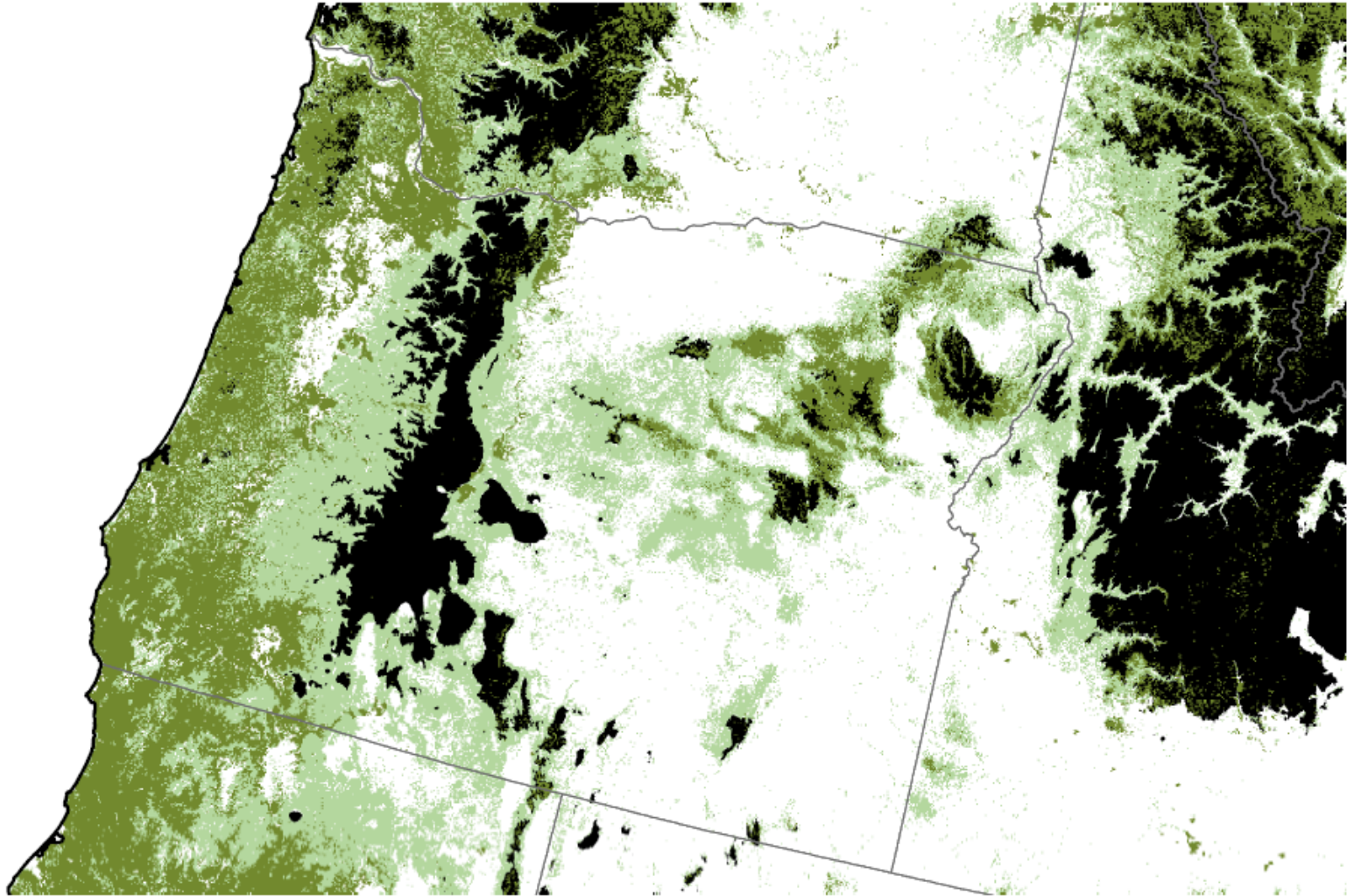
EGM	12
AGM	2

Washington:

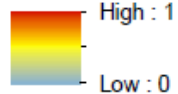
EGM	32
AGM	10

Total moths: 56

European Gypsy Moth *Lymantria dispar dispar* Establishment Map for Oregon



Detection Likelihood



Climate Suitability Mask

Unsuitable

Preferred Host



NLCD Tree Cover



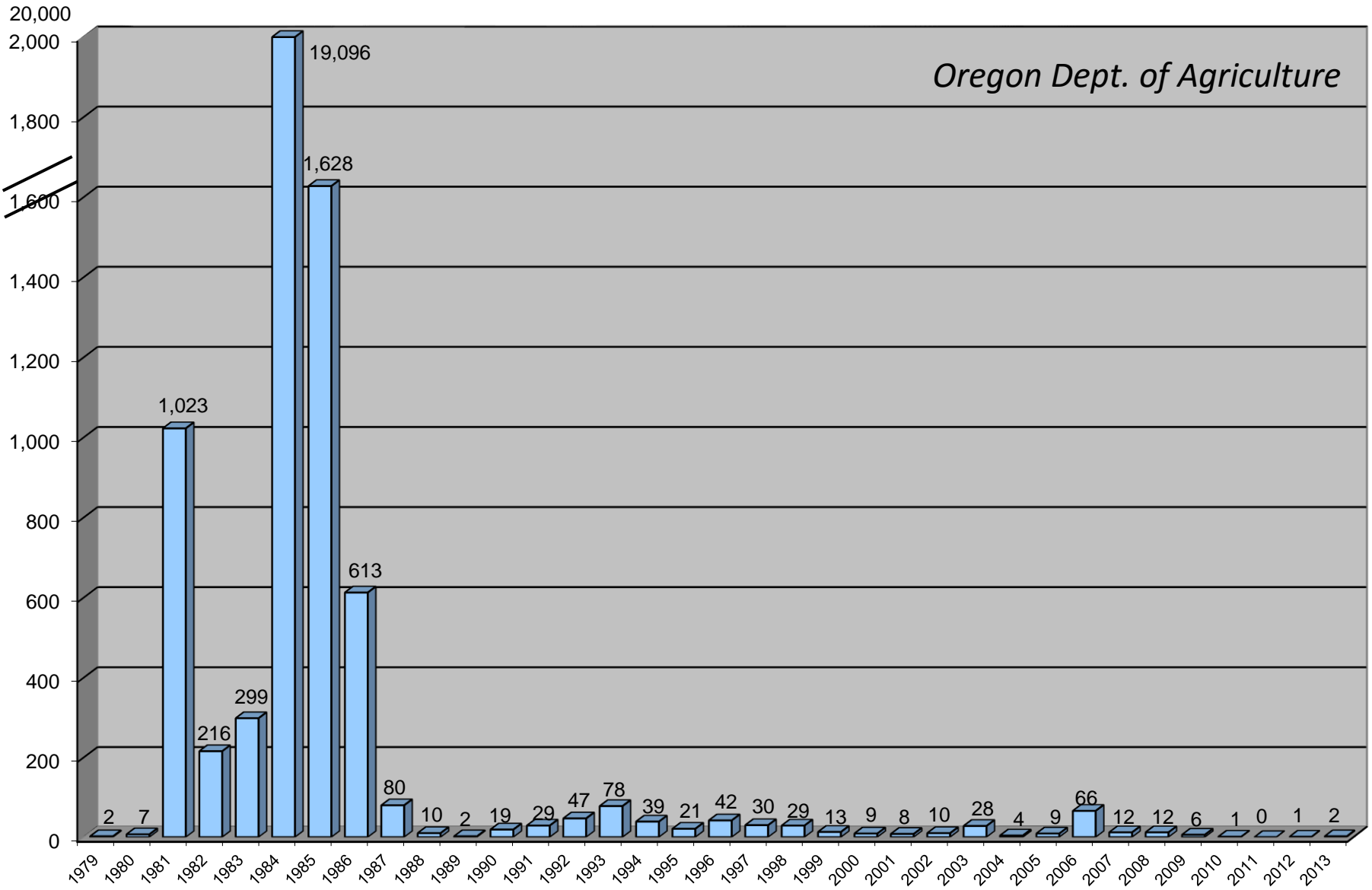
Oregon Potential Economic Costs

- Costs of quarantines to nursery (\$803 million; 85% exported) and Christmas tree industries (\$100 million; 90% exported)
- Forestry production (hardwoods and fir)
- Increased pesticide use by private landowners (urban, nurseries, and private forests)



5502834

Annual Gypsy Moth Trap Catches in Oregon



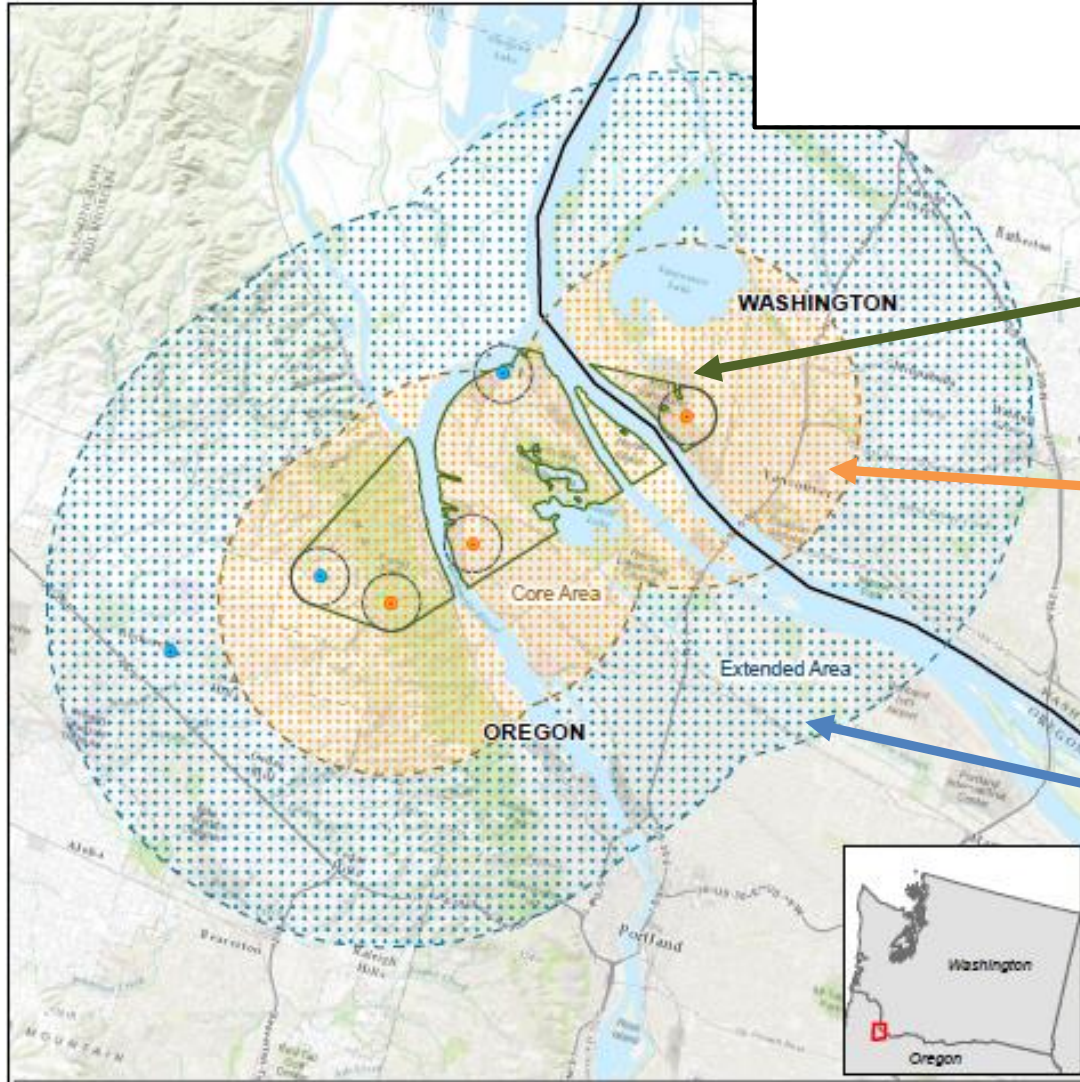
Gypsy moth in Oregon – Historical Context

- 1979: GM trapping begins in Oregon
- **1984: 19,000 moths trapped– 1,200 mi²; Lane Co.**
- 1985: 225,000 acres treated; 400 moths trapped
- 1986: 186,000 acres treated; 41 moths trapped
- 1987: 0 acres treated; 15 moths trapped
- 1988: 1 moth trapped
- 1989: 0 moths trapped

“If steps are not taken now to eradicate the gypsy moth in Oregon, it is very probably that the insect will become widespread and attempts to control it will take the form of suppressing populations, not eliminating them.”

REPORT OF THE TECHNICAL WORKING GROUP
FOR THE
RESPONSE TO ASIAN GYPSY MOTH CAPTURES
WASHINGTON-OREGON 2015

OCTOBER 30, 2015



9,400 acres in
spray area

33,400 acre *core*
area, 2500 traps

73,000 acre
extended area
2850 traps

Response Plan



Oct – Nov	Nov – Feb	Feb – Mar	Mar – May
Stakeholders	Analysis	RFP	Spray Notices
Authorities	NEPA	Finalize Draft EA	Safety Plan
Communication	NPDES	/ BA	Heliport
Declaration	Public Meetings	ICS Planning	Pre-Work
	Notification	Phenology	Calibration
	Approval(s)	Credentialing	Application
Notification	Planning	Logistics	Implementation
	Prioritization	Resource	
		Management	

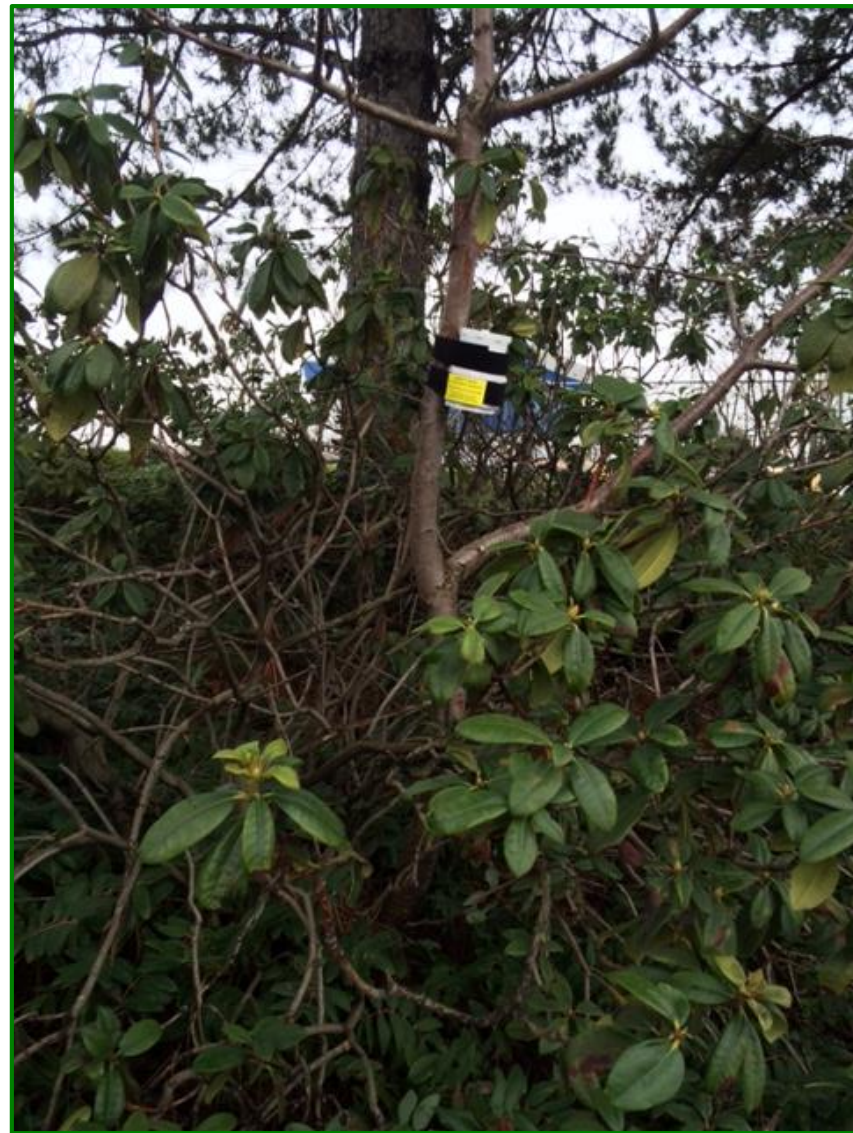
Oregon Forest Pest Detectors

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Asian Gypsy Moth

Background





Sentinel egg masses placed in the field January 14, 2016
2 at Terminal 6, 1 at Terminal 4

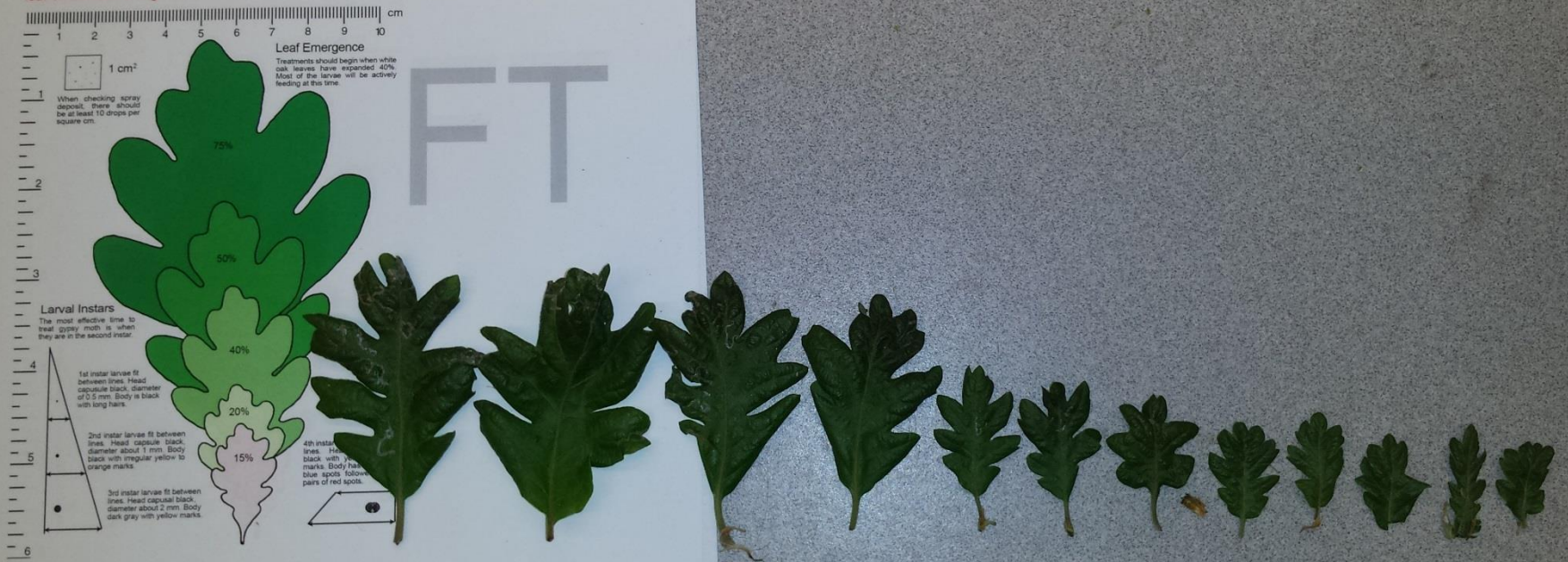
Appendix B. Pre-Spray Activities

Field monitoring of foliage expansion will be used to further determine the appropriate time to spray and to modify spray block boundaries when necessary (useful in areas with elevation change).

Insect and Foliage Development Monitoring

For multiple application eradication projects, where life stages are likely to be few or difficult to find, application should begin when sufficient host foliage has expanded for the insecticide to be deposited on. Oak leaves should be 25 to 35 percent expanded.

The graphic below will help field crews communicate field observations better. They can lay the leaf on the card and give a reliable estimate.



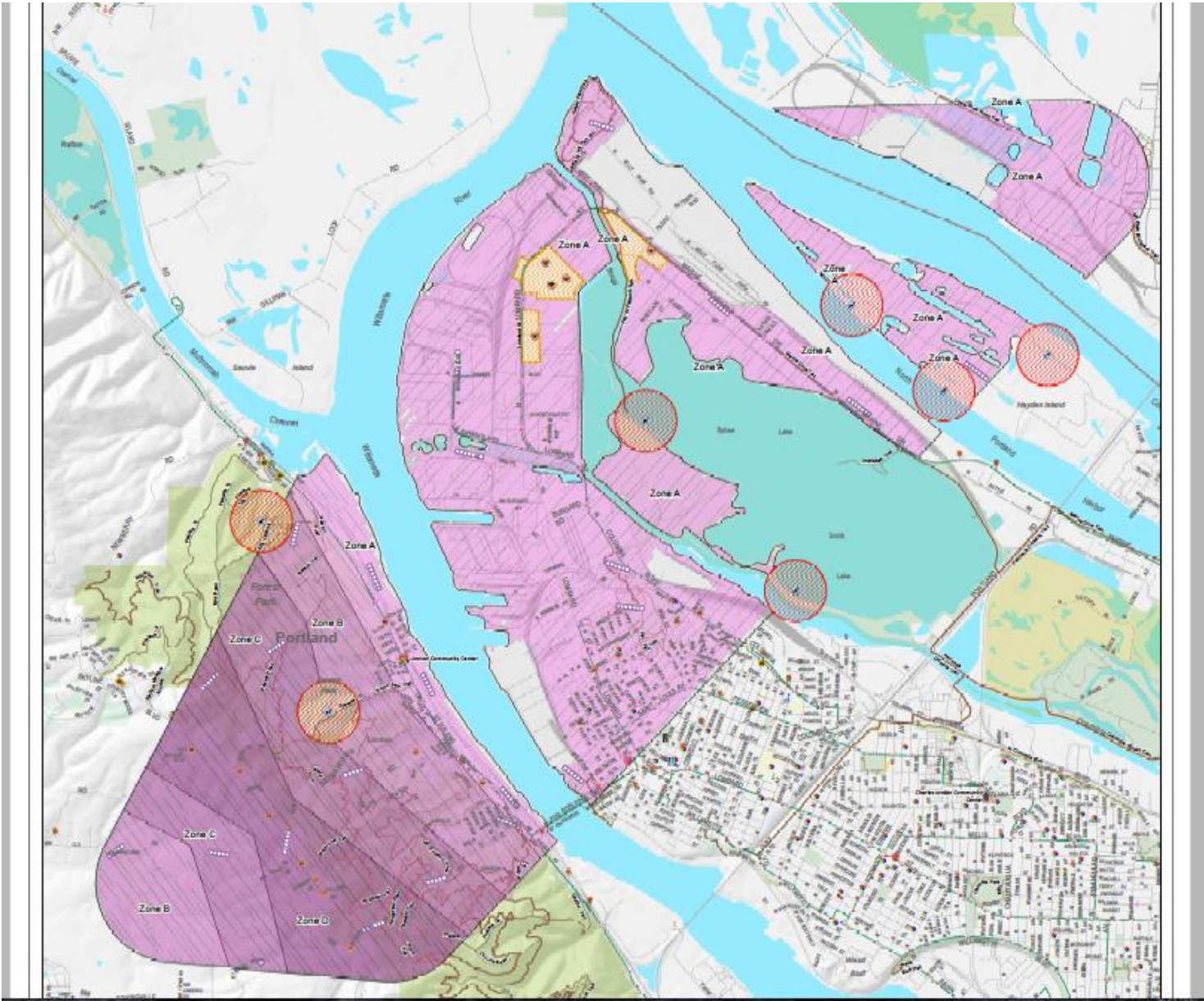








Asian Gypsy Moth Eradication



FORAY SPRAY CARD

1CM²
GRID



BEST FOR FORAY

TOO LARGE

DROPLET
STAIN
SIZES:



125 μ



250 μ



500 μ



750 μ



1000 μ

ASSUMPTION — UNDILUTED FORAY, SPREAD FACTOR = 1.5

CARD NO. _____

*"Whatever it takes"
to protect Oregon's
forests.*



STEWARDSHIP IN FORESTRY

OREGON DEPARTMENT
OF FORESTRY



Summary

- Multi-agency ICS to eradicate a forest/ag pest
- Treatments complete; next stage: delimitation trapping
- By August, we will know if treatments are required in 2017
- Lessons learned in forest health emergency



Gypsy moth ID



ADULT



EGG



PUPA



LARVA
(Caterpillar)



Questions?



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