

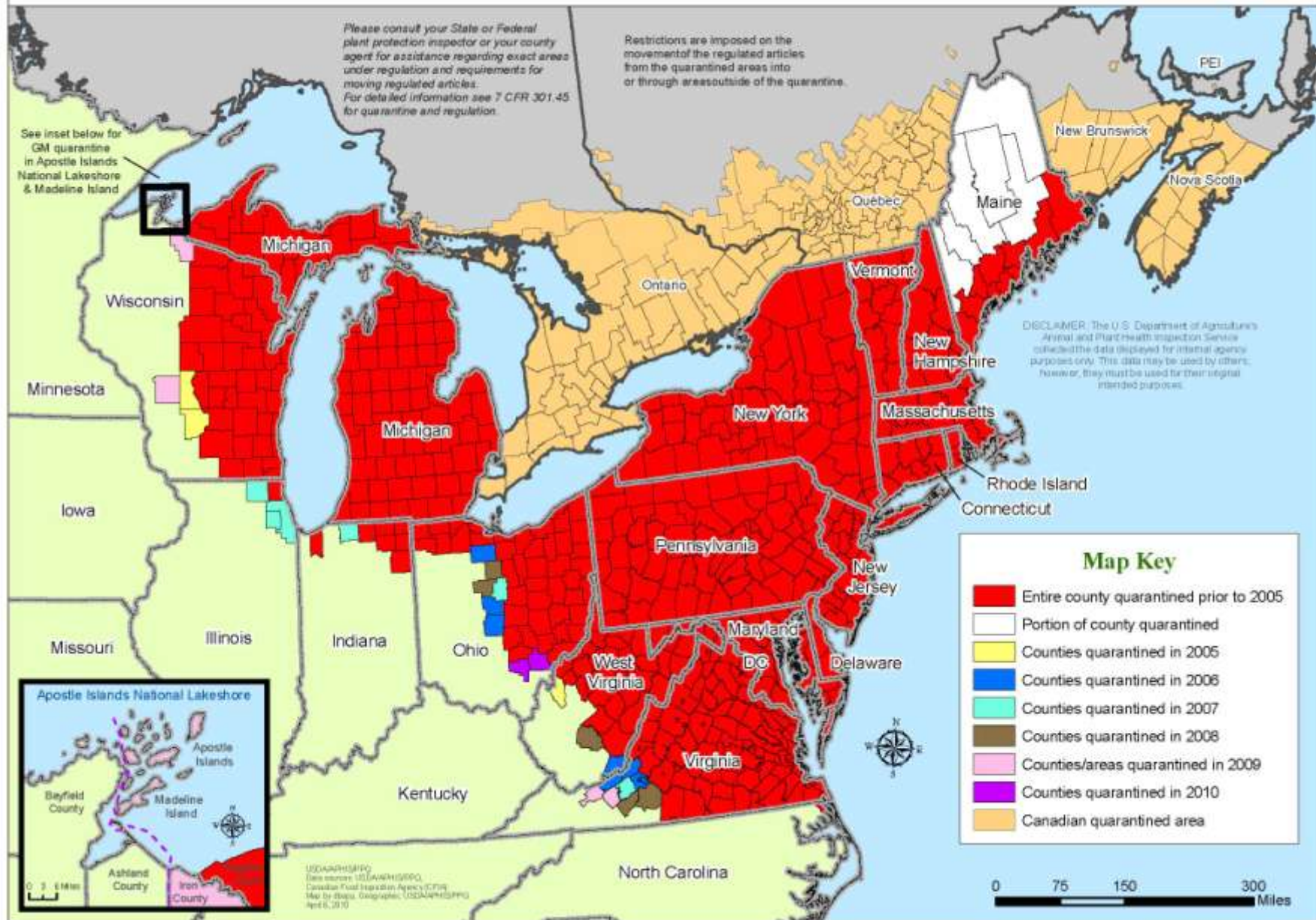
GYPHY MOTH (*LYMANTRIA DISPAR*) TRAPPING & TREATMENTS IN MINNESOTA – 2010 UPDATE

Natasha Northrop, MDA Plant Protection Division

Please consult your State or Federal plant protection inspector or your county agent for assistance regarding exact areas under regulation and requirements for moving regulated articles. For detailed information see 7 CFR 301.45 for quarantine and regulation.

Restrictions are imposed on the movement of the regulated articles from the quarantined areas into or through areas outside of the quarantine.

See inset below for GM quarantine in Apostle Islands National Lakeshore & Madeline Island



DISCLAIMER: The U.S. Department of Agriculture's Animal and Plant Health Inspection Service collected the data displayed for internal agency purposes only. This data may be used by others, however, they must be used for their original intended purposes.

Map Key

- Entire county quarantined prior to 2005
- Portion of county quarantined
- Counties quarantined in 2005
- Counties quarantined in 2006
- Counties quarantined in 2007
- Counties quarantined in 2008
- Counties/areas quarantined in 2009
- Counties quarantined in 2010
- Canadian quarantined area



USDA/APHIS/PPQ
Data sources: USDA/APHIS/PPQ
Canadian Plant Protection Agency (CPA)
Map by: USDA, Geographic Information Systems
April 6, 2010

PROGRAM AREAS

- SURVEY

- TREATMENT

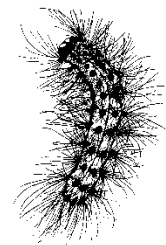
- REGULATORY





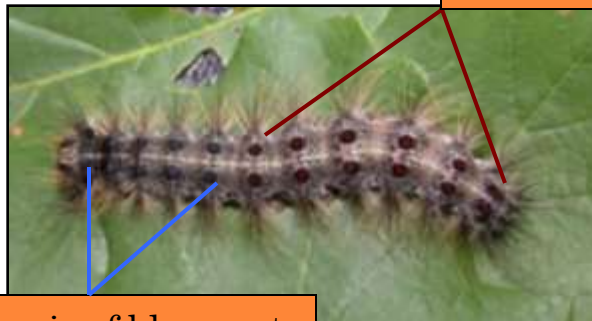
European Gypsy Moth Life Cycle

(univoltine)



Larva
(5-6 Instars)

6 pair of red spots



5 pair of blue spots

Pupa



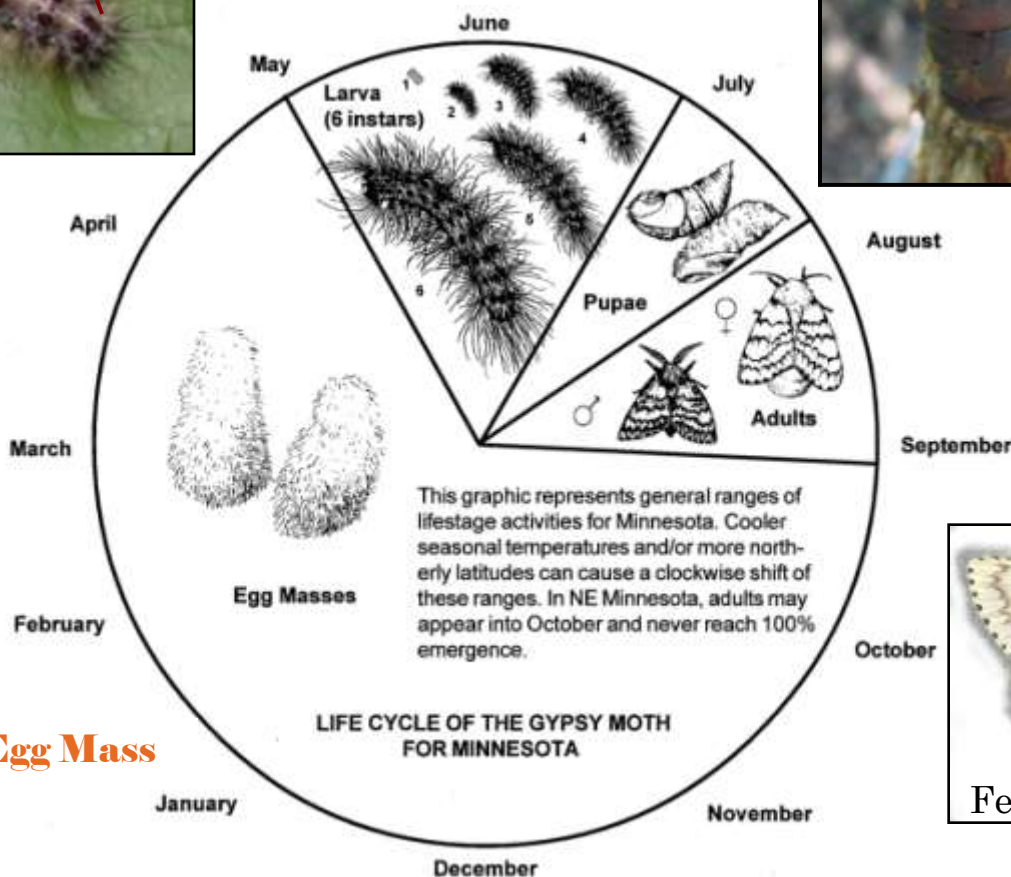
Adult



Male



Female



Egg Mass



MINNESOTA'S COOPERATIVE GYPSY MOTH PROGRAM

○ *State Partners*

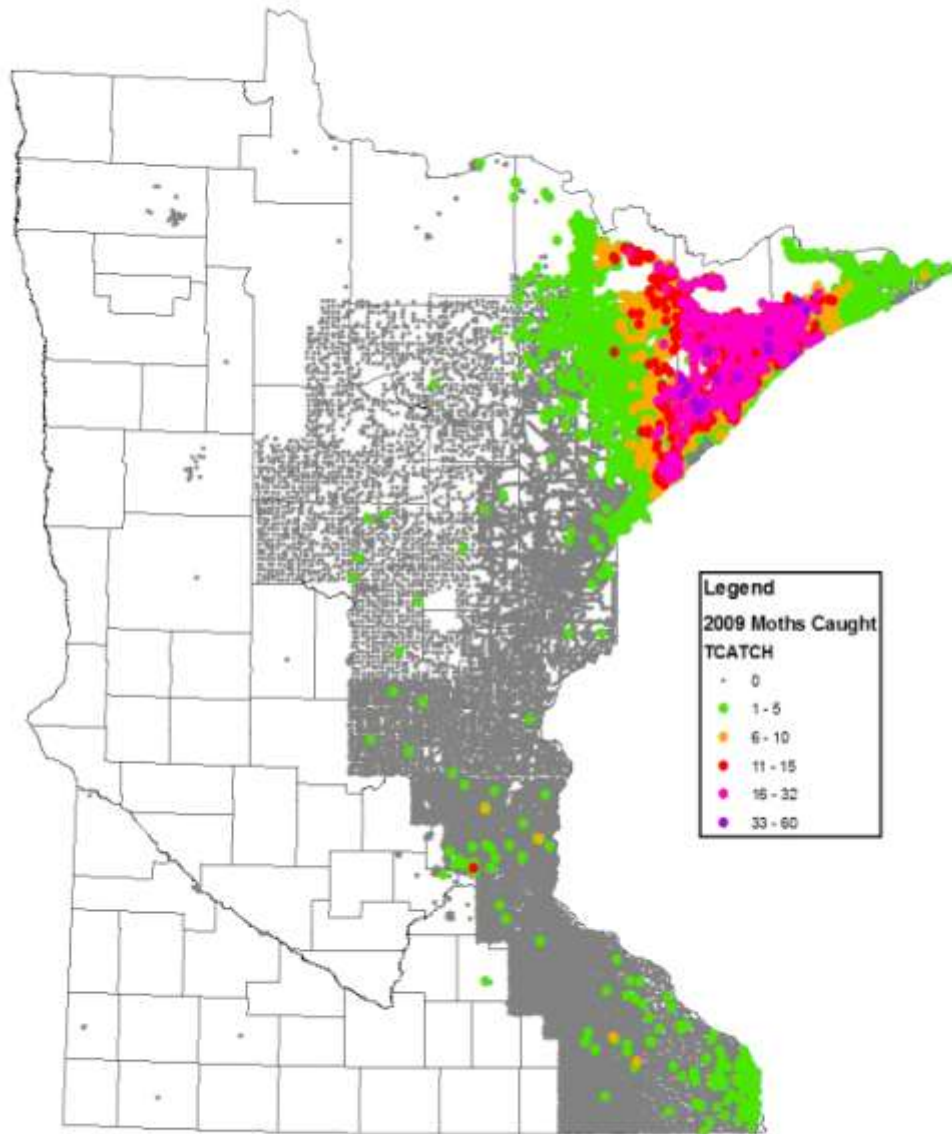
- MN Department of Agriculture
- MN Department of Natural Resources
 - University of Minnesota

○ *Federal Partners*

- USDA APHIS Plant Protection & Quarantine
 - USDA Forest Service
- Gypsy Moth Slow the Spread Foundation



2009 Gypsy Moth Survey



2009 Gypsy Moth Survey

- 27,870 moths
- 23,639 traps



2010 MINNESOTA TREATMENTS

Treatments Block Type

- Btk Block
- Mating Disruption
- State Park
- National Forest

Map Labels:

- Ninemile Lake** 1285 acres
- Finland** 540 acres
- Legler Lake** 46,852 acres
- Knife River** 51,842 acres
- Clover Valley** 351 acres

Geographic Labels:

- St. Louis County
- Lake County
- Cook County
- Grand Marais
- Two Harbors
- Duluth
- Arnold
- Hermantown
- French River
- Wild Rice
- Fish Lake Flowage
- Island Lake Reservoir
- Boulder
- Livingston
- Pequot
- King
- Whitewater Reservoir
- Whitewater
- Aurora
- Hoyt Lakes
- Sabin
- Greenwood
- Seven Belvoir
- Butterball
- Bassett
- Legler
- Split Rock Lighthouse
- Gooseberry Falls
- Beaver Bay
- Silver Bay
- Tettegouche
- George Crosby Manitou
- Cramer
- Finland
- Wilson
- Four Mile
- Temperance River

2 1 0 2 Miles

4/07/2010a

Block Type

☐ Mating Disruption

 National Forest

4/07/2010a

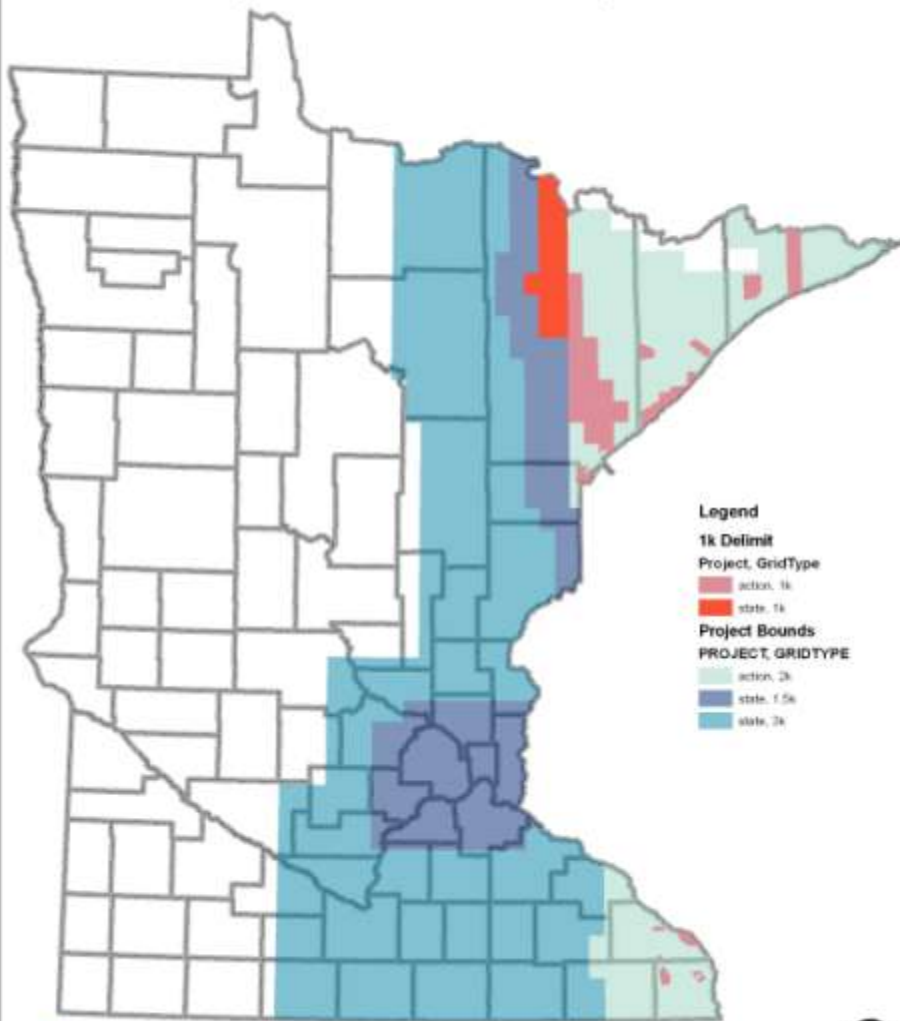
2010 STS TREATMENTS

100,870 ACRES

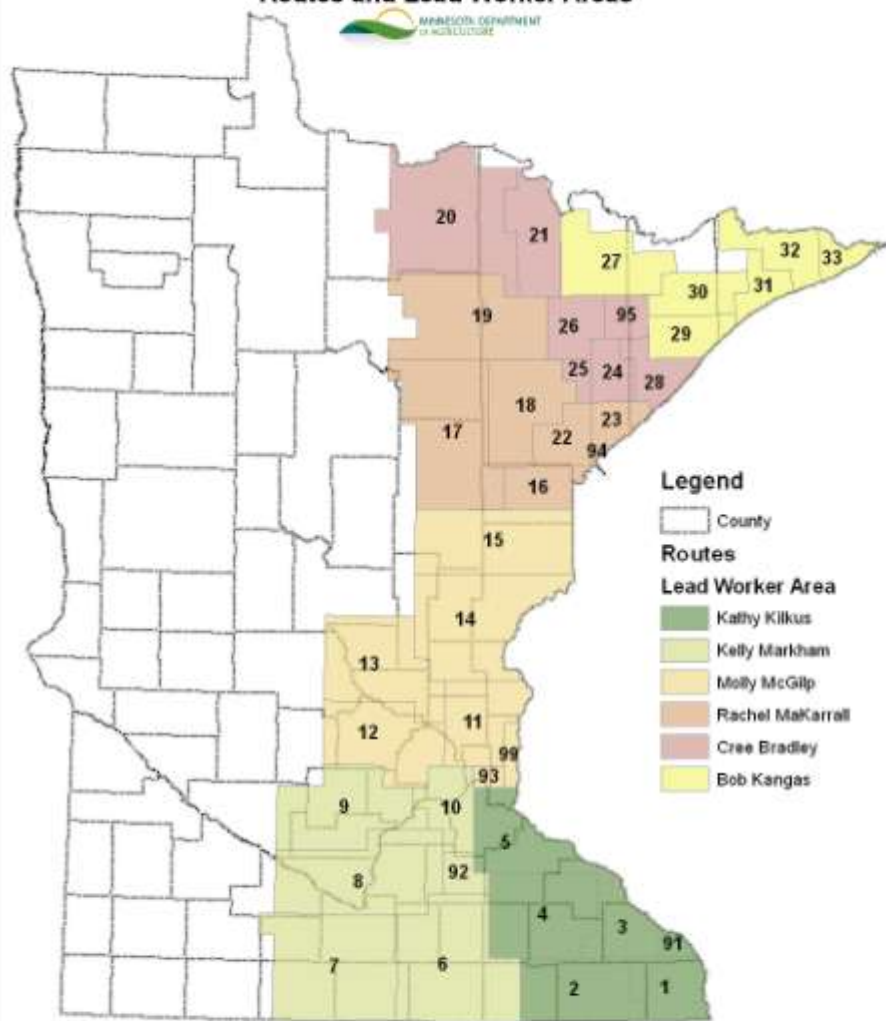
Company	Product	Acreage	Application Rate	Price / Acre
Airborne Custom Spraying Dean Solum Halstad, MN	Btk	2,176	24 CLU x 2	\$23.25
Al's Aerial Spraying Al Schiffer Ovid, MI	Flakes	98,694	6g	(\$TSF Contract)

2010 Proposed Gypsy Moth Survey Project Bounds and Density

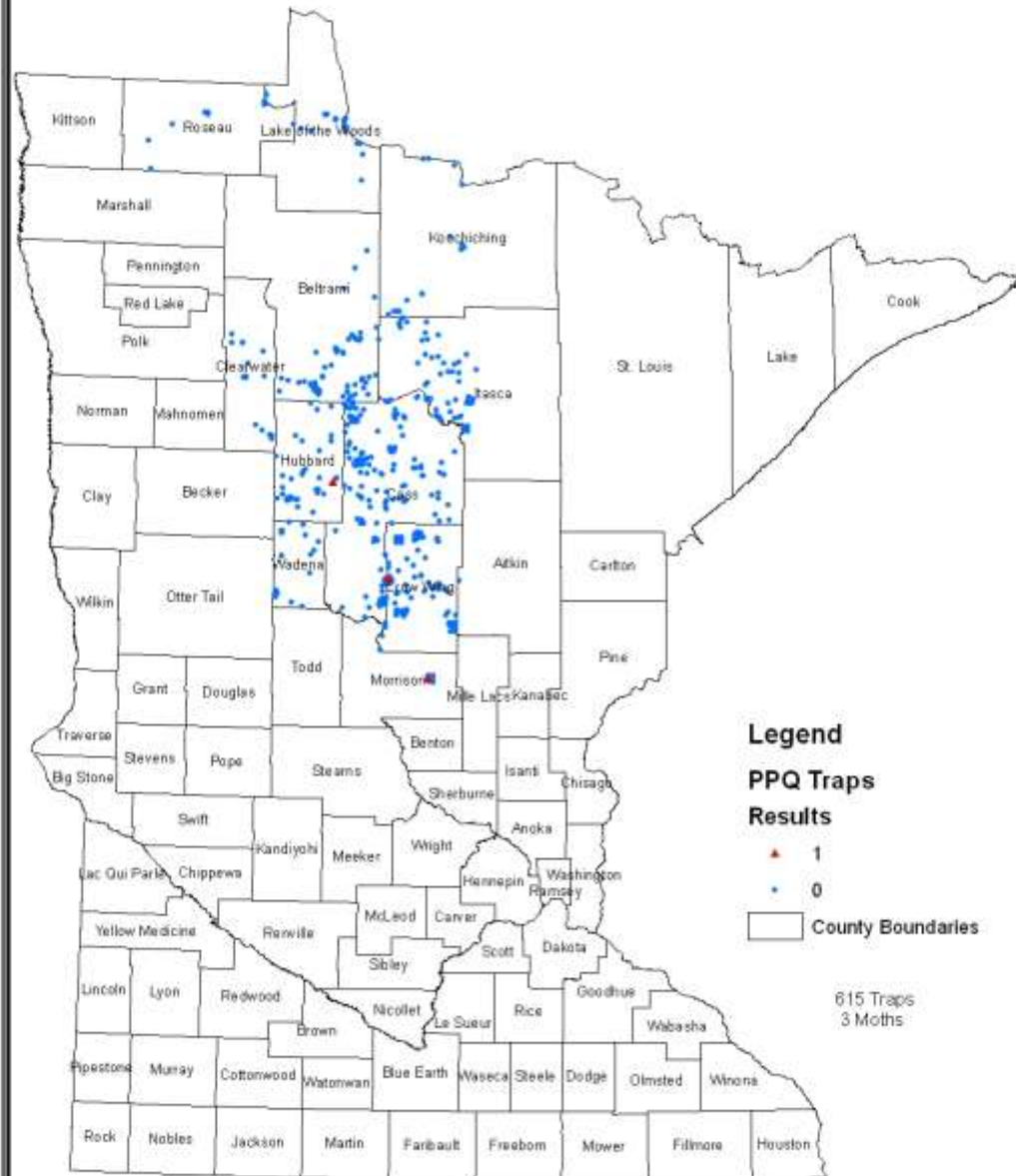
12/10/09



2010 Gypsy Moth Survey Routes and Lead Worker Areas



PPQ GM Trapping 2010

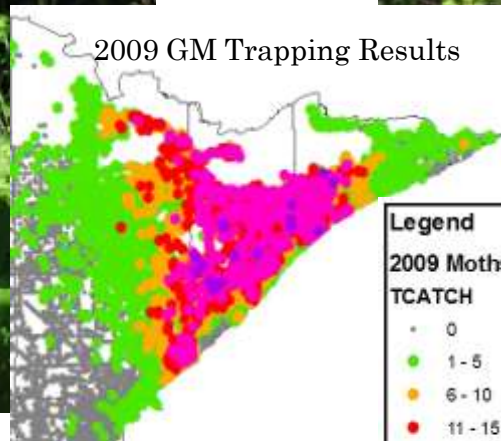


2010 TRAPPING / DETECTION SURVEY

- MDA Traps
 - 39 Field Staff
 - 19,171 traps
- 532 In Kind Services Traps
 - APHIS
 - 615 traps
 - County Ag Inspectors
 - 75 traps
 - Lake of the Woods Co.
 - Clearwater Co.
 - W. Koochiching Co.
 - Three Rivers Park District
 - 24 traps



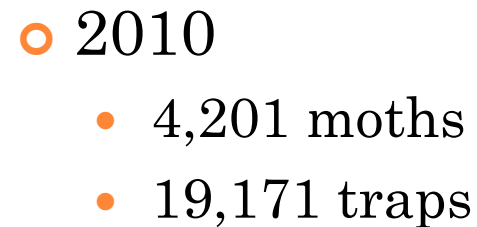
ARROWHEAD REGION OF NE MINNESOTA



Legend	
2009 Moths Caught	
TCATCH	
•	0
•	1 - 5
•	6 - 10
•	11 - 15
•	16 - 32
•	33 - 60

END-OF-SEASON CHECKOUTS

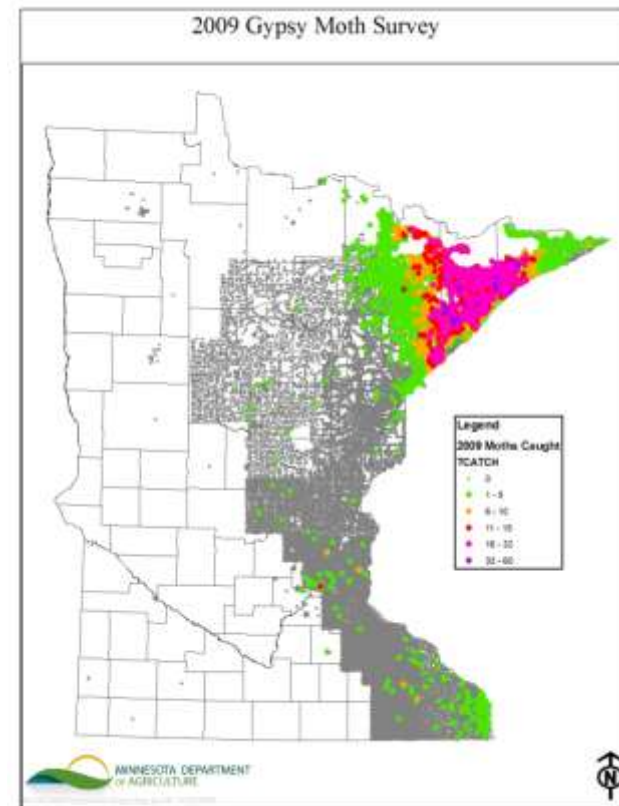
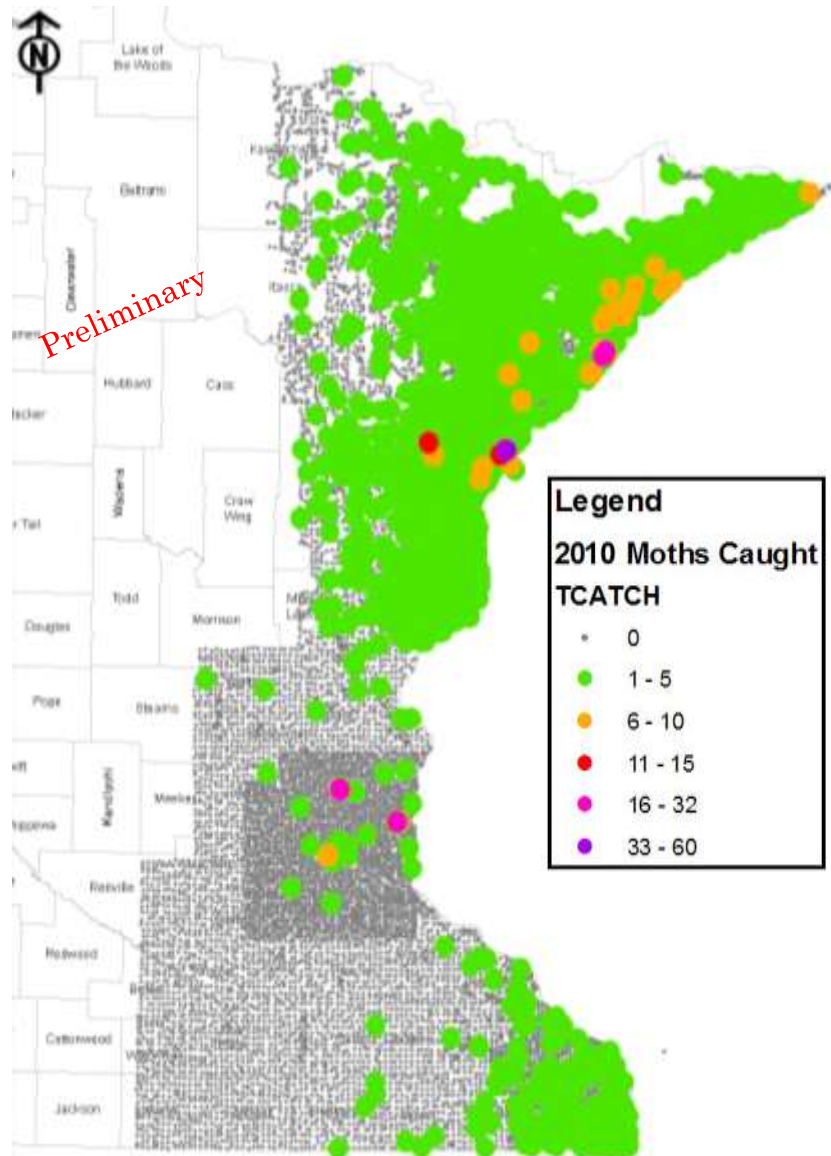


A photograph of a moth with brown and orange patterned wings, likely a species of Tortricidae. The moth is shown from a dorsal view, with its wings spread. The wings have a complex pattern of brown, orange, and white markings. The body is brown and fuzzy. The legs are visible at the base of the wings.

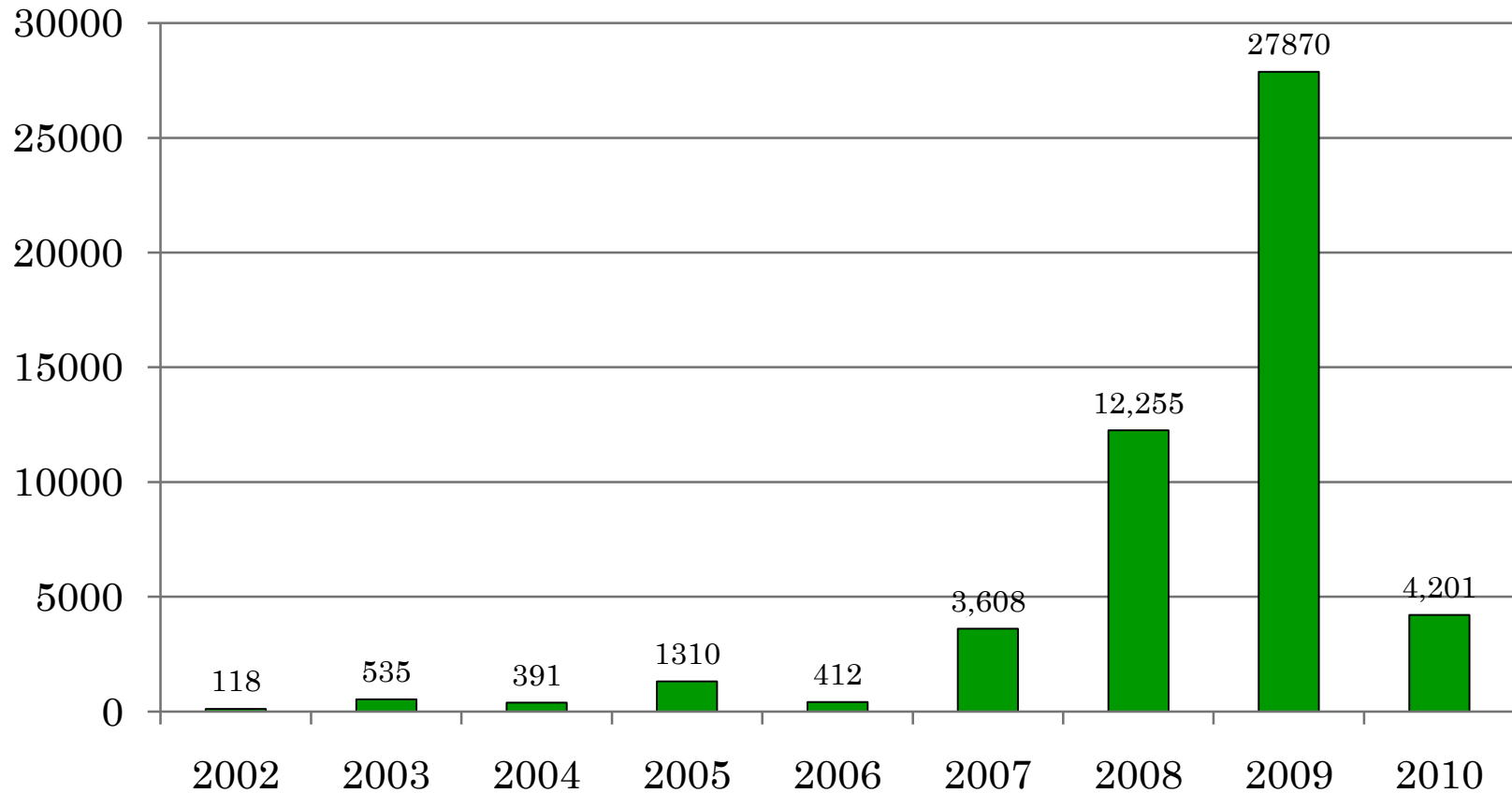
2010 TRAPPING SURVEY RESULTS



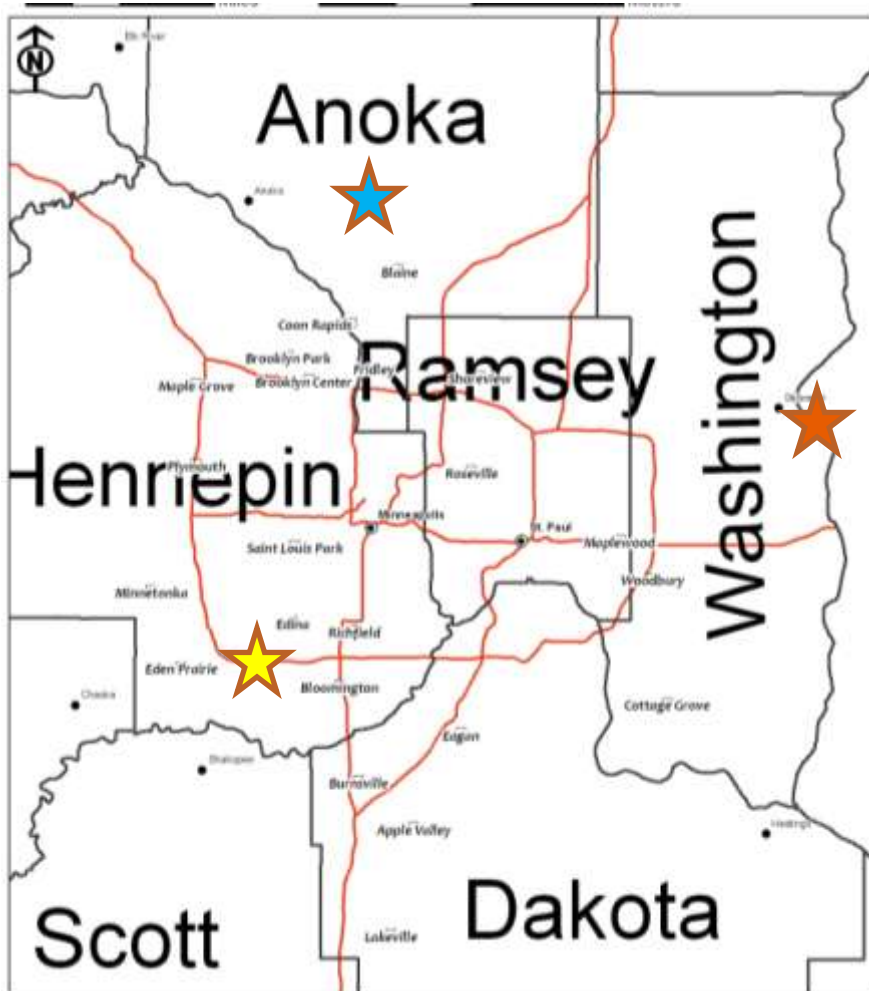
- 2010
 - 4,201 moths
 - 19,171 traps



Male Gypsy Moths Trapped in Minnesota 2002-2010



ALTERNATE LIFE STAGE SEARCHES



COON RAPIDS

- Residential
- Positive!



STILLWATER

- Residential
- Positive!



HOPKINS

- Trace Forward
- Positive!



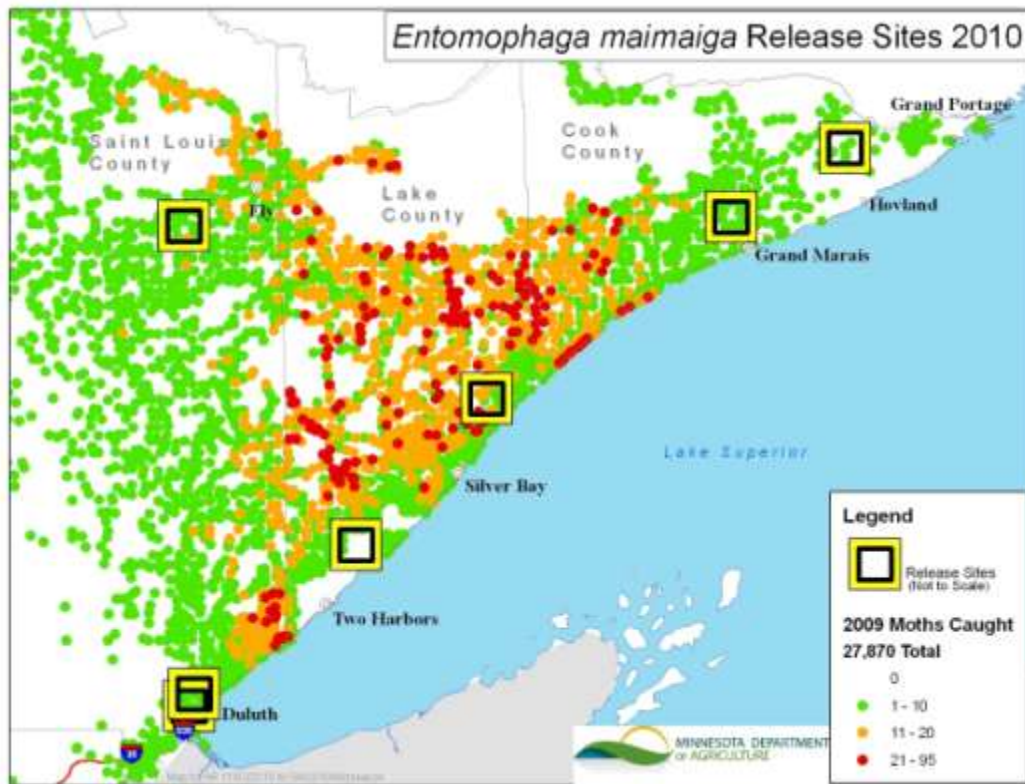
REGULATORY (USDA-APHIS)

- New Compliance Agreements Issued
 - 1

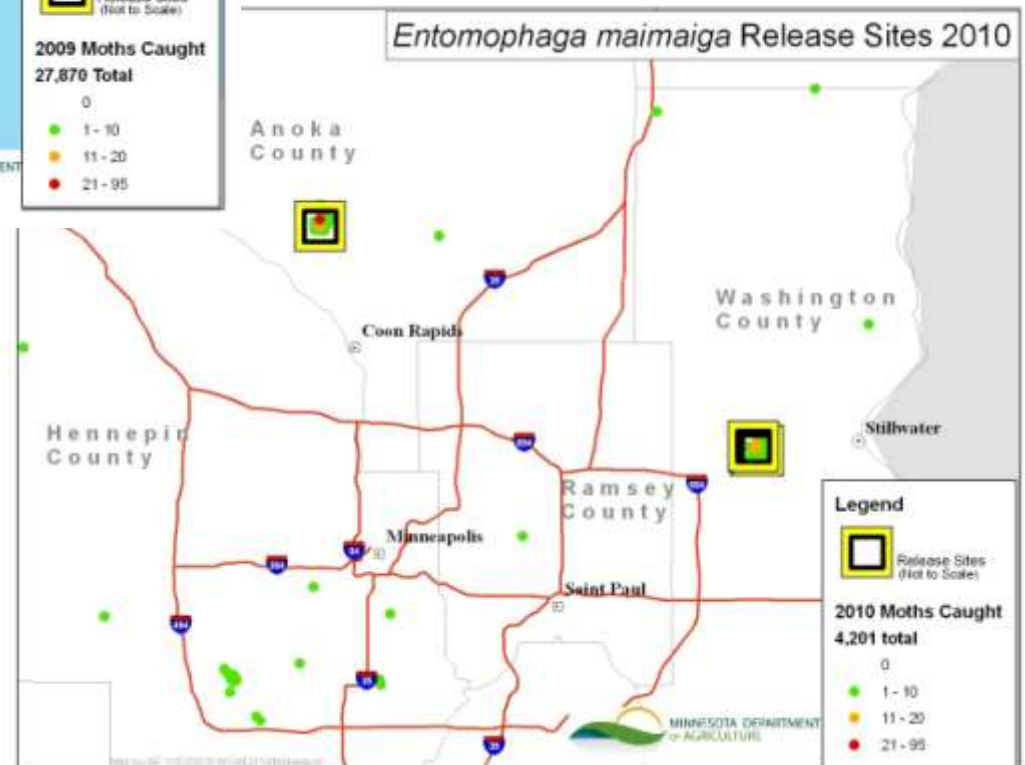
- Gypsy Moth Compliance Agreement Trainings
 - 5 mills
 - 1 nursery

- Violations
 - 1 (CA subsequently cancelled)





Biocontrol Releases Monika Chandler, MDA



Tree Care Registry Updates

- Dedicated Phone Line
 - 651-201-6611
- Dedicated Email
 - mda.tcr@state.mn.us
- Consumer Fact Sheet
- Updated Web Pages
 - www.mda.state.mn.us/tcr



GYPSY MOTH (*LYMANTRIA DISPAR*) MONITORING & TREATMENTS IN MINNESOTA – MDA PROGRAM UPDATE

Natasha Northrop, GM Trapping Coordinator
Minnesota Dept. of Agriculture

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St. Paul, MN 55155

651-201-6692

natasha.northrop@state.mn.us

Arrest the Pest Hotline: 651-201-MOTH
1-(888)-545-MOTH