

TREE DOCTOR TIPS

Winter Moth

(Operopthera brumata)

DESCRIPTION:

The male fringe-winged winter moth is often seen in homes and around lights and holiday decorations in December and January. This invasive pest arrived in the U.S. and Canada from Europe. In Canada, it is well known in Nova Scotia, Vancouver, British Columbia and other locations. In the U.S., it is found predominately in coastal Massachusetts, Rhode Island, Washington and Oregon.

HOSTS:

This moth has many hosts, including maples, several oaks, apples, crabapples and some spruces. Forested stands are particularly susceptible.

BIOLOGY AND SYMPTOMS:

Adult moths emerge from the soil in late fall and may be active until January. Females are wingless and crawl to the base of trees, where they rest and emit pheromones. The tan-colored, fringe-winged males are strongly attracted to light sources.

Mated females deposit overwintering eggs in crevices on tree trunks and branches. Eggs hatch in as early as 20 Growing Degree Days, which is a weather based indicator system used to predict plant and pest development.

Newly hatched larvae may be seen ballooning or crawling to terminal branches, where they tunnel into newly formed buds or small fruits, causing bud loss. They are green inchworms with two lateral white strips on either

side of their bodies. They feed on buds and expanded leaves until June, when inch-long, mature larvae migrate to the soil to pupate and emerge as adults in fall.

In large numbers, the maturing larvae may cause defoliation. Over several seasons, this may lead to tree decline or even death.

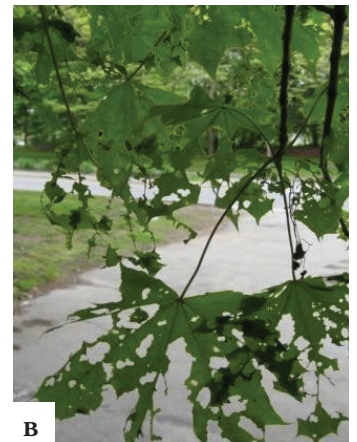
MANAGEMENT:

Good irrigation is essential for stressed trees. Dormant oil sprays, applied in early spring to egg masses on tree trunks and lower branches, offer some measure of control, along with applications of *Bacillus thuringiensis* (Bt), insecticidal soap, or other insecticides to very young larvae. However, results may vary. These offer good seasonal management and may be best choices for both commercial and residential settings.



A

FIGURE A. MALE WINTER MOTH



B

FIGURE B. WINTER MOTH DAMAGE

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.*

