



The Plant Doctor's LANDSCAPE TIPS

By Dr. David L. Roberts, The Plant Doctor LLC a.k.a. The Tree Doctor

OAK WILT GRIDLOCK

INTRODUCTION

Oak Wilt, caused by the introduced fungus *Bretziella fagacearum*, seems to be gaining increasing prominence in Michigan (Photo 1). In fact, and not to trigger a fire alarm (but maybe I should) in my conversations with various arborists, landscapers, government representatives and others in the arboriculture/plant industry, the consensus among these folks is that Oak Wilt is “exploding” throughout Michigan. Unfortunately, I suspect that at least part of the reason for this explosion is that many of us don’t know what to do when faced with this deadly disease. And costs play a major factor with addressing the Oak Wilt threat. I can’t relate how many times I have been asked to review a possible Oak Wilt situation, and our clients become impotent on how to respond. To be fair, a portion of the public wants to do the ‘right thing’ and are willing to ante up to make the proper decisions to manage the disease (Photo 2). Frankly, those who are willing to do the ‘right thing’ do not appear as populous as those who become impotent to act on Oak Wilt matters. In my experience, there are a variety of causes for “Oak Wilt Gridlock”.

Photo 1 shows an oak tree affected by Oak Wilt. The property owners, upon realizing the tree in the photo was dying from Oak Wilt, wanted to stop the disease from spreading to other trees (right in picture). This was the reason they contacted me. Complicating the matter is that the tree is in the right-of- way of the County Road Commission. Having known the supervisor of the road commission for years, I invited him for input. I had proposed using my Glyphosate Stump Cup ‘Chaser’ technique and including the site as part of my research. However, the supervisor could not authorize the use of Glyphosate or other chemicals and methods, creating possible litigious scenarios. The supervisor further explained that the road commission is probably not responsible for stopping Oak Wilt but is responsible for removing dead/hazardous trees. Complicating the matter even further, the supervisor explained that according to his investigations, the property boundary likely passed through the tree, requiring another neighbor’s involvement. Hence, the two neighbors and the County Road Commission would likely need to agree to an understanding, possibly through legal channels. While my

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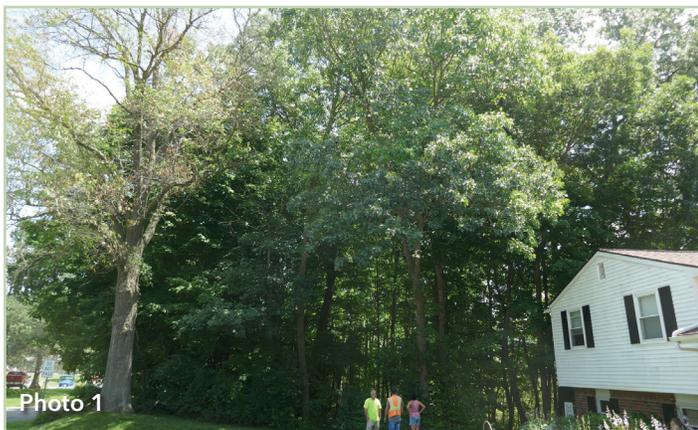


Photo 1

Photo 1: The tree to the left in the photo contracted Oak Wilt via Overland Spread. The property owners sought the most conservation-minded procedure available to prevent disease spread to other trees (right). Unfortunately, the tree is in the Right-Of-Way of the County Road Commission, which sees its responsibility as tree removal and not necessarily Oak Wilt containment and eradication. Complicating this matter is that a second property owner owns half of the afflicted tree. Who has jurisdiction and can all parties agree on remediation? Gridlock!

CAUSES OF OAK WILT GRIDLOCK

Over my more than 40 years of experience with Oak Wilt throughout this state, I have been disappointed if not disillusioned with Michigan’s responses to addressing the seriousness of the disease. I thought it might be interesting to discuss several causes for Oak Wilt Gridlock.

Jurisdiction (“It’s Complicated”): Or put another way, “Who’s responsible?”. I recently visited a site where “jurisdiction” was front and center. This site exemplifies the Gridlock I have encountered ever since I started dealing with Oak Wilt many decades ago.



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Glyphosate method would likely be inexpensive, simple, and effective, it would be folly to even consider the more costly and destructive methods promoted by the Michigan Department of Natural Resources (DNR) and the Oak Wilt Qualifications (OWQ) (see below), which would entail the destruction of many healthy trees by trenching and/or herbicide application; neighbors rarely agree on these matters, especially the costly and destructive techniques. So, what will happen? Possibly nothing . . . and the disease may continue to spread due to "Gridlock".

People are Frugal: Okay, so let's face the music. As consumers, we are always looking for the better/best deal. Sometimes it might be surmised that we are even "cheap". Well, we are (sorry, but true!) people are not inclined to spend their hard-earned income on things that they don't fully understand. Oak Wilt is a surprise for many people, and something I have commonly heard is, "not budgeted for" (Photos 2 & 3). Many property owners have been caught flat-footed and have never previously heard of Oak Wilt. Once they become aware of the disease and its potential impact on their property and financial well-being, they typically try to educate themselves by engaging in intensive searches on the web for information, which is often contradictory, confusing, and rife with misinformation.



Photo 2

Photos 2 & 3: Probably the most common concern is finances when people encounter Oak Wilt. Gail and her husband, who own a modest property on Houghton Lake, committed a significant portion of their lifetime savings to remediate Oak Wilt on their property (Photo 2); they loved their trees. Unfortunately, the disease continued to spread on their property and to other neighboring properties because an arborist only trenched 3' deep. In Photo 3, an affluent community with property on Lake Michigan (Inset) couldn't agree on the finances (Gridlock), resulting in Oak Wilt spread along the Lake Michigan shoreline for three years before containment was attempted.



Photo 3

Hinterland Natural Spread: In more remote areas such as Michigan's natural forests and woodlands, Oak Wilt can develop without property owners' knowledge. And in cases where the Oak Wilt is identified and known, people often do not take responsibility, allowing the disease to build momentum and continue to spread (Photo 4). When people fail to take responsibility for Oak Wilt outbreaks on their property, there may be legitimate reasons for doing nothing . . . such as budget and environmental concerns. Failure to address the Oak Wilt threat will result in further underground and overland spread of the deadly disease.

Misinformation: There is abundant information about Oak Wilt from a wide variety of sources. Unfortunately, some, if not much of it, is bad, misleading or incomplete (Photo 5). Those of us who are professionals in arboriculture may contribute to indecision and ultimately Gridlock by not providing the full range of options



Photo 4

Photo 4: In forests and woodlands, Oak Wilt outbreaks are common but often receive no attention, leading to continuing expansion and infection of trees on other properties in surrounding communities.



Photo 5

Photo 5: At this exclusive golf course in northern Michigan, a single oak tree contracted Oak Wilt from trimming near a power service. An OWQ arborist recommended tree injections, which failed to contain the spread of the disease. Subsequently, the OWQ arborist recommended the costly and destructive Bruhn Model; the GC Superintendent didn't want to sacrifice so many trees. The disease continued to spread widely via Underground Root Graft transmission due to indecision (Gridlock) over the ensuing years.

so that our Michigan clients can select what is best for their locale and budget. For example, those companies that specialize in tree removals may primarily involve recommendations of cutting trees down, even though tree removal will not stop Oak Wilt. Those companies that specialize in tree injections advise tree injections, which can be quite costly and not always successful (Photo 5).

Authoritative but Biased or Preferential Advice: In my opinion, so-called authoritative sources of Oak Wilt information are often biased and narrow-viewed. When the public learns they have an Oak Wilt problem, they often turn to what they may believe are the most qualified and authoritative resources. These authoritative sources may include the Michigan DNR, the Oak Wilt Coalition (OWC), universities (such as Michigan State University - MSU), professional societies (examples: International Society of

Arboriculture - ISA, Michigan Green Industry Association - MGIA), MSU Extension Offices, and, of course, Arborists and Landscapers. The Oak Wilt Qualification (OWQ) program, administered by representatives from the DNR, OWC, and ISA-Michigan, was designed to provide in-depth training for arborists (who complete the course) to have greater expertise in addressing Michigan's Oak Wilt issues. Unfortunately, the focus of the OWQ is often one of the most costly and destructive methods for containment and eradication of Oak Wilt. For example, according to many sources, OWQ specialists are taught that the primary go-to and

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scientifically proven procedure (untrue) is the Bruhn Model, which is costly and destructive in its two primary variations: 1) Root Graft Disruption (RGD), and 2) Girdle-Herbicide (GH=Garlon 4/Double Girdle). Usually, to accomplish the goals of either Bruhn Model procedure, multiple tiers of healthy trees must be sacrificed . . . sometimes 10, 20, or even 30 healthy trees are destroyed (Photo 6). Attendees of the OWQ program are not provided with the full gamut of information they should be given. And, in my opinion, some of the teachings are not only biased, but incomplete. An increasing number of Michiganders and Arborists, including those who have completed the OWQ program, are coming to me for assistance because the destructive and costly methods recommended by those associated with the OWQ are utterly impractical in most Oak Wilt situations (Photo 7).

CONCLUSIONS

Over the last 40+ years of research on Oak Wilt, I have developed variations and combinations of the Tier Tree Model and the Glyphosate/Stump Cup techniques, which often require few to no sacrifice of healthy trees, no exorbitant expenses, and far fewer impacts to local environments. I have summarized these procedures in various articles published in *The Landsculptor* over many years. Whenever I examine an Oak Wilt site, I routinely present all management options so that people confronted with Oak Wilt can make the most informed decisions that align with their desires and budget. In fact, my presentation of the most costly and destructive options first has been a boon to my research for better Oak Wilt remediation methods; I have



Photo 7

Photo 7: At this older condominium site, where trees are considered a valuable resource (actually an arboretum), destruction of trees is strictly forbidden. Trees had been dying for several years over a wide area before someone figured out the cause was Oak Wilt. An OWQ-trained arborist elected to work with me by implementation of my Glyphosate/Stump Cup 'Chaser' procedure (Inset Left). Only two trees across this extended area exhibited damage from Glyphosate (Inset Right); both are likely to survive and recover with time. No further spread of Oak Wilt has occurred in the last three seasons.

never experienced a situation in the last 30+ years, where the most costly and destructive methods were selected over the less impactful procedures I have developed (Photo 8). If we can develop and present more options that are more palatable to the public, perhaps we can start to stem the tide of the explosive advancement of Oak Wilt. These options need to be practical, effective, and cost effective if we are to avoid the Gridlock that is so prevalent today. 🌿



Photo 6

Photo 6: In this aerial view, an oak (yellow arrow) became infected with Oak Wilt from Overland Spread. The first arborist the property owner contacted was OWQ and recommended the Bruhn Model (double white lines=trenches); due to tree density and size, implementation of this procedure would have resulted in the destruction (and cost) of approximately 32 healthy trees. Hesitating for over a year (Gridlock), the property owner finally reached me; my implementation of the Glyphosate/Stump Cup 'Chaser' procedure to the lone infected oak was 100% successful in stopping the spread of Oak Wilt.

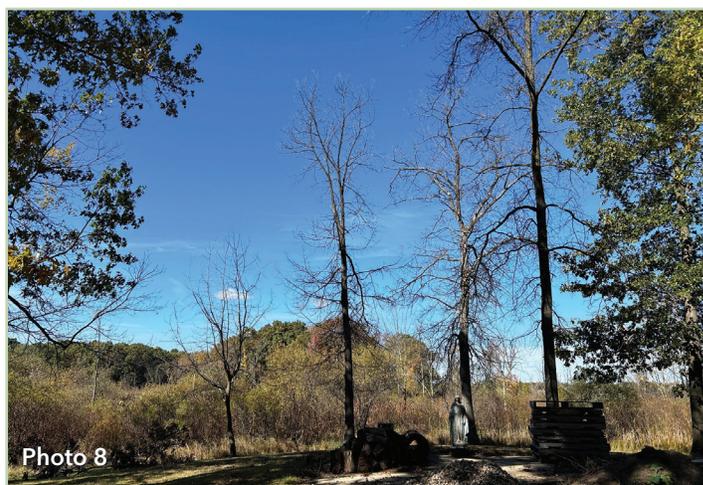


Photo 8

Photo 8: An Oak Wilt epicenter had developed for two years at this property near Fenton, Michigan. Four trees had succumbed to the lethal disease. Implementation of my Glyphosate/Stump Cup 'Chaser' procedure only to diseased trees three seasons ago stopped the spread of Oak Wilt and saved numerous other oak trees from destruction (Inset).

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