"What's Eating My Oaks?"

As we get into the heat of summer, we take advantage of the wonderful shade trees in our community. However, you may have noticed that Oak trees are having a rough time this season. A frequent question that comes through the Conservation District is: "What is wrong with my tree?" There are many diseases and pests that can affect Oak trees, and the weather plays a role as well, so the answer isn't always simple. Not all of these are a death sentence for your trees! Knowing the symptoms and proper treatment can help save vou some heartache by keeping your Oak trees healthy and

Oak is a common image of strength and resilience, but even the mightiest of Oaks is subject to the weather. When late frosts occur, the damage to all species of trees is often dramatic. The buds and early leaves of trees can rapidly die after being exposed to freezing temperatures. Most trees can survive this kind of damage, and will try to regrow leaves later in the year. Another common Spring weather problem for trees is having far too much water. Most Oaks show signs of flooding stress in as little as one week of floodlike conditions. Oaks that have been affected by this may have some branches die, make leaves later, or have smaller leaves. On the other extreme, not having enough water can become an issue in the summer. The leaves of Oak trees in times of above average temperature and little rain will start to wilt and turn brown. Fortunately, these problems are temporary for healthy trees, so the preferred treatment is to see how the tree recovers, and apply fertilizers if needed.

The diseases of Oak trees often mimic the symptoms of weather stress, and they often get mistaken for one another. Oak Wilt, an invasive species of fungi that can kill a fully grown Oak tree in a matter of months. Oak Wilt is usually found when a landowner noticed that all of the leaves on their Oaks have wilted and dropped mid-summer. This is not diagnostic though, the only ways to confirm Oak Wilt are to find the "mushroom" growing underneath the bark of recently dead trees, or to send a live branch sample into a plant pathology lab. Disease that look similar include Bacterial Leaf Scorch, and Oak Anthracnose. Bacterial Leaf Scorch is a bacterium that lives in the sapwood of trees, causing the wilting of leaves. Unlike Oak Wilt, it can affect other species than Oak, such as Maples, Mulberries, and Sycamores. Also, where Oak Wilt can kill a tree very quickly, Bacterial Leaf Scorch can take years, and can prolonged by keeping trees vigorous through pruning of infected branches, mulching, and fertilization. Oak Anthracnose is the least dangerous of all the Oak Wilt look-a-likes, but it is found frequently after wet springs. It is another fungal disease, but this one's life cycle is entirely within the leaves of the tree instead of the sapwood. It starts as irregular blotches of brown near the veins of leaves, but grows into the similar wilted conditions you see in Oak Wilt. Pruning may be necessary on severe infections, but Oaks can recover from this without treatment.



This month by the numbers:

Site Visits - 10 Site Visit Acreage - 140 Private Sector Referrals - 10 Public Sector Referrals - 7 Media Occurrences - 3

Training and Events:
MI SAF Conference
MACD Virtual Conference

Open Referrals:

03-20-17

Landowner in Fennville area seeking to clear softwood poletimber and harvest mixed hardwood poletimber. 27
Acres across multiple contiguous parcels.

08-20-32

Landowner in Irving Twp.,
Barry Co. applying for
enrollment in QFP, eligible for
NRCS cost-sharing and
seeking TSP. Managing
primarily for game habitat.
90 Acres, lowland mixed oak
forest converting to maple.



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These diseases all have symptoms that appear on the leaves, but there are also insects that can affect the leaves of Oak trees, or just eat them outright! Two-Lined Chestnut Borer, despite the name, is a common pest of Oak trees. It's larva feed on the sapwood of weakened trees. causing the leaves to wilt and die. The adults emerge after chewing "D" shaped holes through the bark, which is the most clear sign of an infestation. Systemic insecticides are the most efficient way to treat this pest.

Another bug that has obvious signs is the Gypsy Moth. Reviled by most who have witnessed an outbreak, the caterpillars of this invasive moth can grow to such appetite and population that trees have been stripped bare of leaves in the past. Oftentimes, the best thing to do about this is wait, as there is a fungus that was introduced that specifically targets Gypsy Moth, and it just takes some time for it to spread

There is another insect that has been causing problems for Oaks in Barry County, the Oak Leaf Roller. The larva will eat the buds and leaves of Oaks, which can make the tree look like it is dead or dying early in the year. One thing to look out for the "rolled" leaves, where the caterpillars fold the leaves over themselves to pupate. These are not an annual pest, so there is no recommended treatment aside from waiting it out.

After reading about all the things that could be happening to your Oak Trees, it can be easy to get discouraged and think they are all doomed. Fortunately, Oaks live up to their reputation, they can withstand the bad years and most pests and diseases don't give them trouble for long. All that needs to be done is give them proper care to keep them healthy and vigorous. The good news is that you are not alone in this! The Barry Conservation District has a forester on staff who can help identify what is affecting your trees, and how to keep them strong. You can request a free onsite assessment from District Forester Ben Savoie at 269-908-4134, or send an email to ben.savoie@macd.org



Right: Oak Leaf Roller larva Left: Oak Wilt spore mat



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