

# British Columbia's Gypsy Moth Eradication Program



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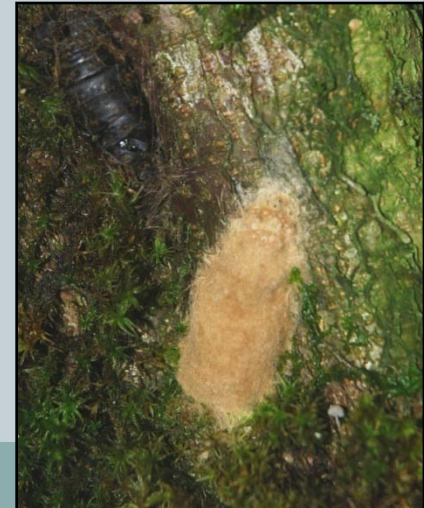
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# Gypsy Moth – What's the risk?



- Gypsy moth is a threat to B.C.'s environment and economy.
- It attacks both natural forests and urban trees.
- An established gypsy moth population would pose a threat of quarantine and resulting trade restrictions.



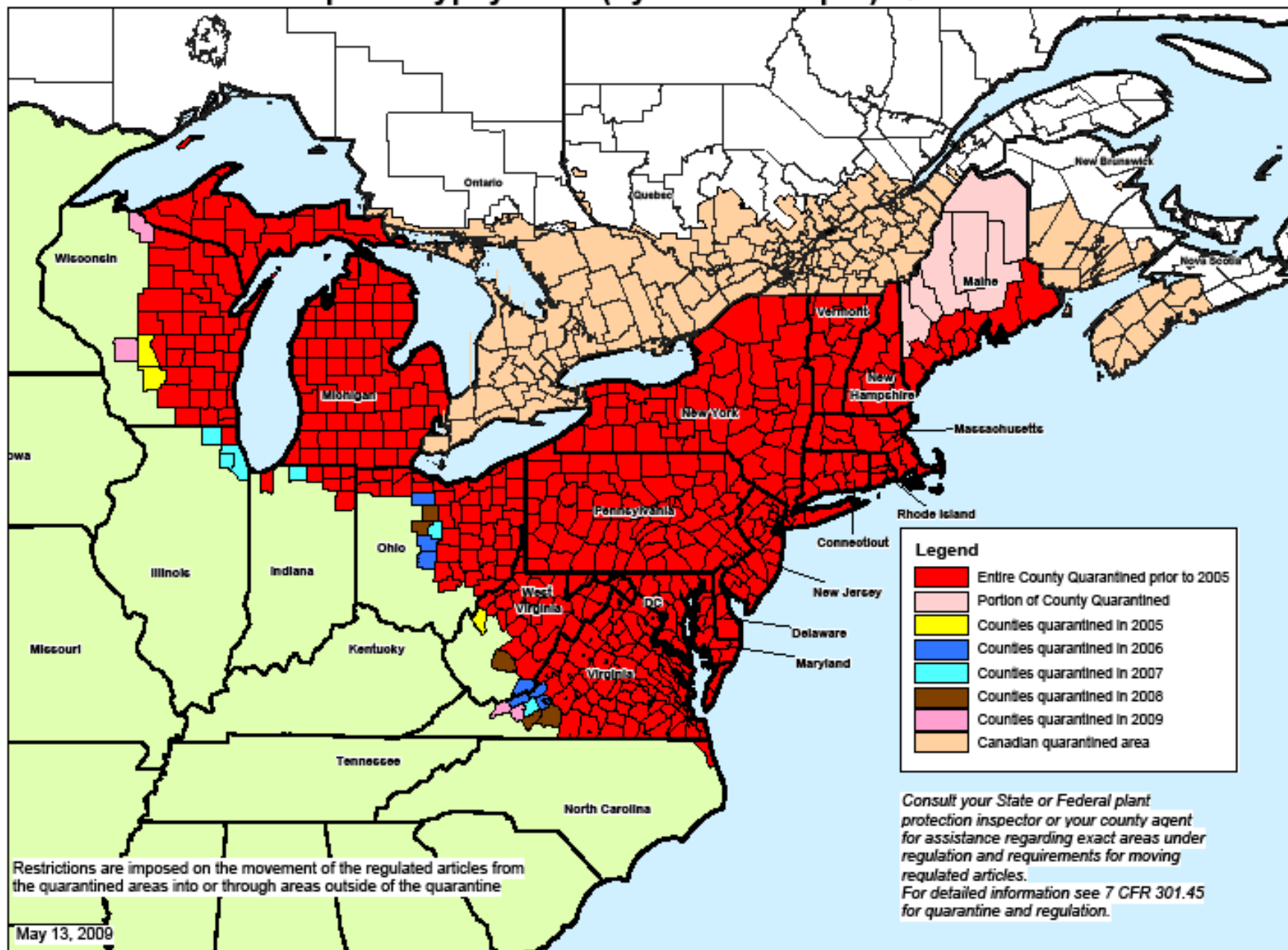
# Gypsy Moth – basic facts



Gypsy moth (*Lymantria dispar*) has two different strains of concern to British Columbia

- European or “North American” GM
  - ✦ Is established in Eastern US and Canada
  - ✦ Larvae feed primarily on deciduous trees & shrubs
  - ✦ Adult female moths do not fly
  
- Asian GM
  - ✦ Not established in North America
  - ✦ Feed on conifers as well as deciduous (over 300 host species)
  - ✦ Adult female moths fly

# European Gypsy Moth (Lymantria dispar) Quarantine



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.

# Gypsy Moth Biology

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March - April



May - June

September - April



July - September



# Gypsy Moth Management Program



- Gypsy moths have been intercepted and successfully eradicated in BC since 1970s.
- Inter-agency cooperation & an integrated pest management program have prevented the establishment of gypsy moth.





# Who Recommends Treatments?



## BC Plant Protection Advisory Council - Gypsy Moth Technical Advisory Committee:

- Canadian Food Inspection Agency
- Canadian Forest Service
- Ministry of Agriculture and Lands
- Ministry of the Environment
- Ministry of Forests and Range

Chair – Jennifer Burleigh, Ministry of Forests & Range

1992 – \$6 million spray program in Vancouver - 18,813 ha





# Gypsy Moth Detection in BC



## Canadian Food Inspection Agency – lead agency

- Mandate to prevent, detect, eradicate and regulate invasive species in Canada
- Approximately 5,000 traps deployed annually in BC
- Regular trapping grid of 1 trap/sq. mile
- Higher densities around ports, container yards or other high risk areas



# Gypsy Moth Detection in BC



A trap is found to have a moth.....

- All positive traps sent to Ottawa for DNA testing

Options for 1<sup>st</sup> year after a single positive catch

- Single or small number of moths
  - Delimitation trapping – 16 traps/sq mile for a half mile around positive catch.
- Multiple +’ve traps or high number of moths in single trap
  - Egg mass search in vicinity of high trap catches
  - Delimitation trapping

# Gypsy Moth Treatment Program



- **What triggers a treatment program?**

Evidence of a breeding and growing population

- consecutive years of increasing trap catches
- discovery of alternate life stage – egg masses or pupae

- **What are the treatments?**

- Aerial spray
- Ground Spray
- Mass trapping – 36 traps/sq mile



# Gypsy Moth Treatment Authority



- MFR has no legislative authority to treat private land
- All treatment programs require an Order In Council issued under the BC Plant Protection Act
  - Enacts a Gypsy Moth Regulation specific to that year and location – authorizes activities
  - Allows designation of inspectors under the Regulation – authorizes MFR staff to conduct treatment
  - Any aerial treatment also requires a Pesticide Use Permit

# 2010/11 Treatment Program

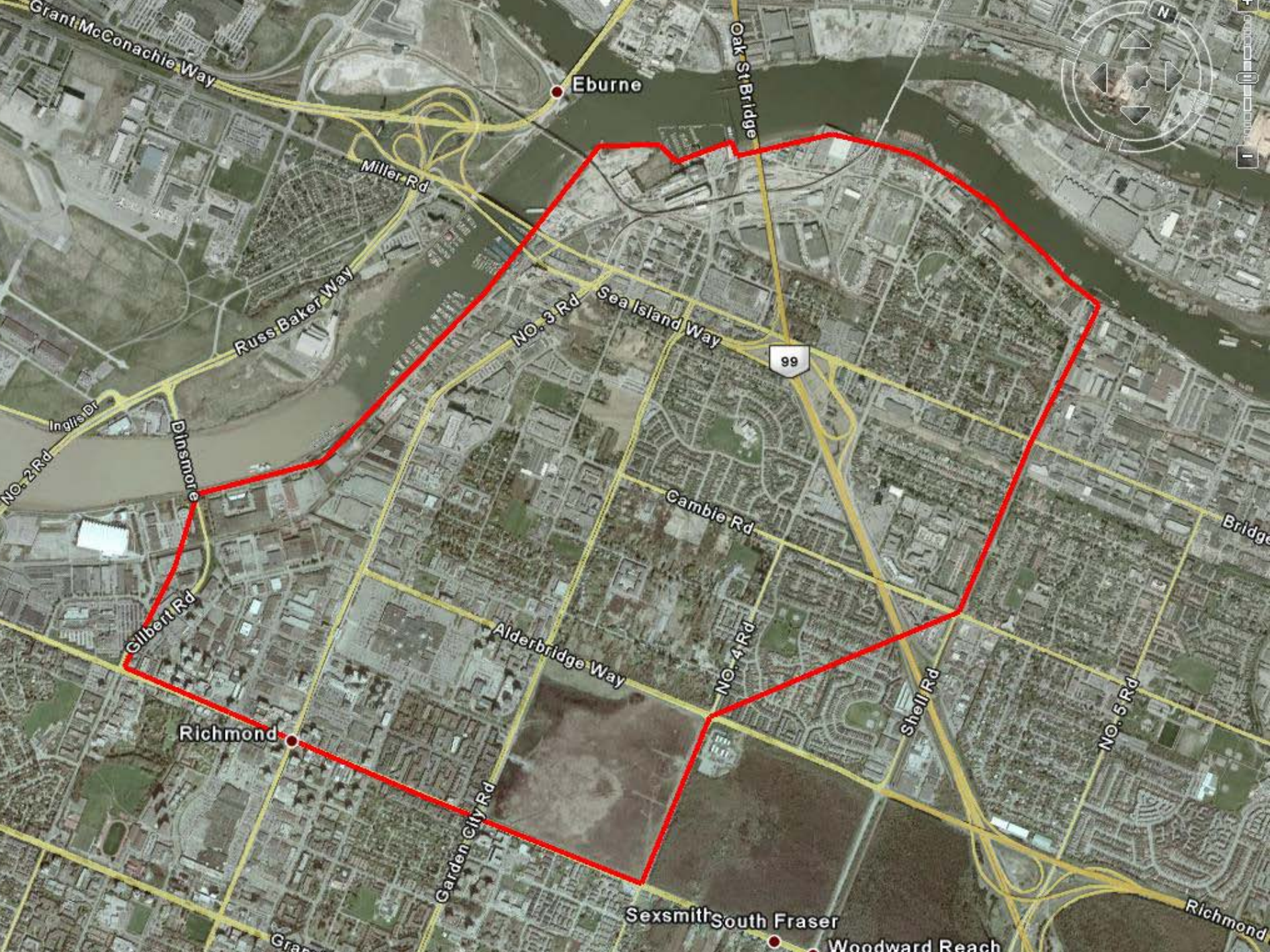


## Downtown Richmond

- 2008 trapping found 2 consecutive traps with 1 moth each.
- Delimiting trapping 2009 found 10 moths in 6 traps and subsequently egg masses were found.
- Aerial program of 776 hectares planned for 2010









# 2010/11 Treatment Program



## Harrison Hot Springs

- In 2009/10 conducted a 329 ha aerial program
- 5 moths caught within the original hazelnut orchard, 2 new egg masses.
- New finds confined to original orchard
- Ground spray to be conducted in 2010 (24 hectares).



# Treatment Program Challenges



## Challenges for this program

- Control programs over highly populated areas tend to be very controversial.
- Gypsy Moth – **Gold Medal** for Political Hot Topic
  - Political sensitivity of permit advertising and public appeals during the Olympics.....
- Budgetary concerns – cutbacks (staff & \$\$)



<http://www.for.gov.bc.ca/hfp/gypsymoth/index.htm>



- Website provides reel-time information on progress
- Toll-free 24hour information line **1-866-917-5999**
  - Pre-recorded information message with program update
  - Leave a message for MFR to call back
- Email listserv sends out program updates

