

Michigan's Maple Maladies

Maple trees hold a special place in Michigan's forests. These beloved trees are important not only to the land they grow on, but for the people that depend on them. The seeds, inner bark, and leaves of maple species are used by animals large and small for survival. Sugar Maple is well-known for its sweet sap, which humans have used to make maple syrup for hundreds of years. Lumber from maple trees is also used to make durable furniture and flooring for the home. They are also frequently planted as ornamental or shade trees, as they have dense canopies and have brilliant fall colors. With so much going well for them, it's no wonder why people care so deeply about maples! The Barry Conservation District receives many calls every year about the health of maple trees in the yards or forests of residents. Thankfully, many of the causes for sickness in maple trees are not serious, with the tree either making a full recovery or requiring very little treatment.

Insects are an abundant source of problems for the maple tree. Over 150 different species of insects feed off of maples, but very few cause long-lasting problems. A few common culprits from this year are the Cottony Maple Scale, Maple Sawfly, and the Twig Girdler. The Cottony Maple Scale is a small, legless insect that feeds on the sap of maples. As they feed and age, they grow white, cotton-like masses to protect their bodies. While each insect does not feed that much, if there is a large surge in their population, the sheer amount of insects feeding can cause whole branches to die. Treatment for this pest is to either spray the young scales with pesticide before they can protect themselves with their "cotton", or to inject the tree with pesticide so that it is delivered to the scales as they feed.

Maple Sawflies are a type of wasp that lays their eggs in the small stems of leaves, also known as petioles. The grub will eat the insides of the petiole when it hatches, causing the leaf to fall to the ground. These green leaves usually drop in May or early June. While the loss of leaves in large outbreaks may cause some stress for maple trees, this pest does not cause serious damage to the tree. Finally, the Twig Girdler is a beetle that uses a whole host of trees, including maple, to grow their larva. Adult beetles will emerge in Mid-August and continue will into October. These insects lay their eggs in the twigs, and chew a V shaped groove to kill the sapwood and protect their unhatched young. Over time, the weight of the larva or fast winds cause these twigs to break off at this groove, appearing like the twigs were cleanly cut off. While these insects can be unsightly, they also do not cause long term damage to the tree. Populations can be controlled by destroying any fallen twigs.

Insects don't cause all the problems for maple trees, however. By far, the most common complaint about maple tree health is from fungal infections. These range from the completely benign Tar Spot, to the very serious Verticillium Wilt. Tar Spot is a fungal disease that occurs all across Michigan, and in almost every maple species. It causes small black dots to form on the leaves, which can spread to become unsightly blotches on the leaf surface. Fortunately, this causes no noticeable stress to the tree itself. The most common way to control outbreaks is to rake up and burn the fallen leaves in the fall.

Maple Anthracnose is another fungal disease, which is only marginally more harmful to maples than Tar Spot. It is a common disease that comes up in the Spring, during cool and wet weather. During these times of rapid fungal growth, large brown and black lesions will form on the leaves, causing a wilted appearance. Maple trees can bounce back from infection during the summer, but repeated infections can cause stress and die-back in vulnerable trees. Pruning infected branches, and ensuring the tree has plenty of water during the summer season can help weakened trees make a comeback.

Verticillium Wilt is a soil-borne fungal disease, and it commonly effects maple species. This fungus, rather than infecting the leaves, attacks the tree through the roots and plugs up the sapwood with fungal tissue. The fungus itself can lay dormant in the soil for years, and can suddenly show up when trees have been impacted by other stresses such as extreme weather. There is no known treatment for the disease, but healthy trees can recover by growing a callous tissue that sections off the fungus from the rest of the tree. Pruning dead branches and provided any water and nutrients the roots may need will help promote vigorous regrowth.

This is just the tip of the iceberg when it comes to tree pests and diseases, and it can be overwhelming to try and find out what is specifically happening to your tree. The Barry Conservation District has a forester on staff who can help ease the burden! District Forester Ben Savoie can provide on-site assessments to help you with your trees, providing expert advice and referrals to local professionals. Through the Forestry Assistance Program, these services are provided at no cost to you. If you are interested in learning more about your trees, or are looking to manage your woodlot, send Ben an email a ben.savoie@macd.org or give him a call at 269-908-4134.



This month by the numbers:

Site Visits - 12
Site Visit Acreage - 506
Private Sector Referrals - 11
Public Sector Referrals - 9
Media Occurrences - 5
Outreach Events - 1

Open Referrals:

08-20-34 – Landowner in Calhoun County, Leroy Township with small woodlot of approximately 2 acres, interesting in doing timber harvest to finance projects on home. Forest is primarily mixed oak, Red Oak dominant. Interested parties should contact District Forester for contact information.

