The Plant Doctor's LANDSCAPE TIPS

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2015 IN THE REARVIEW MIRROR

Photo 1: Imagine being the owner of a primo piece of lake property and waking up one day to learn that many of your oak trees will die of oak wilt due to improper pruning in the spring.

Photo 2: Typical symptoms of oak wilt include wilting, precipitous defoliation and tree death. Containment, eradication and protecting nearby healthy trees can cost many $1,000s.

INTRODUCTION:

"Only 31 more days of shopping until Christmas" – that's what I heard on the radio on my way into work this morning. With that announcement and hearing the constant cadence of Christmas music on the radio and in stores and restaurants, I develop mixed emotions ranging from cheer to panic. I don't know if it's because I'm getting older but it seems that lately the years go by more quickly. While I'm happy for this time of year, it also means last minute and harried power shopping for my family and friends. What the heck do I get?!?!

In the past December issues of *The Landsculptor*, I have sometimes written very personal messages and sometimes I have written the standard (hopefully) informative articles about issues in the industry. This year I decided to follow the latter with a short personal message in closing.

2015: A BRIEF REVIEW:

There were a number of issues that upon recollection represented highlights for me this past year. I realize that my issues may not be the major issues for those of you who might be reading this article. Due to time and space constraints, here is my short list.

OAK WILT: Without question, oak wilt became my number one focus during 2015. With initial reports and requests for assistance coming in during mid-June through early July, the oak wilt momentum increased to hysterical proportions and continued all the way through the end of October (Photos 1 & 2). I received daily emails and phone calls from individuals all over Michigan and even other states; some of these individuals apparently found me on the web due to my website. It has become very stressful for me to have to inform residents that, yes indeed, your oaks have oak wilt and that they are all going to die. Even more stressful is when I must blame the arborist who unknowingly or flippantly ignored the no-pruning rule and subsequently pruned the oaks in the spring when oak wilt is easily transported to fresh wounds from nearby infected trees. Oak wilt is probably the number one issue in Michigan at

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this time when destructiveness and costs in addressing the disease are concerned. During the summer and into the fall, I traveled helter-skelter all over the lower peninsula of Michigan chasing down oak wilt sites, trying to help the public and arborists who are called upon to confront the disease. Of some intrigue for me, oak wilt never becomes boring or uninteresting. Every site and every situation is different. At many of the sites, I met wonderful Michiganders who, while very depressed about losing many of their valuable trees, were nonetheless eager to help me with research that could lead to advancing our knowledge about oak wilt to help others avoid encountering the same devastation. During 2015, I found three sites where property owners were willing to let me experiment with a theoretical chemical containment of oak wilt using the herbicide glyphosate. I'm not sure what will happen over the next couple of years at these sites, but I'll keep you apprised. During my extensive travels I also found numerous misconceptions or misunderstandings about oak wilt from the general public . . . and even some professional arborists. One recent example was an oak wilt site I had visited and confirmed earlier in the season. The property owners had followed my recommendations of trenching and trunk injections to hopefully contain and eradicate oak wilt from the property. Recently, in late November, while getting bids for removal of the diseased trees this winter, an "arborist" with a claimed 30 years' experience with oak wilt told the property owners that trenching and trunk injections do not work, that they had wasted their money and efforts in these management efforts, but that stump grinding and vacuuming up all the sawdust was the only way to deal with oak wilt. Wow!! I am amazed what people believe and the information they are conveying. As oak wilt gains momentum in Michigan and as we learn more from research and observations, I expect to write more publications and perform more programs on oak wilt to convey our increasing knowledge about Oak Wilt. Even though Oak Wilt has been around for many decades, it is simply amazing how much we don't know about the disease.

WINTER INJURY: The winters of 2014 and 2015 were two of the most severe winters in recent memory; many trees and plantings were lost not only due to outright cold temperature injury or desiccation but also due to rather mild effects that render even viable plants unacceptable in some locations where quality is demanded. As I write this, the experts predict a fairly mild winter. Let's hope so!! I must admit, the fall of 2015 was one of the best I can remember.

HERBICIDE ISSUES: Misapplications of herbicides or misunderstandings of herbicides represent some ever increasing concerns for our landscapes and trees. While many of the mistakes are encountered in the homeowner domain, occasionally professional applicators cause some damage on non-target plants. The damage is most often the result of unintended drift and/or the leaching/water movement of the herbicide. There are also some poorly worded label precautions. This past summer, I even visited a couple sites with lingering DuPont Imprelis issues; however, the formerly widespread and destructive Imprelis problem is largely resolved. Herbicide related problems seem to be on the rise. I can only advise people to be more cautious, especially when applying a new product, a new chemistry or a new formulation with which they have little to no experience.

TRELLIS RUST: I suspect that most people in our industry have either heard of Trellis Rust (TR) or have encountered it by now. TR is a relatively new disease on ornamental pear (Pyrus spp.) imported from Europe (aka European Pear Rust). It is actively on the move and is spreading across Michigan. In locations where it currently exists, the disease is building up from an initial minor nuisance problem to a highly destructive disease (Photos 3A, 3B and 3C). During 2015, I learned more about TR and passed some of that information on in publications and lectures (Photo 4). I can't yet say whether the disease is capable of killing trees, but I can suggest that the trees with high levels of TR are not acceptable specimens in the average

Photo 4: The author happened to catch Trellis Rust's reproductive structures on its juniper host tree on May 6. These gelatinous horns are producing spores that will attack pear.

Photos 3A, 3B & 3C: The newly introduced (from Europe) Trellis Rust is very harmful to ornamental pears. Photo A was taken on May 6, 2015, and illustrates the devastation wrought to these three pear trees from infections during 2014-note little foliage and virtually no flowering. Photo B was also taken on May 6 of somewhat normal flowering pears even though Trellis Rust is building up on these trees some distance away from those in 3A. Photo C was taken several weeks later on June 19-the three trees in Photo A are even more devastated by spring infections. Obviously, TR can cause landscape trees to be unacceptable.

Photos 5A, 5B & 5C: Beech Bark Disease (BBD) research has revealed that we might be able to obtain significant control of the Beech Bark Scale (and hence the lethal Nectria fungus) with very limited treatments. Photo A is an untreated control tree, Photo B is a treated tree eight years after one treatment of the Talus and Photo C shows the very healthy canopies of treated trees.

landscape. At many locations in SE Michigan, for example, arborists have removed pear trees from high value landscapes due to their unsightly health and appearance.

BEECH BARK DISEASE: BBD and Beech Bark Scale (BBS) continue to spread in Michigan even if the spread is rather slow. 2015 marks the 8th year since a group of us (including Gary and Megan Kuhlman, and Banner Sales' Doug Fenner and Dan Banks) initiated some BBD trials in northern Michigan in 2007. We are still attaining excellent control of BBD from some treatments primarily after only one application back in 2007. Because the BBS is rather slow to colonize and infest trees, followed by the deadly Nectria canker fungi, it appears that we will be able to obtain perhaps 5 or 8 years of control with just one treatment (Photos 5A, 5B and 5C). This is really exciting from research and practical management standpoints. I'm even hoping that possibly 10 years of reasonable suppression of the BBS can be obtained. For more information on BBD, refer to the April and June 2013 issues of The Landsculptor. BBD may be coming to a location near you soon.

COMMON PESTS AND DISEASES: While I haven't personally witnessed it, many arborists/landscapers claimed that scale insects were far more prolific and common in 2015 than in previous years. Perhaps I'm just getting used to seeing and ignoring some of the more common stuff. In the disease realm, issues such as tar spot on maple, scab on Malus sp. and anthracnose have been quite variable. In particular, Tar Spot had been increasing in incidence throughout Michigan until a couple of years ago when the disease seemed to crash and almost disappear in some areas (Photo 6). I do not have information that the tar spot fungus is less capable of surviving harsh winters (2014 & 2015) than mild winters, but I suppose that is possible. Regardless, it would be very difficult to predict the severity of various diseases and pests for 2016 ... in my opinion.

SEASONS GREETINGS: With the recent terrorists' attacks in Paris, France, and with continuing hostilities in many parts of the world, especially the Middle East, it is easy to become depressed or melancholic during the holidays. As Americans, we need to remember the many freedoms we enjoy that many others do not. That is apparently part of the reason why certain minority extremists of people in other cultures or religions are not pleased with the United States and other "western" countries. Many people around the world (and even in the U.S.) are less fortunate, either being poor, oppressed by others and/or, perhaps, may not have sufficient food to eat or shelter from the cold. I try to remember the trials and tribulations many have in this sometimes cruel world.

I am reminded at this time of year of the many friends and family I am lucky to have in my life. Regrettably, some of those family and friends have passed on. Others have poor health and cannot get around much anymore. Yet, I'm still very thankful. I feel very fortunate to have been associated with this industry for . . . what? More than 35 years?!?! It never gets boring, it's always challenging and it's a heck a lot of fun working with all of you!!

I'll close by sharing a photo my brother found this year when sorting through some of my Uncle Robert's possessions. I like to say I ride Harley "Hog" Davidsons for fun and pleasure; this was my first "Hog" when I was 8 years old (Photo 7). Live Long and Prosper!

Photo 6: While many diseases and pests typically increase and decrease from year to year, tar spot seems to have taken a very prominent disappearing act in some regions of Michigan since the two record cold winters of 2014 and 2015.

Photo 7: Although the author is known to occasionally ride a Harley "Hog" Davidson for pleasure, this was his first "Hog" when he was eight years old. The photo was found among the possessions of deceased Uncle during 2015.

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