

UNWANTED

Invasive Plant Pests and Diseases



Spotted Lanternfly

Photo credit: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org



Asian Longhorned Beetle

Photo credit: Joe Boggs, Ohio State University, Bugwood.org



Viburnum Leaf Beetle

Photo credit: Paul Weston, Cornell University, Bugwood.org



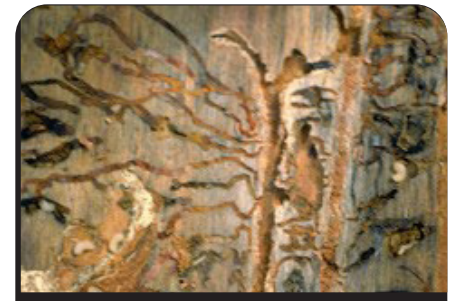
Spongy Moth

Photo credit: John Ghent, John Ghent, Bugwood.org



Box Tree Moth

Photo credit: Ferenc Lakatos, University of Sopron, Bugwood.org



Mountain Pine Beetle

Photo Credit: William M Ciesla, Forest Health Management International, Bugwood.org



Elongate Hemlock Scale

Photo credit: Lorraine Graney, Bartlett Tree Experts, Bugwood.org



Hemlock Woolly Adelgid

Photo credit: Chris Evans, University of Illinois, Bugwood.org



Balsam Woolly Adelgid

Photo Credit: <https://www.flickr.com/photos/sammarth/31434461684>



Boxwood Blight

Photo credit: Mary Ann Harsen, Virginia Polytechnic Institute and State University, Bugwood.org



Ramorum Blight

Photo credit: Joseph O'Brien, USDA Forest Service, Bugwood.org



Beech Leaf Disease

Photo credit: Yonghao Li, The Connecticut Agricultural Experiment Station, Bugwood.org



Help protect our state and economy. Find and report invasive pests.
Pest Hotline: (866) 440-7523 • Email: datcpesthotline@wi.gov

Wisconsin continually faces the threat of the arrival of unwanted, invasive plant pests. Each invasive species has the potential to impact urban and natural landscapes. Preventing the arrival of these pests is the best and most economical form of protection against invasive species. If they do arrive, early detection is key to protecting our natural resources and industries. The sections below list how to identify the pest and why it is important to prevent its arrival or spread.

Spotted Lanternfly (*Lycorma delicatula*)

Identification: Young nymphs are black with white spots, becoming red with white spots as they grow; feeding on the sap of plants. Adults are 1" long and ½" wide. Forewings are light brown with black spots, scarlet hind wings with black spots, and mated females have bright yellow and black abdomens. Adults strongly prefer the invasive Tree-of-Heaven. These sap-feeding insects excrete honeydew, which then causes black sooty mold to form.

Importance: Serious economic threat to grape, orchard, and logging industries as SLF sucks sap from the vines and trunks of more than 100 plant species, including walnut, maple, willow and oak. Learn more or report at slf.wi.gov *Currently not found in Wisconsin.*

Spongy Moth

(*Lymantria dispar*, formerly *Gypsy Moth*)

Identification: Their spongy, caramel colored egg masses can be laid on anything outdoors. Larvae hatch in May, turning greyish with 5 pairs of blue dots and 6 pairs of red dots. Male moths have grayish-brown wings with a wingspan of about 1 ½". Female moths are white and much larger, with wingspans of about 2 ½". Female moths cannot fly.

Importance: Larval leaf-feeding seriously damages natural resources. Larvae feed on more than 300 species of trees and shrubs. Repeated defoliation severely weakens trees and can result in death as well as predispose them to other pathogens and pests.

Established in 52 eastern Wisconsin counties.

Elongate Hemlock Scale (*Fiorinia externa*)

Identification: Elongate Hemlock Scale (EHS) is a sap-sucking armored scale insect with oval brown or white scale coverings that feeds and is found on the underside of hemlock, fir, spruce and pine needles. Mobile crawlers start new infestations.

Importance: EHS causes tree decline, needle loss and yellowing. EHS has been introduced into 20 eastern states and has been intercepted in Wisconsin on holiday trees, décor and hemlock nursery stock. It threatens native conifers and industry. *Currently not found in Wisconsin.*

Boxwood Blight (*Calonectria pseudonaviculata*)

Symptoms: Initial symptoms appear as dark or light brown spots on leaves, often with dark borders. Spots enlarge, often with a concentric pattern. Infected leaves turn brown and drop. Distinct black lesions may also appear on stems.

Importance: Boxwood Blight is a threat to boxwood in the urban landscape setting, since boxwood is a popular ornamental plant. Though the disease primarily affects boxwood, it can rapidly spread through the nursery system and residential landscape. It can also move on the herbaceous perennial pachysandra. *Found in a handful of southern WI counties.*

Asian Longhorned Beetle

(*Anoplophora glabripennis*)

Identification: 1-1 ½" long, shiny black and white spotted wings, long white and black-banded antennae, and slightly bluish legs. Females tend to be larger than males.

Importance: Kills healthy trees and has a long list of acceptable host species with maple, birch, buckeye, willow, and elms being the most preferred. The U.S. Department of Agriculture has quarantined parts of New York, Ohio, Massachusetts and South Carolina to prevent spread of known infestations. *Currently not found in Wisconsin.*

Box Tree Moth (*Cydalima perspectalis*)

Identification: Box Tree Moth (BTM) larvae are greenish-yellow, with black heads, up to ½" in length, developing thick black and thin white stripes as they grow. White webbed cocoons are hidden among leaves and twigs.

There are two adult moth color variants; the more common has white wings with thick dark brown borders; the less common has brown wings with a white streak on the forewing. BTM can have 1-5 generations a year depending on geographic temperatures.

Importance: BTM is a serious pest of boxwood. Damage occurs when larvae feed on boxwood, skeletonizing leaves, causing defoliation and dieback. They will also attack the bark of the plant, which causes it to dry out and die. BTM is native to East Asia and was found in Ontario, Canada in 2018. *Currently not found in Wisconsin.*

Hemlock Woolly Adelgid (*Adelges tsugae*)

Identification: Hemlock Woolly Adelgid (HWA) is a small aphid-like insect native to Asia. Females lay white, waxy egg sacs that look like the tips of cotton swabs at the base of hemlock needles on the underside of branches.

Importance: HWA has killed millions of hemlocks in over 20 eastern states. Wisconsin restricts hemlock nursery stock from HWA-infested areas. Contact DATCP to see if you need a compliance agreement to import hemlock from other states. *Currently not found in Wisconsin.*

Ramorum Blight (*Phytophthora ramorum*)

Symptoms: Rhododendrons, azaleas, lilacs and other hosts may show brown leaf spots with dark margins and shoot dieback called Ramorum blight. Ornamentals can spread the disease to other susceptible shrubs and trees like oak trees nearby.

Importance: This pathogen has a wide host range and the potential to move to forests causing sudden oak death. Concerns lie with the potential of this pathogen to move through the U.S. nursery system and into natural environment from there. *Not known to occur in Wisconsin.*

Viburnum Leaf Beetle (*Pyrrhalta viburni*)

Identification: Adults are approximately ¼" long, yellowish brown to light brown in color. Larvae are up to ½" long, shiny greenish yellow to light brown and covered with dark dots and dashes.

Importance: Viburnum leaf beetle larvae chew holes in viburnum leaves in the spring creating a lace-like pattern, causing significant damage to viburnum shrubs. *Found in Wisconsin's Brown, Dane Iron, Kenosha, Marathon, Milwaukee, Ozaukee, Racine, Sheboygan, Vilas, Walworth, Washington, Waukesha, and Winnebago counties.*

Mountain Pine Beetle

(*Dendroctonus ponderosae*)

Identification: The Mountain Pine Beetle (MPB) is about ¼" long and lives under the bark of pine trees. Damage caused by MPB is more readily observable than the insect itself. When attacked by MPB, a pine tree often responds by producing a "pitch tube" in an effort to push the beetle out.

Importance: This insect has killed entire mountainsides of trees in the West. It carries a tree-killing fungus and gathers huge numbers of beetles to overwhelm tree defenses, enabling it to kill healthy pine trees. It could kill white, red, and jack pine in Wisconsin. *Currently not found in Wisconsin.*

Balsam Woolly Adelgid (*Adelges piceae*)

Identification: Balsam Woolly Adelgid (BWA) adults are tiny, soft-bodied insects which appear as white, woolly tufts on true firs. A purple stain is produced when crushed and rubbed between fingers.

Importance: BWA attacks true fir trees, including balsam fir and Fraser fir. Repeated attacks weaken and kill trees, causing twig gouting, branch mortality, and tree death over the course of several years. There are 2-3 generations produced each year depending on temperature. BWA is established in the Northwestern U.S. and several Eastern states. *Currently not found in Wisconsin.*

Beech Leaf Disease

(*Litylenchus crenatae*, a nematode)

Symptoms: A microscopic roundworm or nematode that causes dark banding between veins on leaves, leaf disfigurement, branch dieback and canopy thinning.

Importance: American beech, European beech, and possibly other non-native species of beech are susceptible. In some areas, extensive mortality of understory beech seedlings and saplings has occurred. *Not known to occur in Wisconsin.*

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