

WHAT IS AN INVASIVE SPECIES?

An invasive species is one that is not native and whose introduction causes harm or is likely to cause harm to Michigan's economy, environment, or human health.



YOU CAN HELP PROTECT MICHIGAN'S FORESTS FROM INVASIVE PESTS AND DISEASES WITH THESE THREE STEPS:

1. EDUCATE

Learn more about invasive species that threaten Michigan forests.

2. REPORT

Report invasive species to your local CISMA. You can also report directly through the MISIN app or website: MISIN.MSU.edu/Report

3. PREVENT

Learn about prevention strategies for individual species at:



FIND MORE INFORMATION

The Oakland County Cooperative Invasive Species Management Area (CISMA) is a partnership of local cities, villages, townships, county agencies and conservation organizations working to control invasive species. More information is available from your municipality and at:

OAKLAND COUNTY CISMA WEBSITE:

www.OaklandInvasiveSpecies.org

OAKLAND COUNTY CISMA FACEBOOK PAGE:

www.Facebook.com/OCCISMA

MICHIGAN DNR FOREST HEALTH:



MSU EXTENSION - SPONGY MOTHS



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INVASIVE FOREST PEST GUIDE

REPORT FOREST PESTS TO
YOUR LOCAL CISMA!

WWW.OAKLANDINVASIVESPECIES.ORG
WWW.FACEBOOK.COM/OCCISMA

WHY ARE INVASIVE FOREST PESTS BAD FOR MICHIGAN?

Forest pests change Michigan's landscape by directly and indirectly damaging native species, inhibiting plant growth and causing tree death. Early detection is vital for the protection of Michigan agriculture, business and forests.

HOW DO FOREST PESTS GET HERE?

Forest pests are often transported as eggs in or on logs, firewood, timber imports, pallets and through pallet yards, train and rail yards, packing supplies, and outdoor furniture.

FOREST PEST IMPACTS

Pests can form dense infestations that affect healthy mature trees, suck sap from plants increasing mold growth and defoliate trees. These impacts often lead to tree damage or death, causing:

- Loss of habitat or food sources for wildlife
- Loss of tree species diversity
- Hazards from falling limbs or trees
- Tree removal and reforestation costs
- Loss of property value and recreational opportunities
- Increased erosion along streams and lakes

Hemlock Woolly Adelgid
Adelges tsugae
Watch List Species
Detected in Michigan
Look for hemlock woolly adelgids throughout winter.

*A prohibited species is one that is illegal to sell, import, cultivate, or transport.

BE ON THE LOOKOUT FOR THESE INVASIVE FOREST PESTS AND DISEASES!

There are different types of forest pests and diseases to keep an eye on. Reporting them and preventing their establishment is critical to protecting Michigan's landscapes.



Emerald Ash Borer
Agrilus planipennis
Prohibited Species*
Established in Michigan
Look for D-shaped holes in ash tree bark.
(Not necessary to report this species)



Spotted Lantern Fly
Lycorma delicatula
Watch List Species
Not detected in Michigan



Beech Leaf Disease
(may be caused by foliar feeding worm)
Litylenchus crenatae
Not detected in Michigan
Look for leaf banding of light and dark stripes.

BEECH LEAF DISEASE

BEECH BARK DISEASE



EMERALD ASH BORER



Spongy moth
Lymantria dispar
Established in Michigan
Left: male moth
Right: female moth
(Not necessary to report this species. See link on back for more info)



OAK WILT

Beech Bark Disease
(caused by scale insect and fungus)
Cryptococcus fagisuga & *Neonectria* spp.
Detected in Michigan
Look for fuzzy white spots coating bark and branches (insect), or red fungal spores in clusters on bark (fungus).



Oak Wilt
(caused by fungus)
Bretziella fagacearum
Detected in Michigan
Look for premature leaf drop and browning in July and August.



HEMLOCK WOOLLY ADELGID



Asian Longhorned Beetle
Anoplophora glabripennis
Watch List Species & Prohibited Species*
Not detected in Michigan
Look for pencil-sized holes and damage in maple and other trees.



ASIAN LONGHORNED BEETLE