



# GYPSY MOTH

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Request to Middlesex County Council

# Gypsy Moths – Middlesex County

01

Impact of Gypsy  
Moth within  
Middlesex County.

02

Rationale for  
County  
Involvement.

03

Next Steps.

# 01 – Impact of Gypsy Moth within Middlesex County

- Gypsy Moth infestation is occurring in Middlesex County and surrounding regions
- Gypsy Moth is a voracious, tree-destroying insect which can cause negative human impacts
- Gypsy Moths can eat an average of one square meters of trees
- Beyond trees, shrubs and other plants may be affected
- During severe outbreaks, trees and shrubs are completely defoliated; while tree may produce new crop of leaves, the damage causes significant growth loss
- Defoliation makes trees more susceptible to secondary pests, drought, and poor growing conditions
- Impacting children's ability to play outside
- Impacting local businesses (e.g. nurseries, golf course)











## 02 – Rationale for County Involvement

- Benefits to fulsome investigation, comparison, and evaluation of a county-led spray program, as opposed to private efforts only
- Aerial spraying programs of Btk are in place in other municipalities, including within the County, and are efficient effective ways of biological pest control to reduce defoliation and other impacts
- Defoliation caused by Gypsy Moth in Ontario increased from 47,203 hectares in 2019 to 586,385 hectares in 2020 ([Gypsy moth | Ontario.ca](https://www.ontario.ca/gypsy-moth))
- Protecting the beauty of the natural environment owned by the county supports county goals:
  - Tourism
  - Economic Development
  - Middlesex County Protection of Tree Canopy and Natural Environment Policy

# Map of areas defoliated by Gypsy Moth in 2020 Across Ontario & 2021 Projections



## Gypsy moth 2020

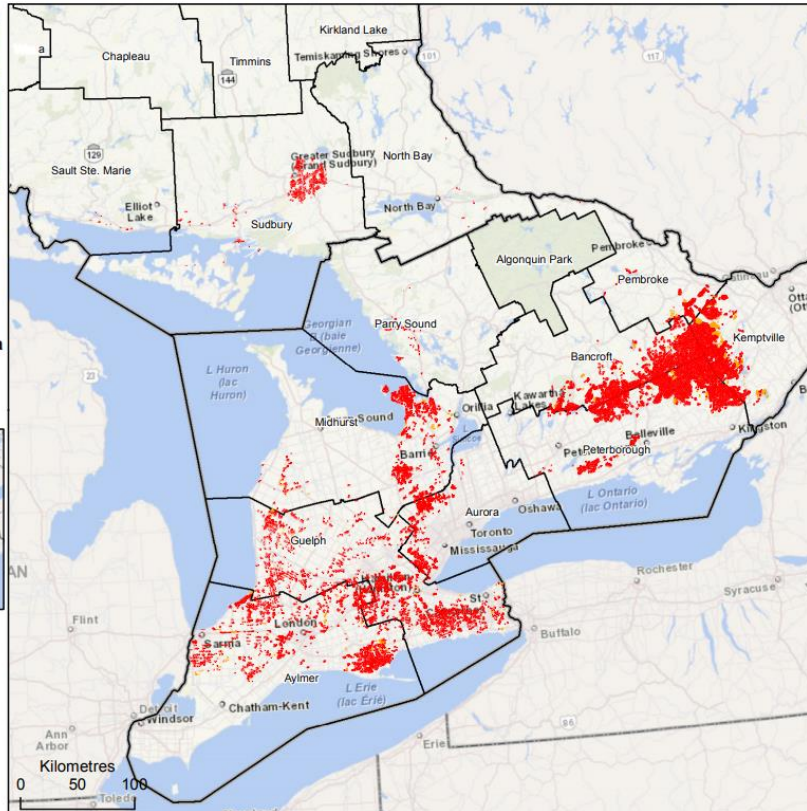
Areas in Ontario where gypsy moth caused defoliation

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.



## Gypsy moth egg mass survey results

Defoliation forecast 2021

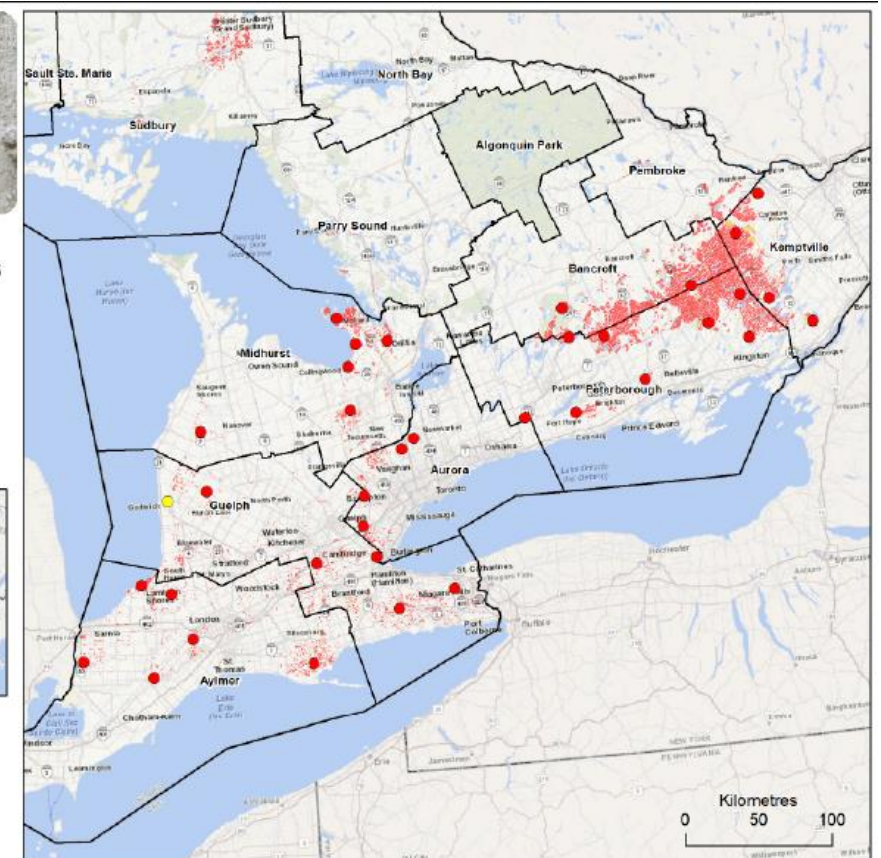
- Severe
- Moderate

Gypsy moth damage 2020

- Area of moderate to severe damage
- Area of light damage



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## 03 – Next Steps.

- In Canada, Btk (*Bacillus thuringiensis*) bacterium spray treatment has been used to control the gypsy moth where established on public trees prior to egg hatch, as it is only poisonous to the larvae
- Benefits of targeted spraying program, including prevention of defoliation and protecting the health of vulnerable trees
- Request a feasibility study by County Forestry to investigate the safety, practicality and costs of aerial spray prior to the annual infestation in 2022 to allow for county council budget consideration on county owned woodlots