

Michigan Department of Natural Resources



Naturalization of Gypsy Moth in Michigan

Lymantria dispar dispar
(European Gypsy Moth)
14 April 2022

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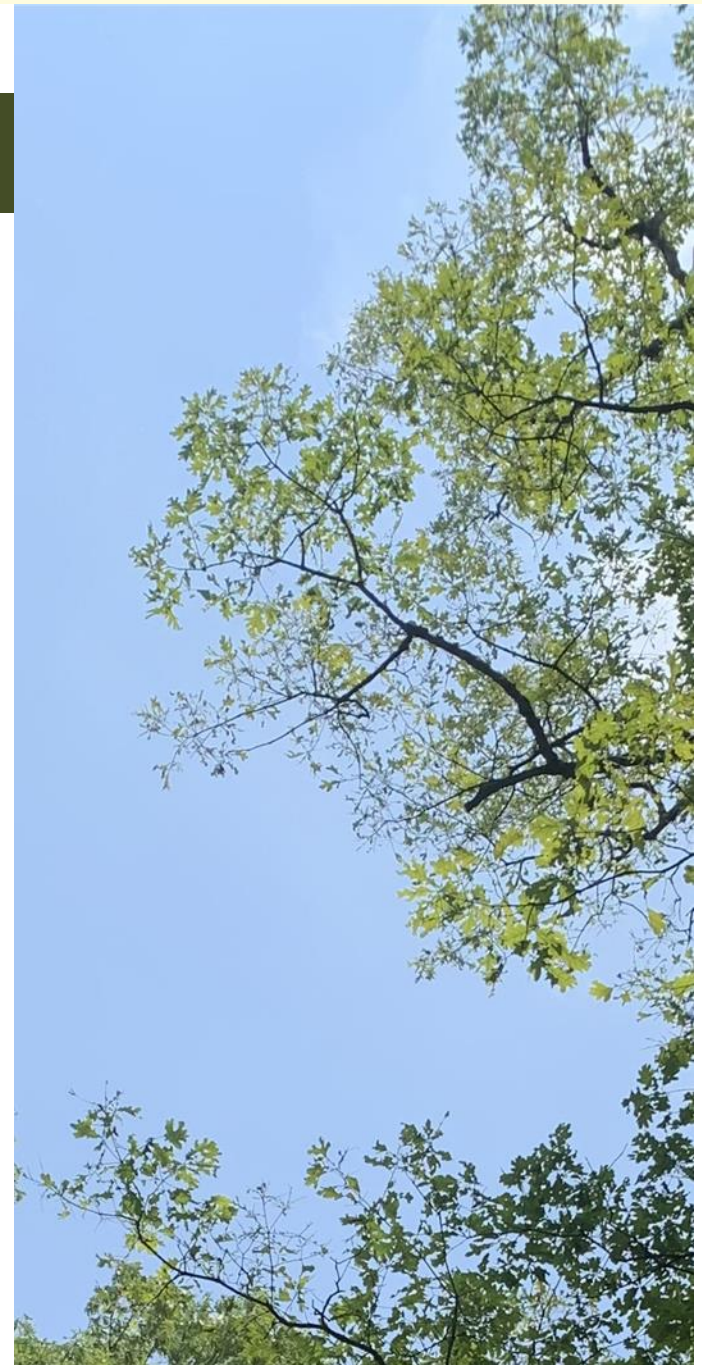
Forest Resource Division



History in Michigan

First detected in 1952 in Lansing, MI

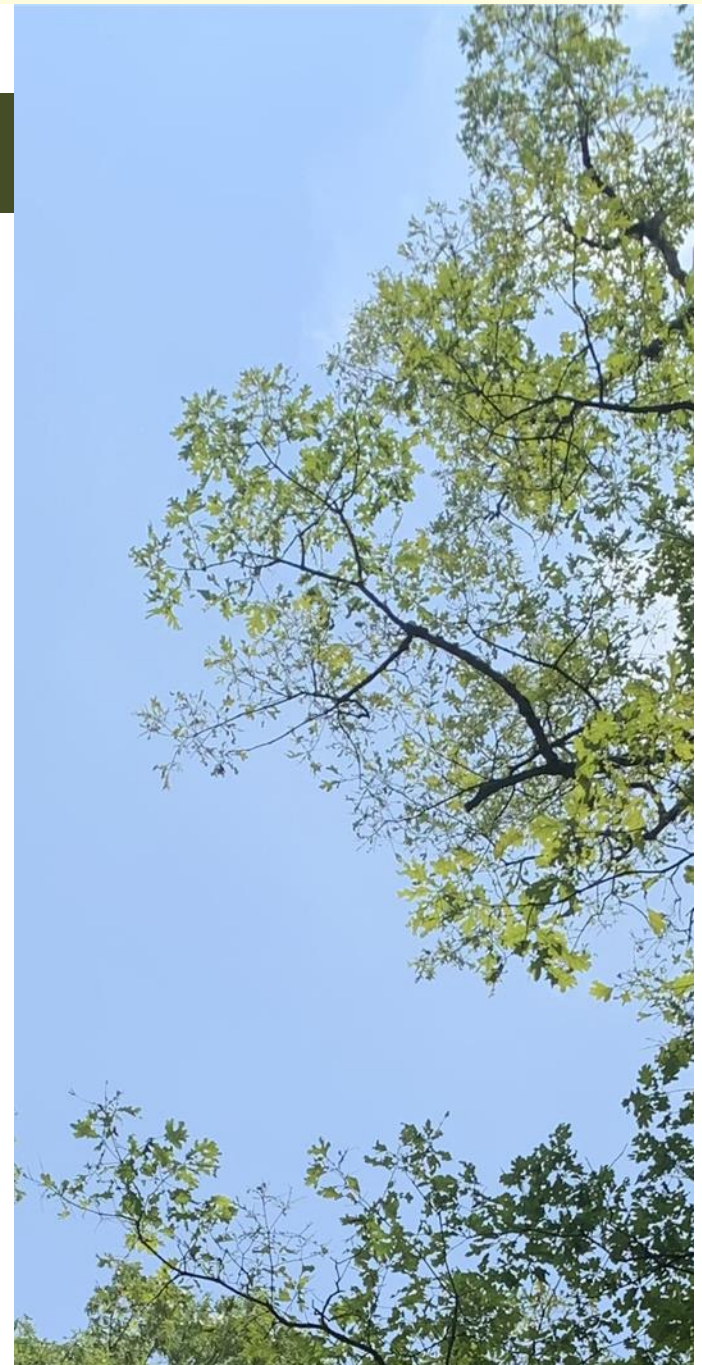
- Underwent an eradication program
 - 58,000 pounds of DDT dropped over 100 square miles in 1954
 - 1954 -1962 – Sprayed DDT
 - 1967 – Changed to Sevin
- Was thought to be eradicated with several years of no observations



History in Michigan

New trap lure was released in 1972

- 1972 – 3 counties detected moths
- 1980s – Statewide
 - Statewide Cost-Share Aerial Spray Program Administered by Michigan Department of Agriculture (MDA)
- 1990s
 - 1992-96 First large-scale defoliation



Michigan History

Michigan naturalized populations into Michigan forests in the 1990s

- Focused on dispersal of predators, parasitoids, and a fungi specific to gypsy moth caterpillars

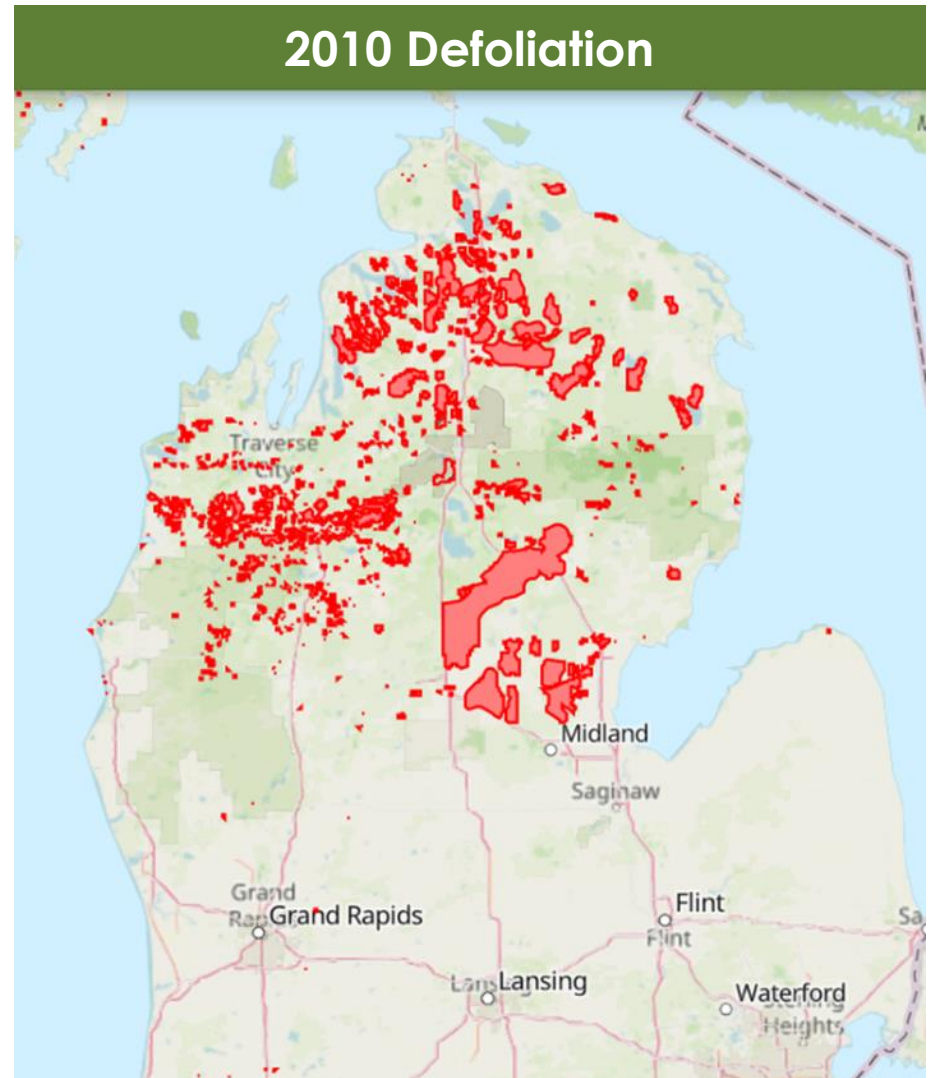
Result

- Endemic Levels last for 7 to 10+ years
- Reduced many outbreaks to 2-3 years and controlled naturally
 - Outbreaks rarely result in mortality to healthy trees or forests
- Trees of Concern Today
 - Unhealthy, stressed trees
 - Recently planted trees



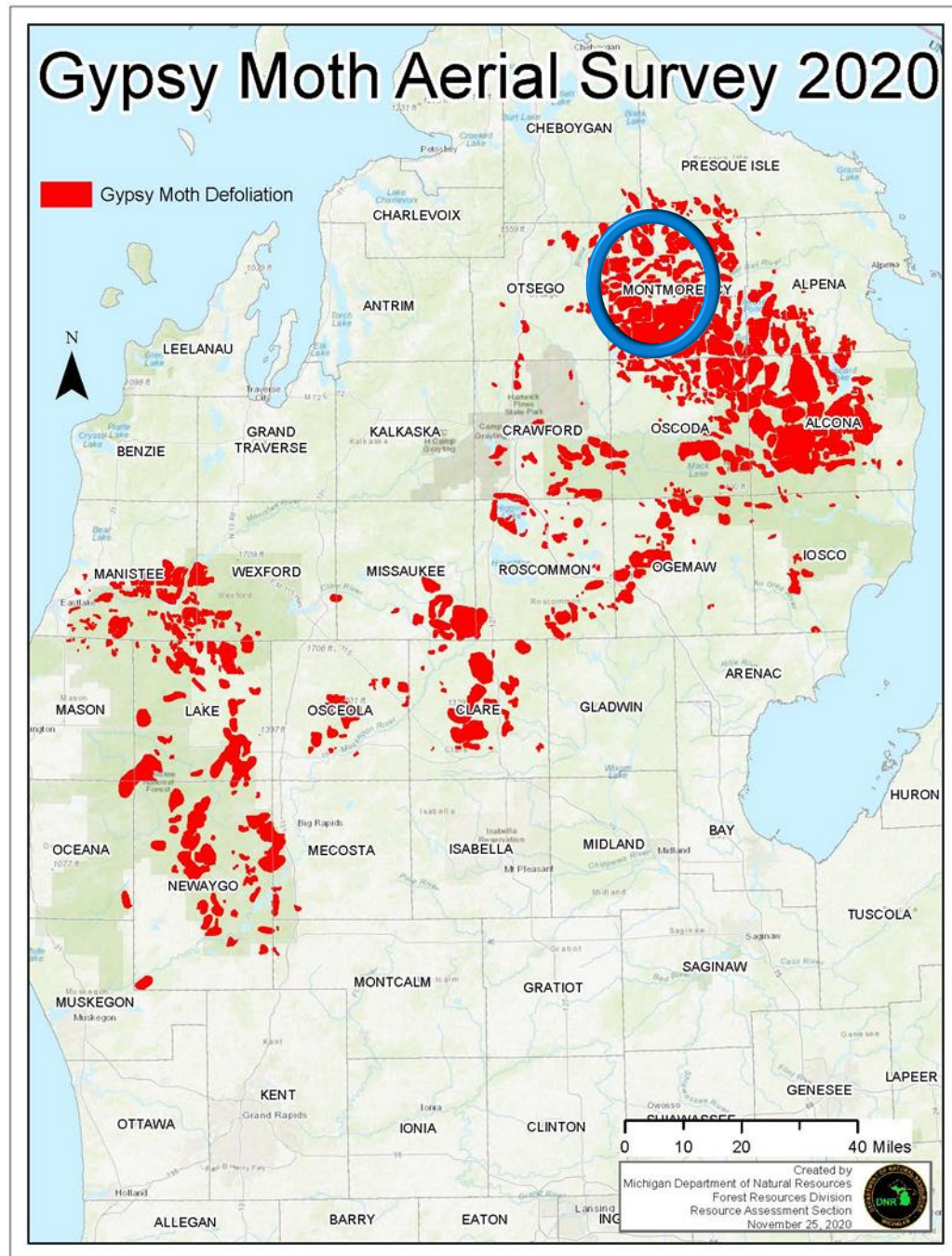
Recent Michigan History

- Late 1990s & 2000s
 - Typically, < 10,000 acres defoliated statewide
 - Very little spraying was needed
- 2006 – Dismantled Aerial Spray Program
 - Healthy trees & forests are rarely impacted
 - Expensive to administer
- 2009-2010
 - Last severe outbreak
 - > 500,000 acres were defoliated

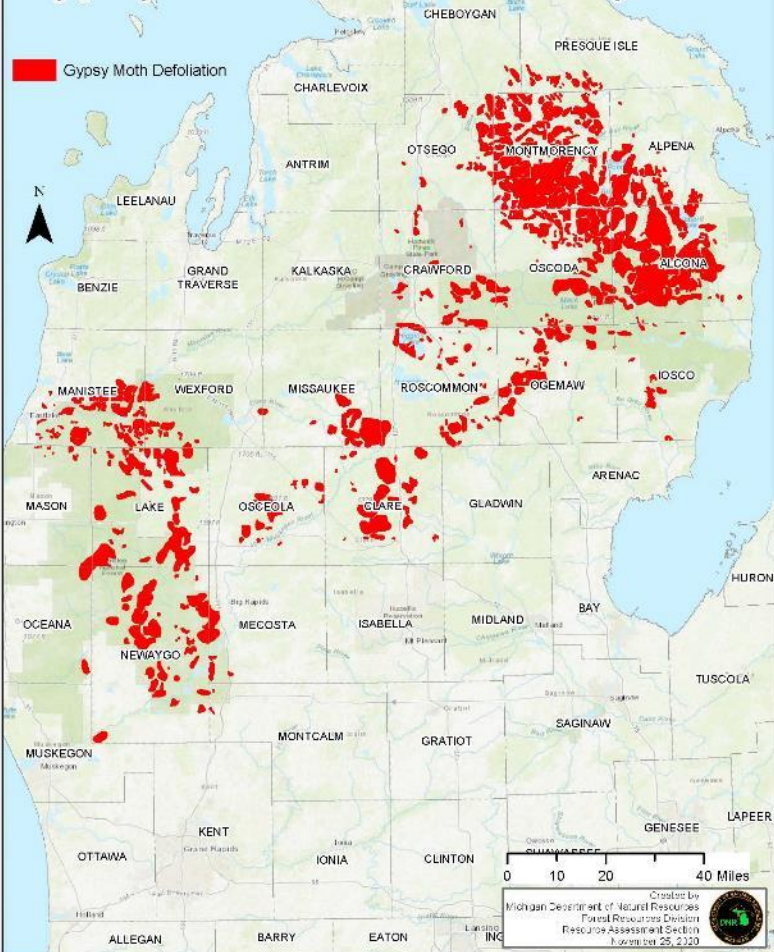


Recent Outbreak

- 2019
 - Start of the current outbreak
 - 1/4 million acres affected
- 2020
 - 950,000 acres
 - Dry conditions
 - Late frost damage to oaks at the end of May

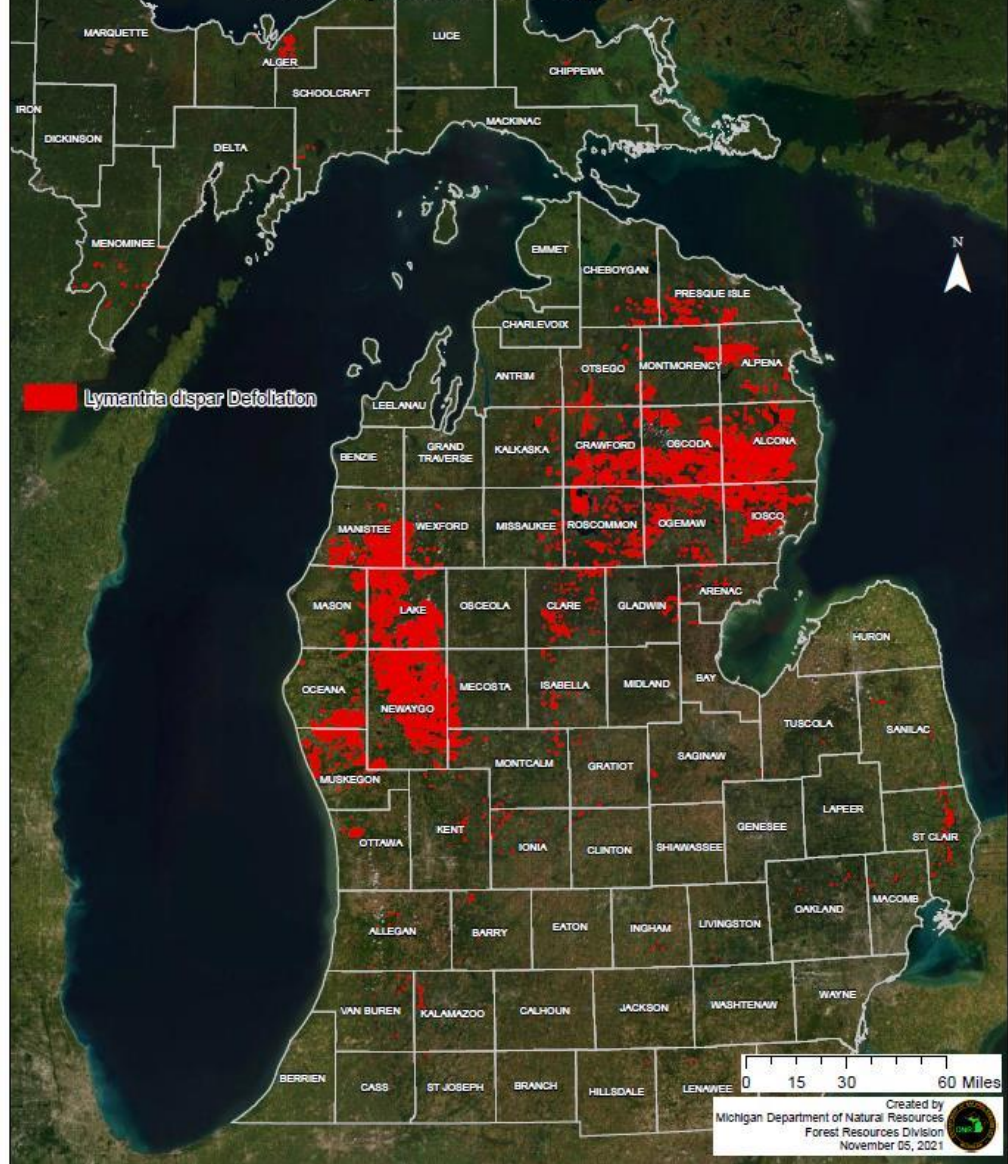


Gypsy Moth Aerial Survey 2020



Lymantria dispar Aerial Survey 2021

Formerly known as Gypsy Moth



A map of Michigan divided into its 83 counties. Red shading indicates areas affected by Lymantria dispar defoliation between 2016 and 2020. The shading is most concentrated in the central and eastern parts of the state, particularly in the Lower Peninsula. A blue circle highlights Montmorency County. A legend in the bottom left corner shows a red square next to the text "Lymantria dispar Defoliation". A scale bar at the bottom right indicates distances up to 60 miles. The map is credited to the Michigan Department of Natural Resources Forest Resources Division, dated November 05, 2021.

Things to be Aware of

- Gypsy Moth Traps



Things to be Aware of

- Treatment timing
 - Btk – Mid-Late May
 - Spraying moths
- Trichogramma Wasps



BugGuide.Net

Questions?



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Thank you!

