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GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
LANSING



DANIEL EICHINGER
DIRECTOR

January 10, 2020

Cheshire Township
471 41st St.
Allegan, MI 49010

SUBJECT: Hemlock Woolly Adelgid in West Michigan

Hello,

Please share the included bulletin from the Michigan Department of Natural Resources, Invasive species update: hemlock woolly adelgid, with your township workers.

If you would like to receive updates on the status of invasive hemlock woolly adelgid in your area, please send your email address to Cheryl Nelson at nelsonc6@michigan.gov.

Regards,

Cheryl Nelson
Forester, Forest Health Response Team
Michigan DNR – Baldwin Field Office
2468 W. 24th St.
Baldwin, MI 49304

Cell: 231-287-1714
Fax: 231-745-8743

Invasive species update: hemlock woolly adelgid

Hemlock woolly adelgid, an invasive insect that can kill Eastern hemlock trees, has infested areas of Allegan, Ottawa, Muskegon and Oceana counties.



A native of Asia, the hemlock woolly adelgid (HWA) probably arrived in the eastern U.S. on a shipment of hemlock from Japan. It was first identified in Richmond, Virginia in 1951 and by the 1980s had spread to large tracts of forest in the Appalachian Mountains.

In 2001, an [external quarantine](#) restricted the shipment of hemlock to Michigan from states infested with the adelgid. Isolated populations of HWA were discovered in Michigan beginning in 2006. Though these populations were successfully eradicated by 2015, new infestations were found in Ottawa and Muskegon counties in that same year. Infestations were found in Allegan and Oceana counties in 2017.

Both private and public lands are affected, including seven state parks within these four counties.

The problem:

Hemlock woolly adelgids suck sap out of hemlock trees. Their feeding can kill needles, shoots and branches. Over time, tree growth slows, and trees may take on a grayish-green appearance. Without treatment, infested trees can die within four to 10 years.

Most of Michigan's 170 million hemlocks are found in forests, dunes and river corridors, mainly along the Lake Michigan shoreline and in the northern Lower and Upper peninsulas. Hemlocks also are found in residential areas, parks and developed areas throughout the state.

Loss of hemlocks would have a significant impact on natural and developed areas in Michigan. Hemlocks provide shelter for deer and nesting birds and keep forest streams - including designated trout streams - cool and clean. Weakened trees on a home or park landscape can become hazards and may have to be removed.

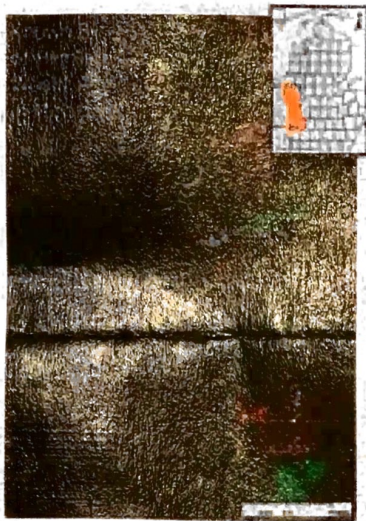
HWA can be moved to new locations on birds, mammals, infested hemlock nursery trees, logs and/or firewood. The insects also can be moved by humans if clothing, vehicles or gear come in contact with an infested tree.

Management:

The Hemlock Woolly Adelgid Coordinating Committee provides direction for survey, management and outreach efforts. It includes representatives from the Michigan Departments of Natural Resources and



Agriculture and Rural Development, Michigan State University, the U.S. Department of Agriculture's Forest Service and the Ottawa County Parks and Recreation Department.



Because certain insecticides are effective in treating trees with HWA, it is possible to save hemlocks that have been infested. Currently, management efforts are focused on identifying all existing HWA populations and assuring they are treated in order to contain the infestation. Management also involves outreach to enlist the public's help in identifying and reporting new HWA locations and preventing the spread of HWA by people and their activities.

Response efforts in Allegan, Ottawa, Muskegon and Oceana counties include surveys of hemlock forests on public and private lands and treatment of infested trees in these areas. Additionally, surveys are underway in Lake Michigan lakeshore counties from Berrien to Emmet in the Lower Peninsula and from Mackinac to Menominee in the Upper Peninsula.

Statewide management efforts are being undertaken by the Michigan departments of Natural Resources and Agriculture and Rural Development, along with Cooperative Invasive Species Management Areas (CISMAs) which are groups of non-profit and government agencies, businesses and volunteers working together to tackle invasive species in their regions.

Quarantine:

Along with the 2001 external quarantine, MDARD issued an [internal quarantine](#) in 2017, restricting the movement of hemlock nursery stock and unprocessed hemlock products from or within Allegan, Muskegon, Ottawa and Oceana counties. To date, no infestations have been found outside of this core area.

Public outreach:

Public support is vital. Identifying and reporting populations of hemlock woolly adelgid helps prevent its spread. State agencies and partners are engaged in education and outreach efforts across the state.

Key messages for the public:

- Hemlock woolly adelgid, an invasive tree pest, is infesting Eastern hemlock trees in west Michigan.
- Learn how to identify hemlock trees and hemlock woolly adelgid.
- Check your hemlock trees from late fall to early spring for signs of hemlock woolly adelgid.
- Know how to report hemlock woolly adelgid if you find it.
- Prevent the spread of hemlock woolly adelgid. Do not move hemlock trees, branches or firewood within or out of the quarantine area.

Finding and reporting HWA:

Identify hemlocks

Since HWA feeds and reproduces only on hemlock trees in Michigan, it is important to distinguish hemlocks from other conifers like pines or spruces.

Look for:

- Pyramid-shaped trees up to 75 feet tall.
- Drooping or feathery branches.
- Short (1/2 inch), flat needles growing individually from the sides of twigs.
- Needles that are dark green on top with two parallel, white stripes underneath.
- Papery cones about three-quarters of an inch long hanging downward from branches.



Look for HWA



Late fall through early spring is the best time to check hemlock. Look on the undersides of branches for evidence of round, white ovisacs near the base of the needles.

Up close, ovisacs look like balls of spun cotton and may appear alone or in clusters. The short video [Hemlock woolly adelgid: invasive species in Michigan](#) provides helpful identification tips.

Other, less damaging pests easily can be mistaken for hemlock woolly adelgid. Be sure to review photos and descriptions of common hemlock woolly adelgid look-alikes at www.michigan.gov/HWA.

Report findings

Trees infested with HWA should be reported by one of the following means:

- Email the Michigan Department of Agriculture and Rural Development at MDA-Info@michigan.gov
- Phone the MDARD Customer Service Center at 800-292-3939.
- [Use the Midwest Invasive Species Information Network \(MISIN\) online reporting tool](#)
- [Download the MISIN smartphone app and report from your phone](#)

Be prepared to report the location of infested trees and, whenever possible, take one or two pictures of infested branches to help confirm identification. To avoid spreading hemlock woolly adelgid, do not collect sample branches or twigs.

The MISIN smartphone app will take a GPS location point if a report is made at the site; it also will allow you to upload photos with a report.

How you can help:

The cooperation of local leaders like you is essential in helping to spread the word about hemlock woolly adelgid. Please share information about HWA in public meetings, with homeowner and community associations, and through your websites, newsletters and local news media.

Presentation resource: Cheryl Nelson, a forester with the DNR's Forest Health Response Team, is available for presentations in your community. Contact Cheryl at 231-287-1714 or nelsonc6@michigan.gov to plan for a visit.

Print resources: These materials are available at no charge for distribution in offices or at meetings. Contact Cheryl Nelson at 231-287-1714 or nelsonc6@michigan.gov for more information.

- Hemlock Woolly Adelgid Forest Pest Alert – printable PDF in large format or small format.
- Hemlock woolly adelgid pocket identification card.

Online resources: Use these resources on websites, social media or for distribution or presentation in meetings.

- Hemlock woolly adelgid website www.michigan.gov/hwa – identification and reporting information for website or email use.
- Hemlock Woolly Adelgid Look-Alikes – printable PDF.
- Hemlock Woolly Adelgid: Invasive Species in Michigan – YouTube video.
- HWA in Michigan – Recommendations for Landowners (MDARD) – printable PDF.
- How to treat hemlock trees – guidelines for homeowners (MSUE) – printable PDF.
- Insecticide application limits for treating hemlock woolly adelgid – printable PDF.

Regional management and contact information:

- Statewide HWA education and outreach

Contact Cheryl Nelson, DNR Forester
231-287-1714
Nelsonc6@michigan.gov

- State Parks

The DNR is surveying state parks on or near the Lake Michigan shoreline and state parks near lake shores in the Upper Peninsula. DNR is treating HWA in Mears, Silver Lake, Duck Lake, Muskegon, P. J. Hoffmaster, Saugatuck Dunes and Holland state parks – spanning the shoreline along the four affected counties. This work is being undertaken by the Michigan Civilian Conservation Corps Forest Health Crew with funding from the Great Lakes Restoration Initiative.

Contact Heidi Frei, DNR Natural Resource Steward & State Park Forest Health
Freih@michigan.gov

- Other State and Federal Land

Other state and federal land within 20 miles of known HWA infestations or within five miles of Lake Michigan is being surveyed by DNR Forest Health Program staff.

Contact James Wieferich, DNR Forest Health Specialist
wieferichj1@michigan.gov

- Allegan, Ottawa, Muskegon and Oceana counties

Infestations on private and municipal lands in Allegan, Ottawa, Muskegon and Oceana counties are being surveyed and managed by the West Michigan CISMA, supported by funding from the Great Lakes Restoration Initiative, the Michigan Invasive Species Grant Program and Ottawa County.

Contact Drew Rayner, West Michigan CISMA Coordinator
616-402-9608
Drew.rayner@macd.org

- Berrien, Van Buren, Mason, Manistee, Benzie, Leelanau, Grand Traverse, Antrim, Charlevoix and Emmet counties

In west coast counties outside the infested area, hemlock stands within five miles of the Lake Michigan shoreline are being surveyed through a collaborative effort between the Nature Conservancy, the Michigan Dune Alliance and CISMAs serving these counties. Survey efforts are supported by the Michigan Invasive Species Grant Program.

Contact Kaldis Grants, Conservation Associate with The Nature Conservancy
(616) 916-5257
Kaldis.grants@tnc.org

- Mackinac, Schoolcraft, Delta and Menominee counties

In the Upper Peninsula, surveying along Lake Michigan is being conducted by multiple CISMAs under the direction of the Alger Conservation District and Lake to Lake CISMA. Survey efforts are supported by the Michigan Invasive Species Grant Program.

Contact Teri Grout, Alger Conservation District Executive Director
906-387-2222
teri.grout@macd.org

Michigan's Invasive Species Program is cooperatively implemented by the Department of Environment, Great Lakes, and Energy; the Department of Natural Resources; and the Department of Agriculture & Rural Development.