Ministry of Natural Resources and Forestry

Forest Health Update 2020

Vanessa Chaimbrone

Biodiversity and Monitoring Section

Ontario

Acknowledgements

- Dan Rowlinson (Forest Health Program Coordinator)
- David Dutkiewicz (Invasive Species Centre – insect diagnostics)
- Sylvia Greifenhagen (Research and Monitoring Section, OMNRF – disease diagnostics)
- Brian Grantham (A/Manager Biodiversity and Monitoring, OMNRF)
- Darren Elder (A/Coordinator – Biodiversity and Monitoring Section, NW Region, OMNRF)
- Dave Etheridge (Coordinator – Biodiversity and Monitoring Section, NE Region, OMNRF)
- Dan Lix (GIS Analyst, Biodiversity and Monitoring Section, OMNRF)
- 2020 field staff (Biodiversity and Monitoring Section, OMNRF)

Ontario

Forest Health Staff

- **Field Coordinator**
  - Dan Rowlinson
- **NW Region**
  - Vance Boudreau
- **NE Region**
  - Lia Fricano
  - Cheryl Widdifield
  - Mike Francis
  - Ariel Ilic
- **Southern Region**
  - Vanessa Chaimbrone
  - Paulette Hebert
  - Rebecca Lidster

Ontario

Forest Tent Caterpillar (*Malacosoma disstria* Hubner)

Pest Information

Pest Origins:	Native to North America
Pest Type:	Defoliator
Host Species:	Hardwoods
Infestation Area:	35,220 ha (2019)

Ontario

Forest Tent Caterpillar (*Malacosoma disstria* Hubner)

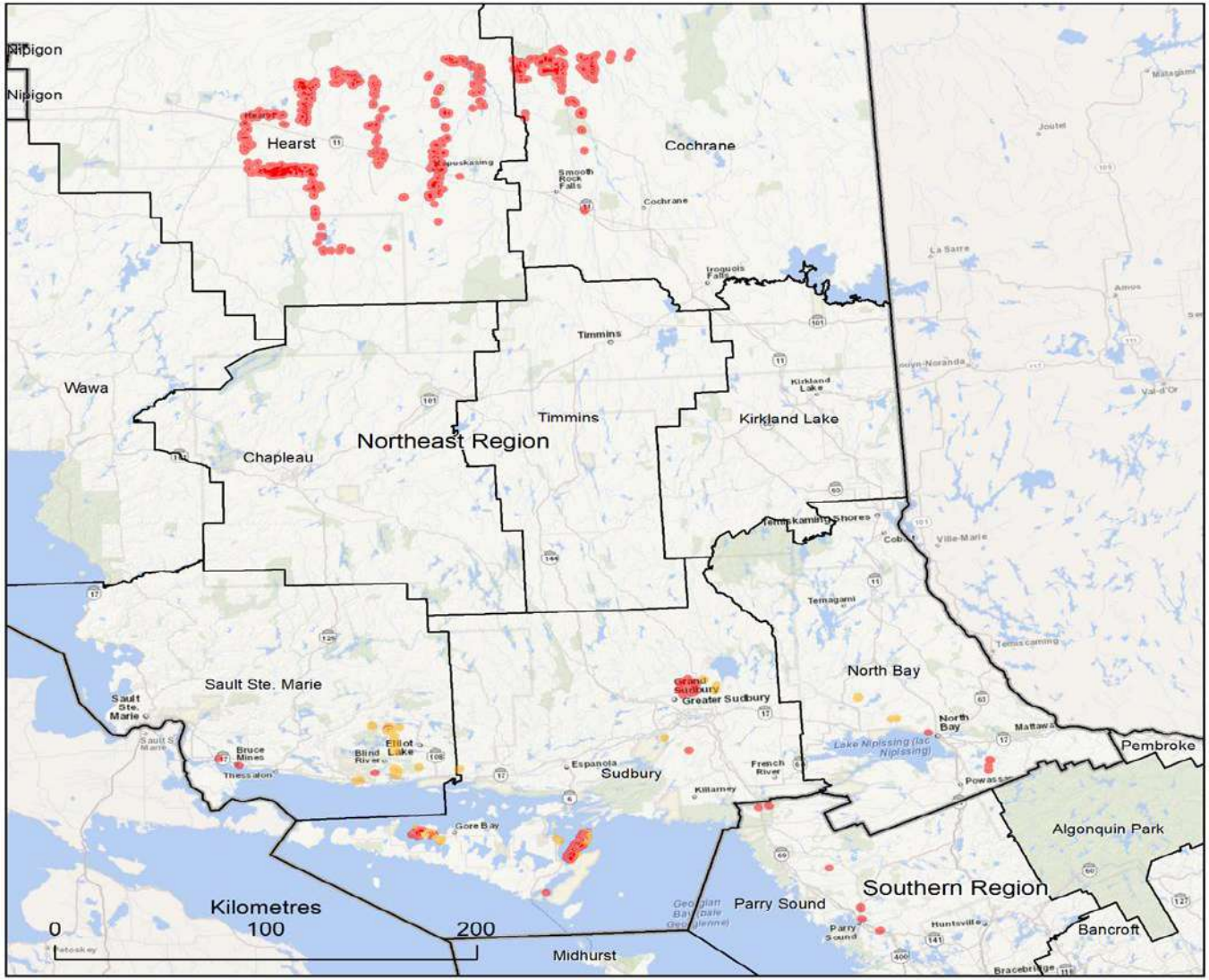
Forest tent caterpillar 2019

Areas in Ontario where forest tent caterpillar caused defoliation

Light = 1,732 ha
Moderate to severe = 33,488 ha

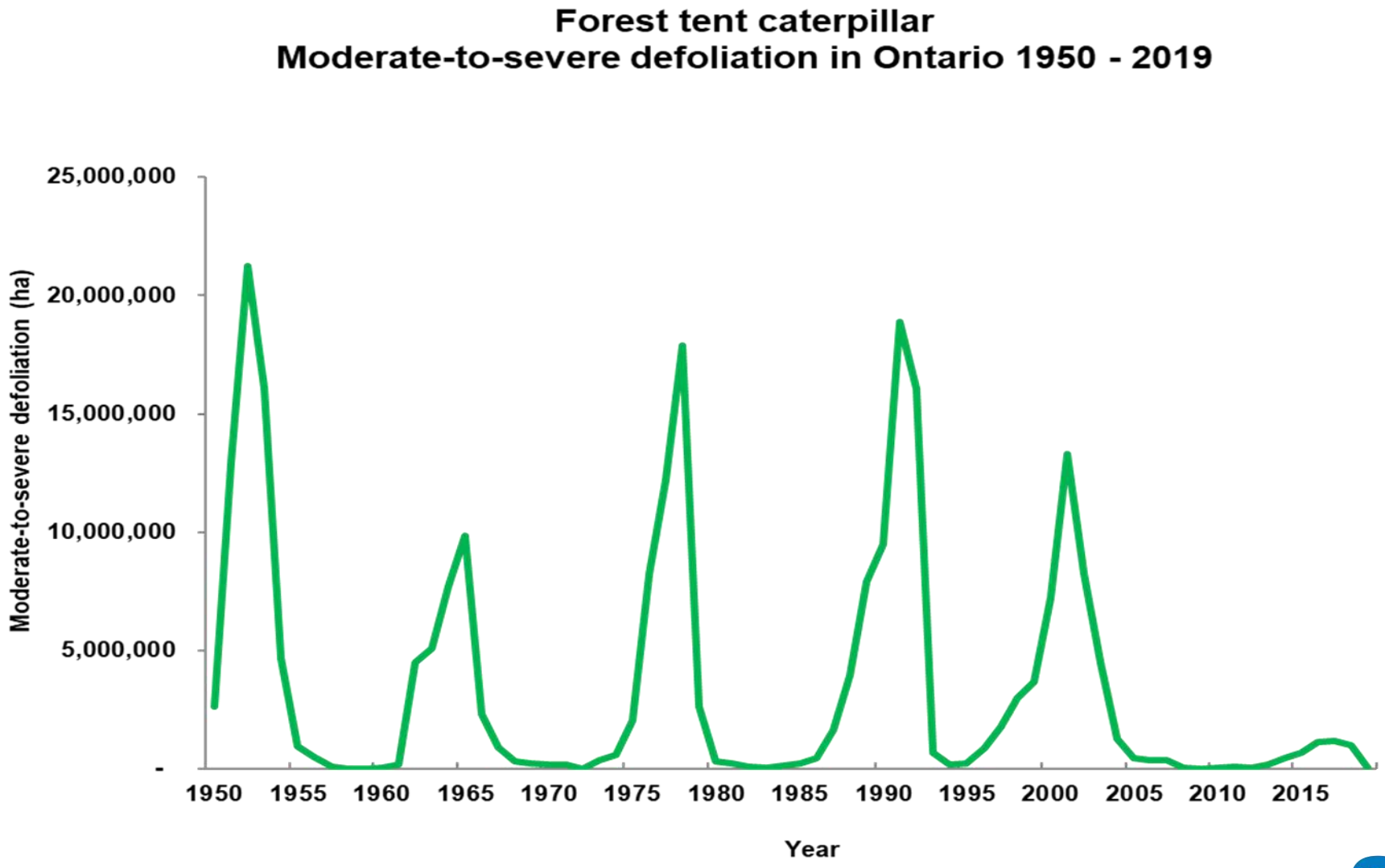
Area of light defoliation

Area of moderate to severe defoliation



Ontario

Forest Tent Caterpillar (*Malacosoma disstria* Hubner)



Ontario

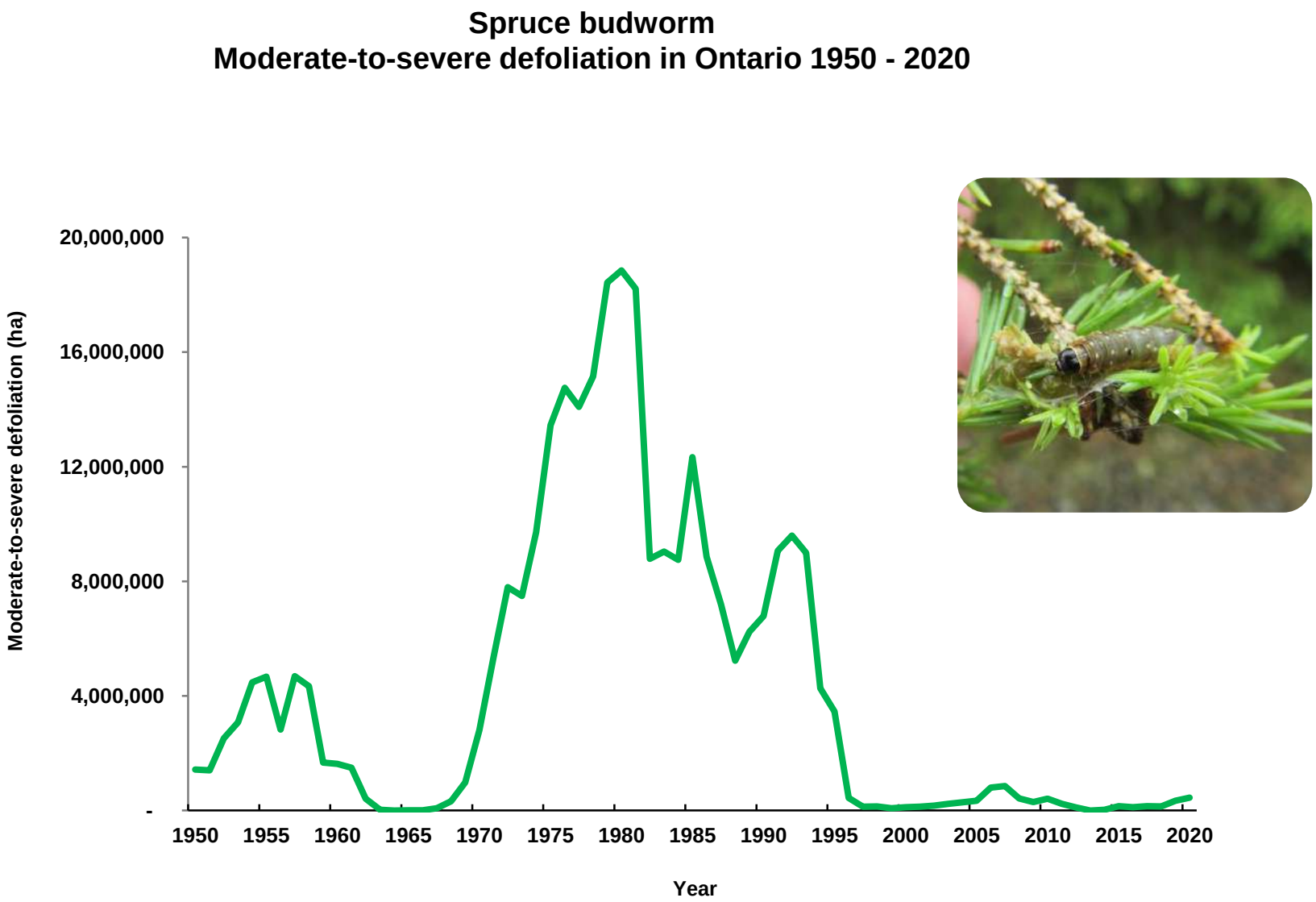
Spruce budworm (*Choristoneura fumiferana* Clemens)

Pest Information

Pest Origins:	Native to North America
Pest Type:	Defoliator
Host Species:	Balsam fir, white spruce, black spruce, red spruce
Infestation Area:	Defoliation– 342,817 ha, Mortality- 2,427 ha (2019)

Ontario

Spruce budworm (*Choristoneura fumiferana* Clemens)



Ontario

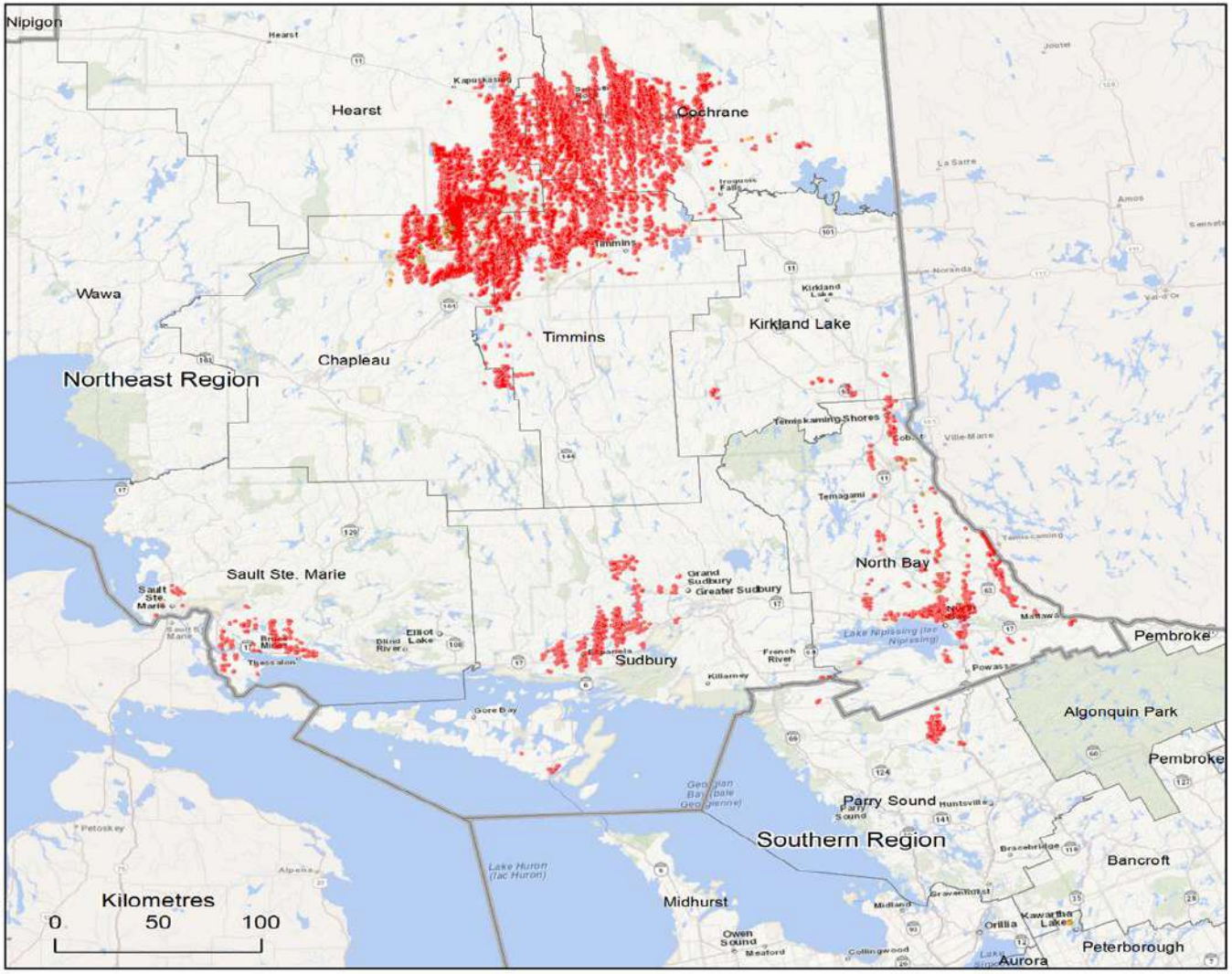
Spruce budworm (*Choristoneura fumiferana* Clemens)

Spruce budworm 2019

Areas in Ontario where spruce budworm caused defoliation

Light = 484 ha
Moderate-to-severe = 342,333 ha
Mortality = 2,427 ha

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



Ontario

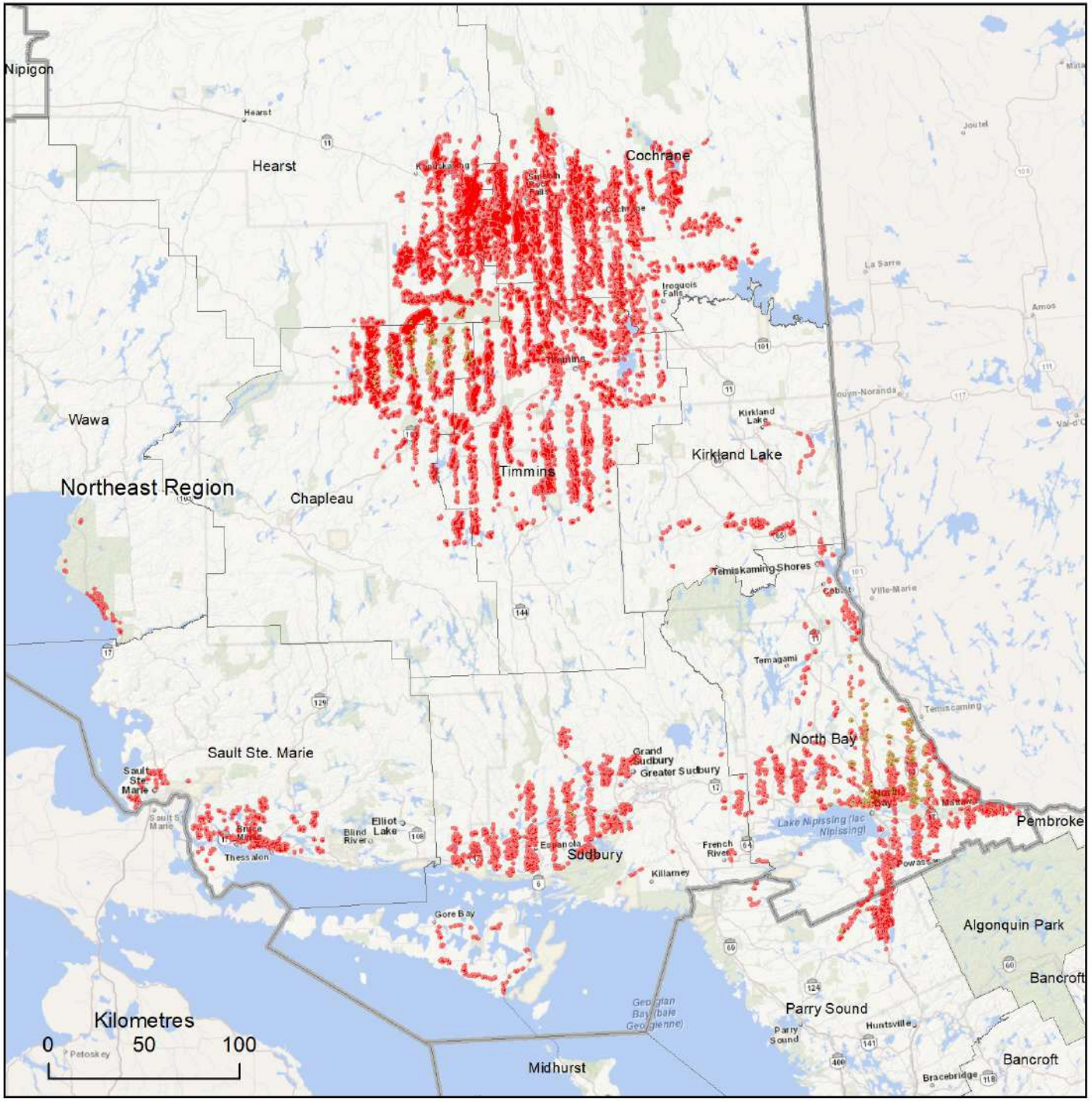
Spruce budworm 2020

Areas in Ontario where spruce budworm caused defoliation

Moderate-to-severe = 442,426 ha
Mortality = 9,358 ha

Area of moderate to severe defoliation

Area of mortality



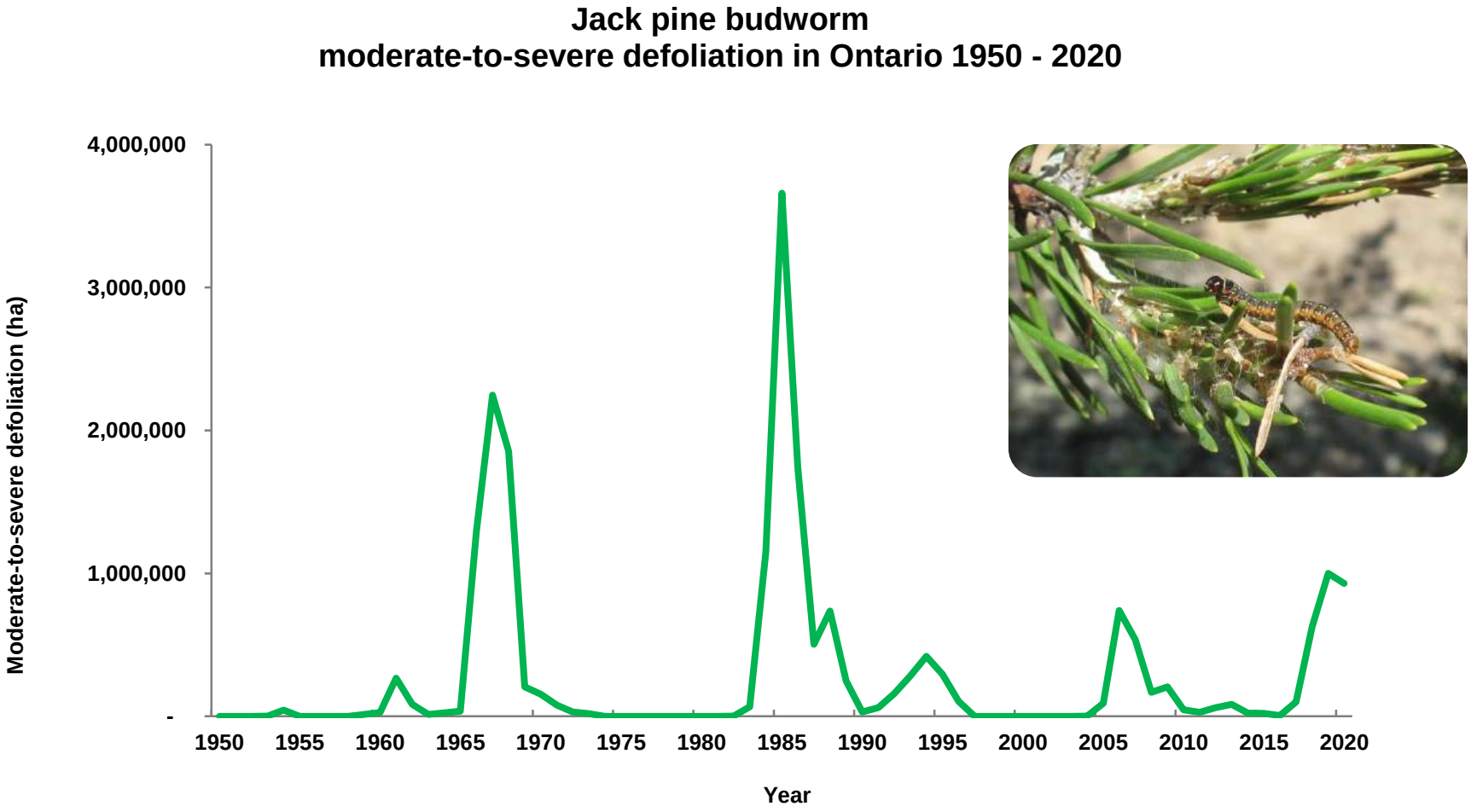
Jack Pine Budworm (*Choristoneura pinus pinus* Freeman)

Pest Information

Pest Origins:	Native to North America
Pest Type:	Defoliator
Host Species:	Jack pine, red pine, Scots pine, white pine
Infestation Area:	Defoliation – 1,001,708 ha (2019) Mortality - 32,234 ha (2019)

Ontario

Jack Pine Budworm (*Choristoneura pinus pinus* Freeman)



Ontario

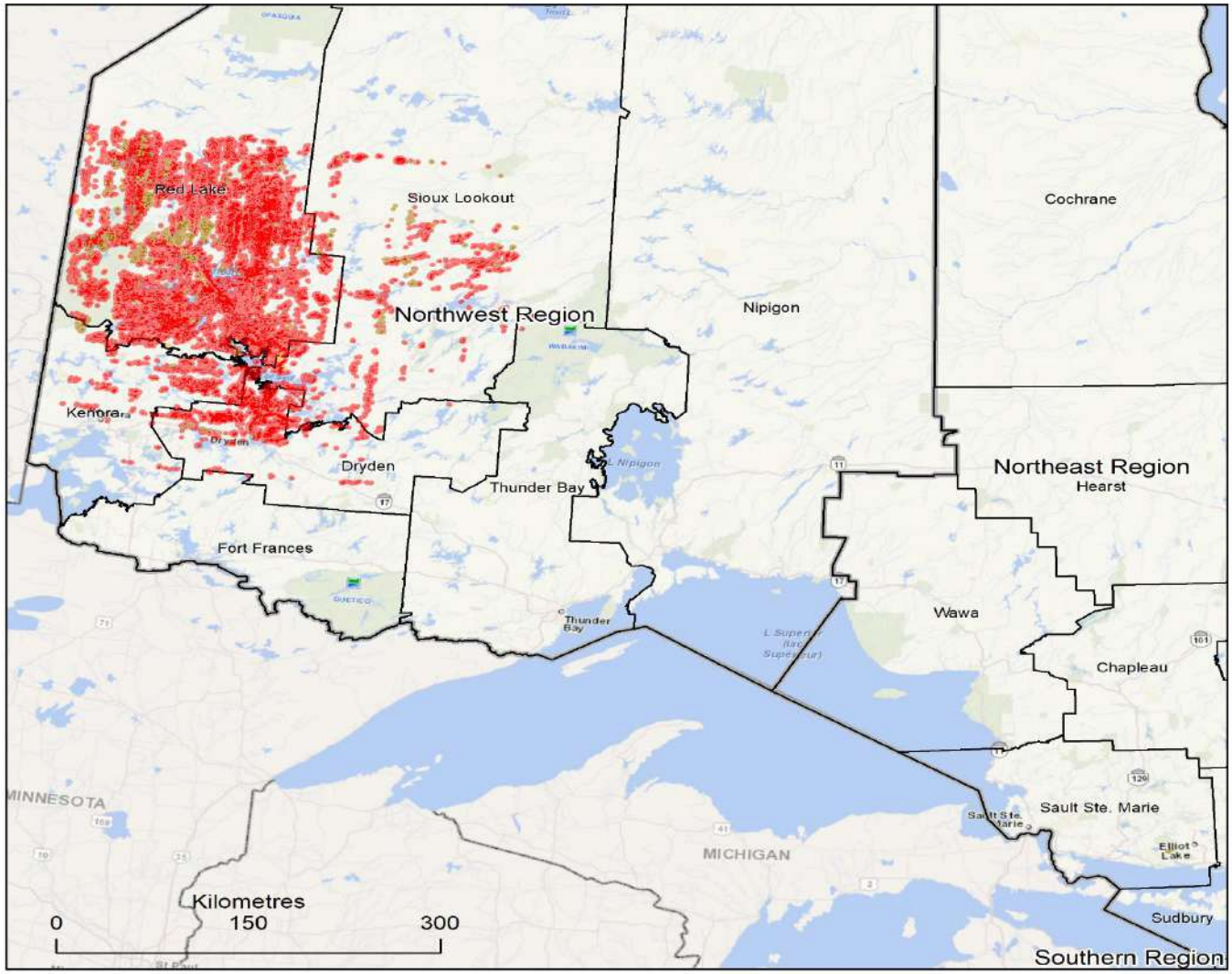
Jack Pine Budworm (*Choristoneura pinus pinus* Freeman)

Jack pine budworm 2019

Areas in Ontario where jack pine budworm caused defoliation

Light = 439 ha
Moderate to severe = 1,001,269 ha
Mortality = 32,234 ha

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



Ontario

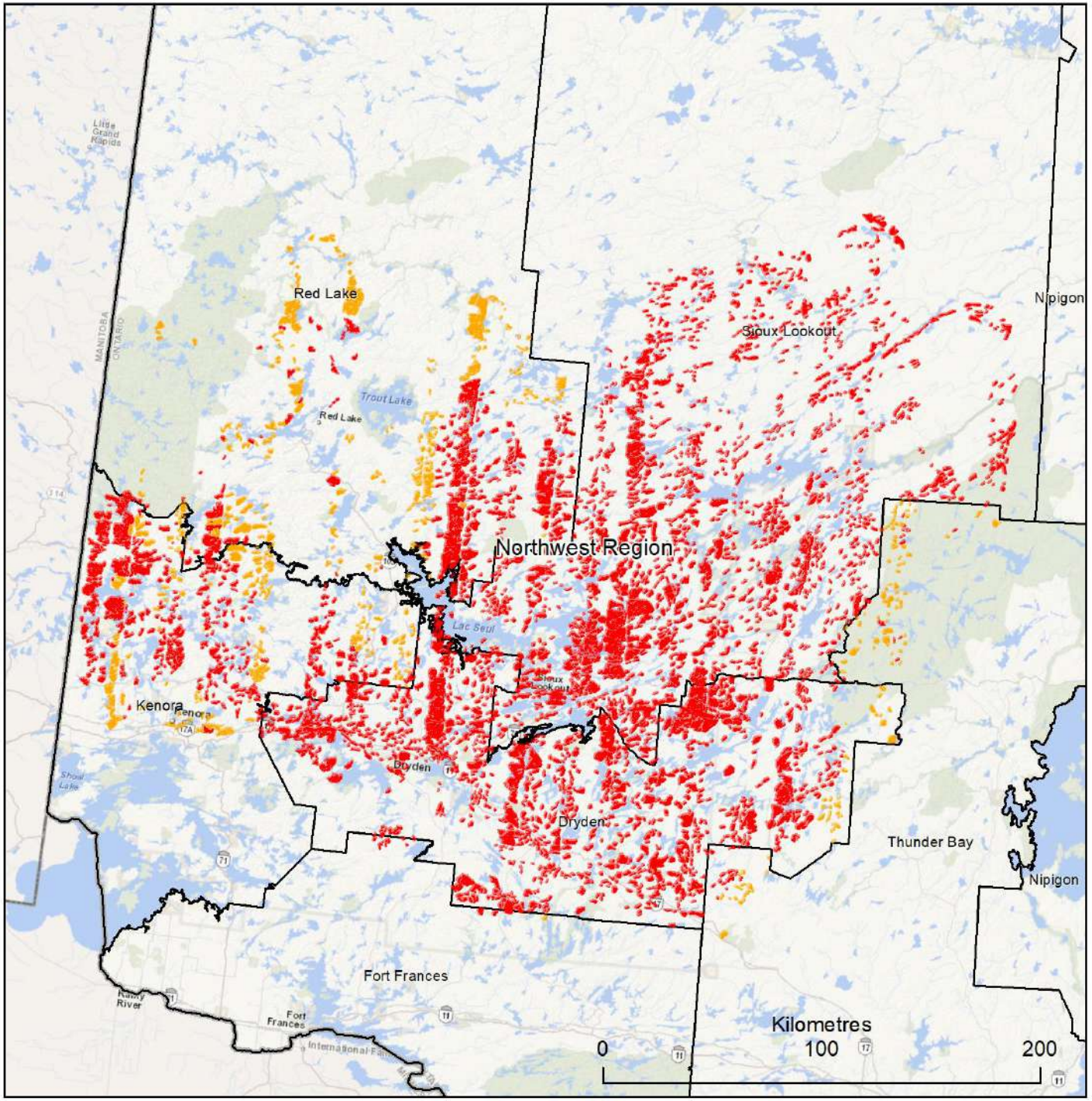
Jack pine budworm 2020

Areas in Northwest Region where jack pine budworm caused defoliation

Light = 136,161 ha
Moderate to severe = 929,635 ha

Area of light defoliation

Area of moderate to severe defoliation



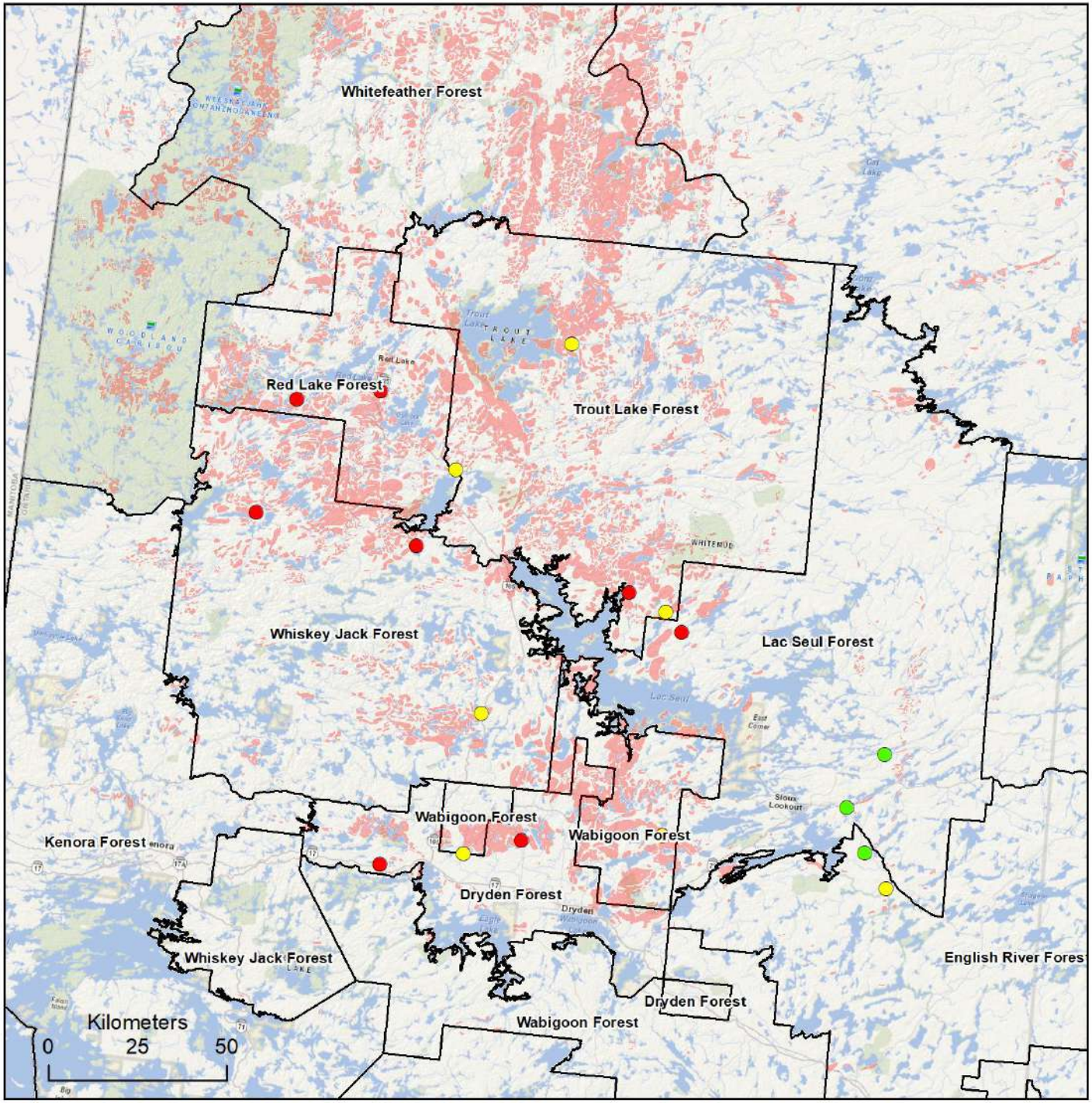
Jack pine budworm second instar larvae survey results

Defoliation Forecast 2020

- Severe
- Moderate
- Light

Jack Pine Budworm Defoliation 2019

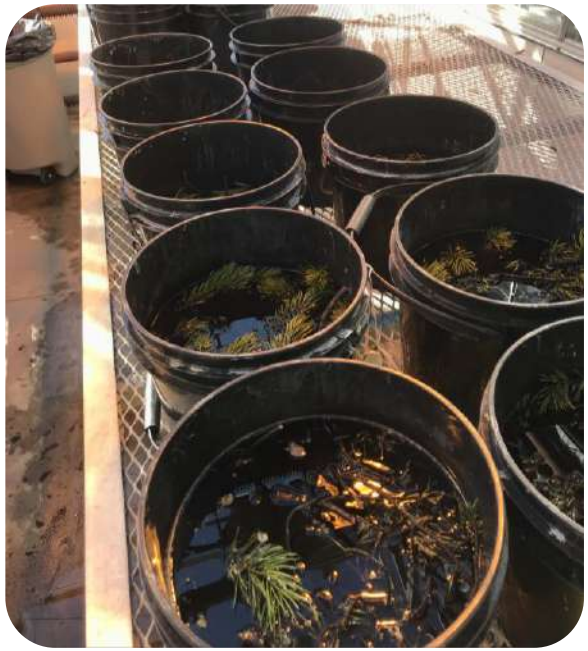
- Area of moderate to severe defoliation
- Area of light defoliation



Jack Pine Budworm (*Choristoneura pinus pinus* Freeman)

Ontario

Jack Pine Budworm (*Choristoneura pinus pinus* Freeman)



Ontario

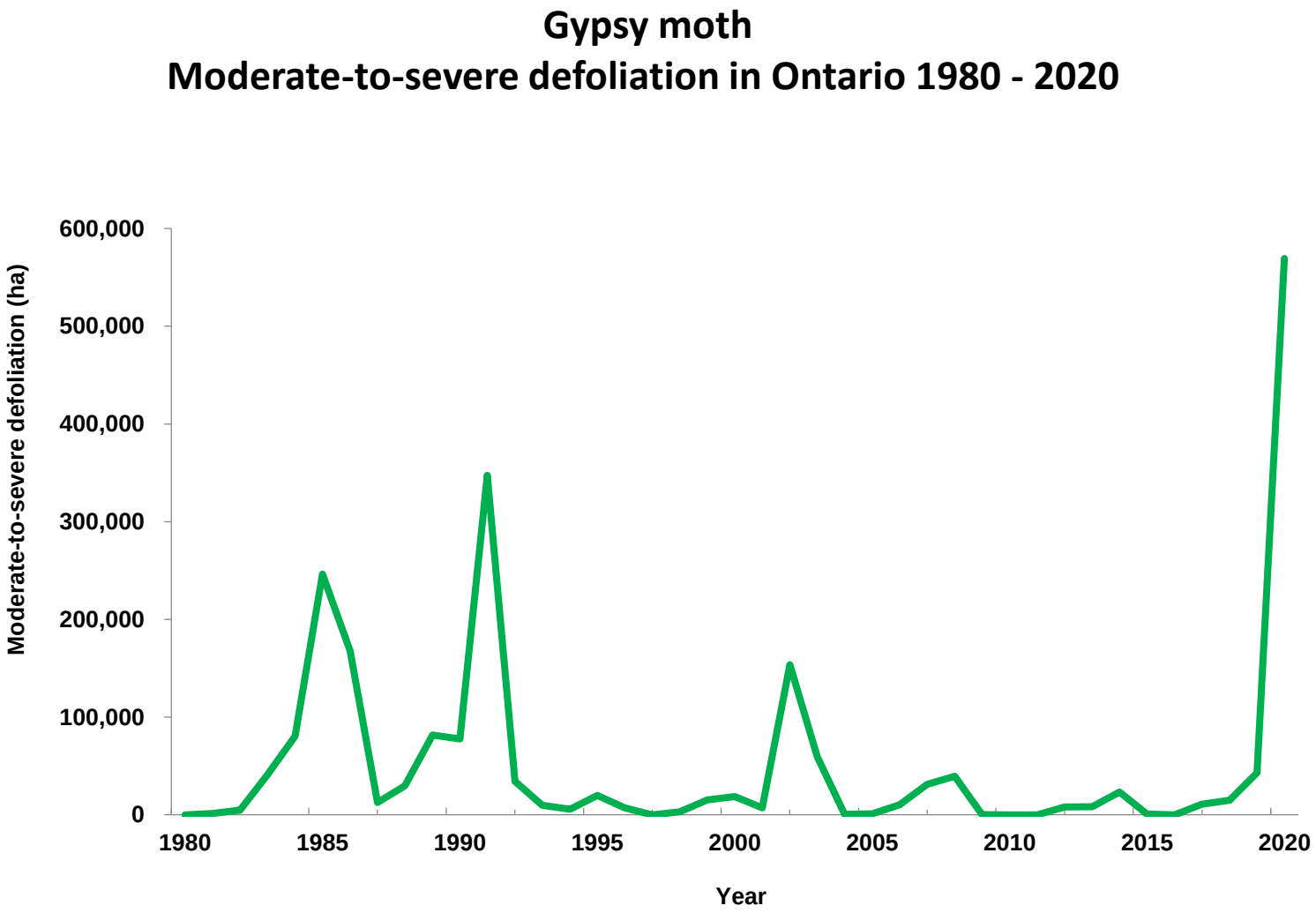
Gypsy Moth (*Lymatria dispar* (L.))

Pest Information

Pest Origins:	**Invasive** - Native to Europe
Pest Type:	Defoliator
Host Species:	Oak, birch, aspen and various hardwoods
Infestation Area:	45,624 ha (2019)

Ontario

Gypsy Moth (*Lymatria dispar* (L.))



Ontario

Gypsy Moth (*Lymatria dispar* (L.))

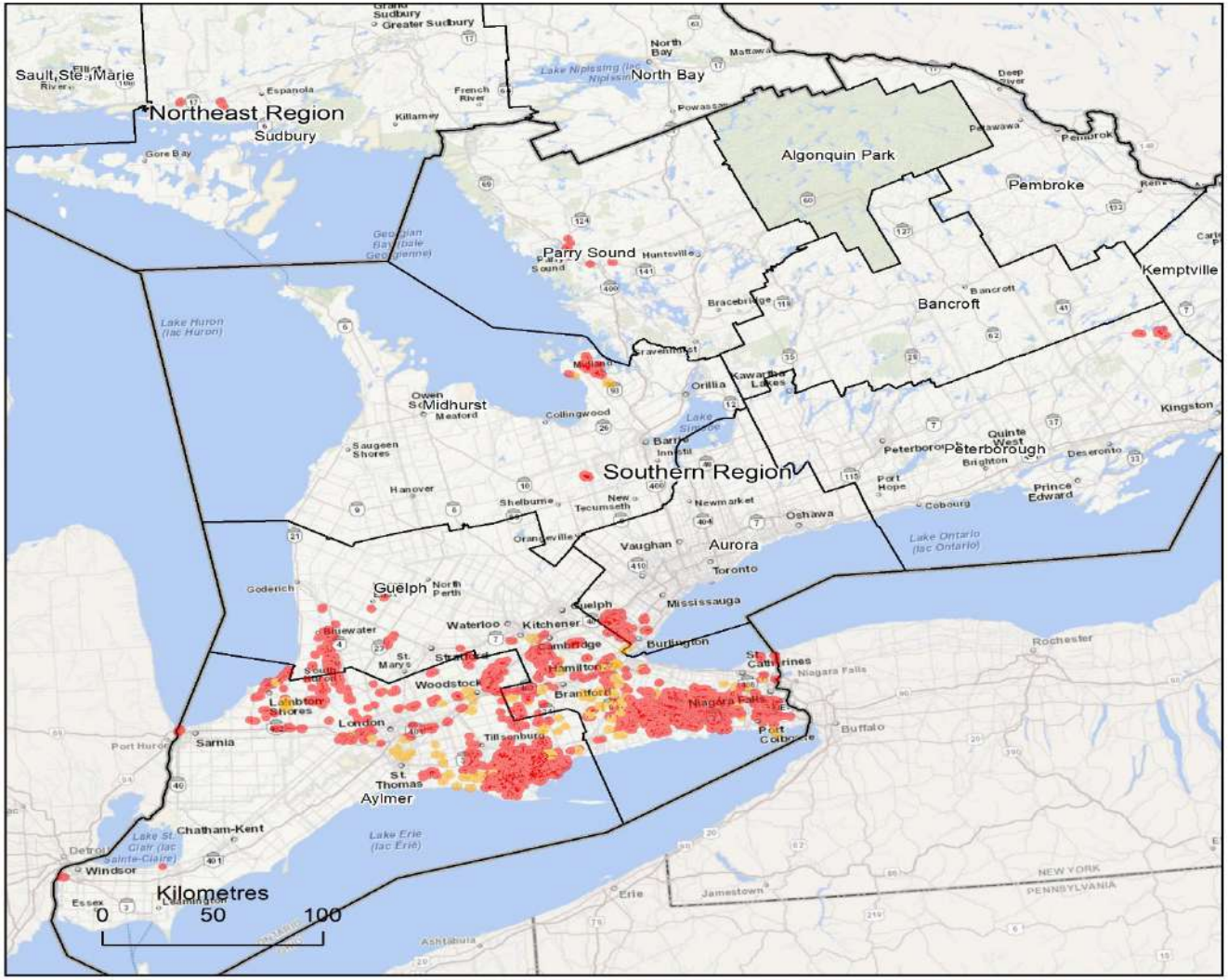
Gypsy moth
2019

Areas in the Ontario where gypsy moth caused defoliation

Light = 4,007 ha
Moderate to severe = 41,617 ha

Area of light defoliation

Area of moderate to severe defoliation



Ontario

Gypsy moth 2020

Areas in Ontario where gypsy moth caused defoliation

Light = 17,002 ha
Moderate to severe = 569,465 ha

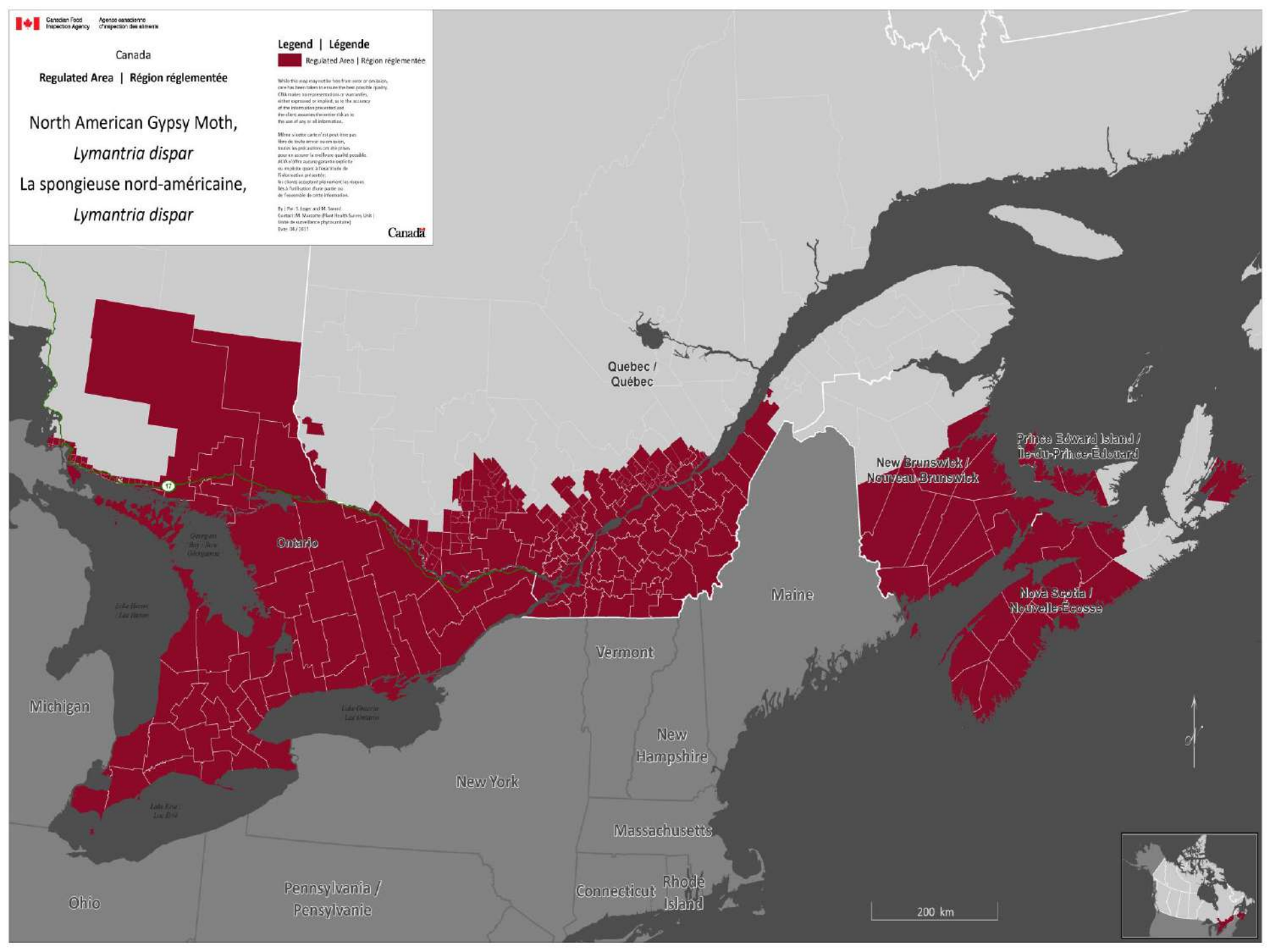
- Area of light defoliation
- Area of moderate to severe defoliation

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 for the Ministry of Natural Resources internal use only and is not intended for external distribution.

Ontario

MNRF Science

Kilometres
0 50 100


Canadian Food Inspection Agency
Agence canadienne d'inspection des aliments
Canada
Regulated Area | Région réglementée
North American Gypsy Moth,
Lymantria dispar
La spongieuse nord-américaine,
Lymantria dispar
Legend | Légende
Regulated Area | Région réglementée
Canada
Quebec / Québec
Ontario
New Brunswick / Nouveau-Brunswick
Prince Edward Island / Île-du-Prince-Édouard
Nova Scotia / Nouvelle-Écosse
Maine
Vermont
New Hampshire
New York
Massachusetts
Connecticut
Rhode Island
Pennsylvania / Pensylvanie
Ohio
Michigan
200 km

A virtual year….

https://www.ontario.ca/page/forest-health-conditions

Thank you,
& STAY SAFE!