

Gypsy moth in Ontario

Gypsy moth (*Lymantria dispar*) is an invasive species that is native to Europe. It was first detected in Ontario in 1969. This defoliator feeds on a variety of hardwood species, preferring oak, birch, and aspen. During severe outbreaks, softwoods such as eastern white pine, balsam fir, and Colorado blue spruce may be affected. Gypsy moth outbreaks have become cyclical, typically occurring every seven to 10 years, with outbreaks lasting three to five years. Healthy trees can withstand repeated years of defoliation before branch and twig dieback start to occur.



What does gypsy moth do to forests?

- Larvae (caterpillars) feed on new foliage.
- They may also defoliate understory shrubs and plants.
- Hardwood trees can produce a second crop of leaves during the growing season enabling them to continue to grow.
- Defoliation stresses trees making them more susceptible to damage from secondary pests, drought, and poor growing conditions.

Gypsy moth life cycle

1. Overwinters in the egg stage — tan-coloured masses — often on the bark of trees.
2. In spring, eggs hatch and larvae ascend the trees to feed on the new foliage. Initially, larvae feed during the day but as they mature feeding occurs mainly at night.
3. Mature larvae, seen in early summer, are about 50 mm long, dark-coloured, hairy, with a double row of five pairs of blue spots down their backs followed by a double row of six pairs of red spots.
4. By July, the larvae are done feeding, pupate for 1 to 2 weeks, then hatch into moths.
5. Male moths are light brown and slender-bodied, while females are white, wingless, and heavy-bodied. They live only long enough to mate and lay eggs.





Control methods

MNRF does not manage gypsy moth on private land. Landowners can find reputable insect control service providers with experience in controlling gypsy moth populations by checking their local listings.

In spring, after eggs have hatched, placing burlap bands around the tree stem gives the travelling larvae a place to congregate during warm days from which they can be physically removed and killed.

In spring, just after larvae have emerged, registered insecticides can be applied to help protect trees from defoliation.

In fall and winter, physical removal and discarding of egg masses is also effective.

Tip: During a drought year, help your trees by watering them into the fall where appropriate to do so (ornamental or open grown trees). In a woodlot setting, manage trees to allow proper spacing and light to promote a healthy forest. Plant a diversity of species for a forest that is more resilient to insect and disease disturbances!

Ontario's forest health monitoring

MNRF monitors forest health across the province every year. Previous years' gypsy moth defoliation information is included in our annual Forest Health Conditions in Ontario reports, available at [Forest health conditions.ontario.ca/page/forest-health-conditions](https://foresthealthconditions.ontario.ca/page/forest-health-conditions)

Related information

Invasive Species Centre

invasivespeciescentre.ca/invasive-species/meet-the-species/invasive-insects/gypsy-moth/

Invading Species Awareness Program

invadingspecies.com/gypsy-moth/

