



Gypsy Moth Update

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Background

- *Lymantria dispar dispar* (LDD) moths (known as European gypsy moths) first found in Ontario in 1969
- Appears in 7 to 10-year cycles, usually lasting 3 years – we are in year 2
- Population fluctuates in relation to environmental and biological controls



Current Outbreak

- 2021 outbreak has been severe and distressing to homeowners especially during the added stress of Covid-19 restrictions.
- Homeowners are overwhelmed, concerned about the health of their trees, and some are experiencing skin irritations from contact with caterpillars.

Overarching Concerns:

- Ecological impacts from declines\losses of oaks and other trees
- Negative forest user experiences due to large numbers of caterpillars and tree declines and mortality
- Increased hazard tree removal costs



Current Outbreak

- Defoliation of oaks, poplars, birch trees across Southern Ontario
- Majority of healthy trees expected to recover



Gypsy moth 2020

Areas in Ontario where gypsy moth caused defoliation

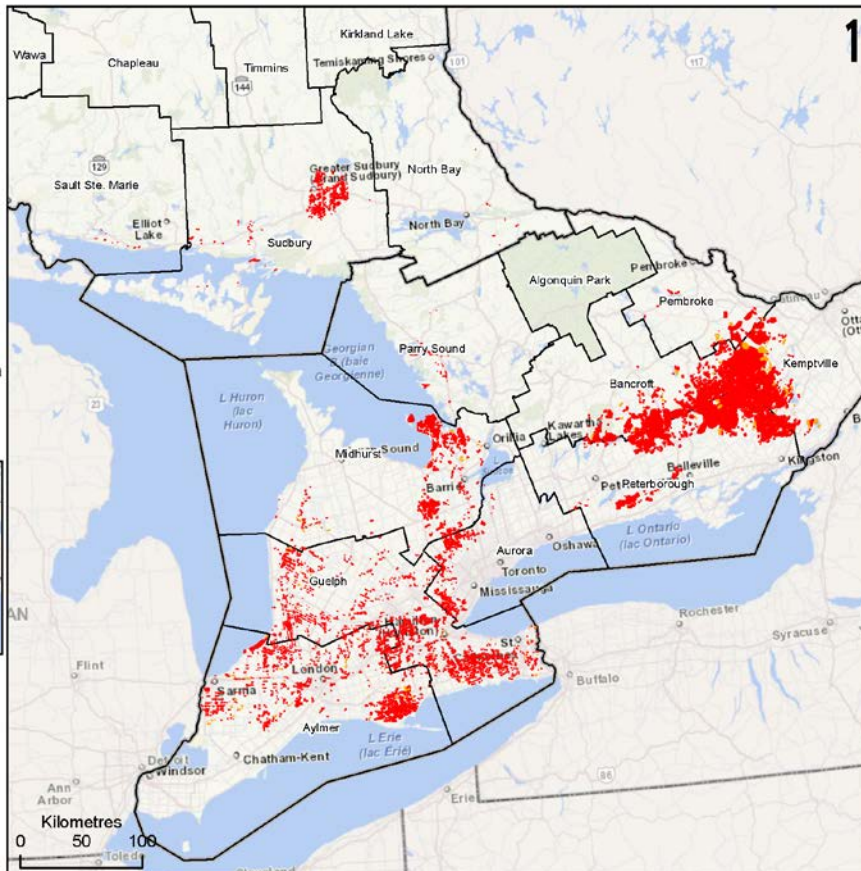
Light = 17,002 ha

Moderate to severe = 569,384 ha

- Area of light defoliation
- Area of moderate to severe defoliation

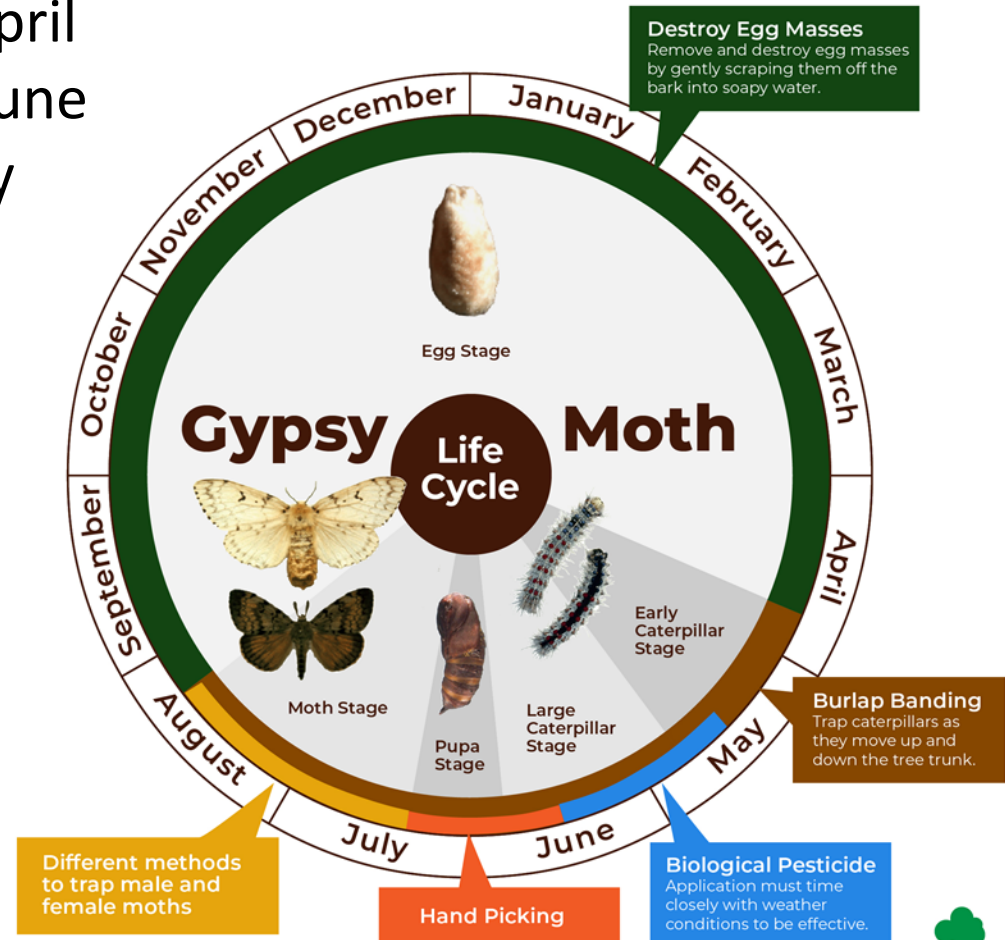


Disclaimer:
This map is illustrative only. Do not rely on this map as being a precise indicator of routes, locations of features, nor as a guide to navigation. This map was produced by the Ministry of Natural Resources and Forestry.



Pest Management Strategies

- Egg: Late August to Late April
- Larvae: Late April to Mid June
- Pupa: Mid June to Mid July
- Adults: Mid July to Late August



Photography Credits:
USDA APHIS PPQ - Oxford, North Carolina, USDA APHIS PPQ, Bugwood.org
Tim Tigner, Virginia Department of Forestry, Bugwood.org

Keep your trees healthy & attract birds to naturally manage pests.

Integrated Pest Management

- Remove eggs masses from Special Management Zones in County Forest
- Burlap wrap high value trees
- Analyze defoliation and tree recovery
- Count egg masses to predict extent of 2022 outbreak
- Direct residents to www.Northumberland.ca/gypsy moth for pest management strategies
- Collaboration with Ganaraska Conservation Region Authority and Nature Conservancy of Canada



Approach across Ontario

- Most municipalities and Conservation Authorities are using similar pest management strategies
- GRCA sprayed 100 acres with insecticide



Future Considerations

- Survey defoliation and mortality of trees
- Analyze GRCA treatment
- Forecast 2022 outbreak through Modified Kaladar Plot (MKP)

