

# Winter Moth

*Operophtera brumata*



Winter moth is an invasive species that was originally found invading Nova Scotia in the 1930s and has since then invaded other parts of Canada and the United States. Winter moth causes severe defoliation on a wide variety of deciduous and hardwood trees.

## Adult Moth

Male moths are slightly larger than the females and are light brown with full wings.

Female moths have silver, gray body with black flecks and vestigial wings that are not capable of flying.



Male winter moth  
Robert Childs, University of Massachusetts

## Larvae

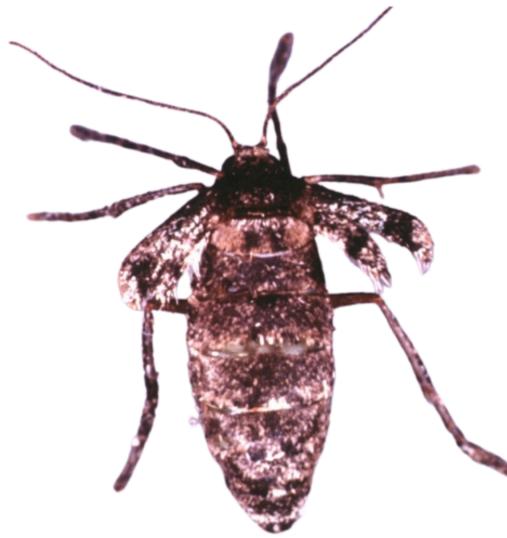
Larvae have light brown heads, a green body, and light-yellow stripes down the side of the body.



Milan Zubrik, Forest Research Institute

## Pupae

Winter moth pupae are tawny brown and spend their time in their cocoon in the soil and leaf litter.



Female Winter Moth  
Daniel Adam, Office National des Forêtsilds

## Concern

Winter moth larvae are responsible for widespread defoliation of many deciduous and hardwood trees.

- Defoliation can result in stressed trees that may cause twig and branch dieback, lower terminal and radial growth, slower wound closure, and impaired root systems.
- Secondary wood borers and decay fungi can be introduced by defoliation and decrease tree health.

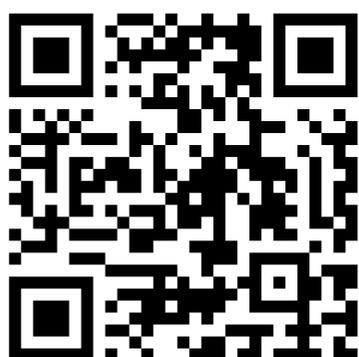


Winter moth larvae eating a leaf. Photo by Hannes Lemme, Barvarian State Research Center for Agriculture.

## Report

### Observations

Add observations to iNaturalist to help document host range and distribution



Winter moths can defoliate stands of trees and alter forest ecosystem dynamics.

Orchards can be a winter moths target and can diminish harvest, deform fruit, and decrease crop value.