

Tree Services®

FALL 2021

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Taking Tree Care to New Heights

PERFORMING A TREE SPECIES ANALYSIS

Selling a varied plant palette.

THREE PESTS TO WATCH

Are these coming to a tree near you?

LEAF MULCHING

A method that works for less labor.

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EDITOR'S LETTER



On my porch this summer, a flicker caught my eye and there it was—a spotted lanternfly (SLF). I had been reporting on these invasives for years, but had never encountered one in my yard. But I knew they were coming. Inevitable. While the SLF was new, I had already been witnessing the impact of hemlock woolly adelgid (HWA) on my NY hikes. Quiet, sacred stretches of forest, whose shady understory once highlighted the gorgeous “redwood of the east,” were clearly showing its effects. Factor in

emerald ash borer (EAB) and the very existence of some native trees is at risk—as with American chestnut blight. Identifying and treating such invasives (T-6), is key not only for tree care, but for ongoing biodiversity.

When it comes to biodiversity, John Fech, a horticulturalist with the U of Nebraska-Lincoln, promotes the need for greater tree variety on landscaped properties (T-3). Better yet, he takes you step by step through the process of performing a tree species analysis, which can then be professionally presented to clients.

Another valuable how-to article comes from Tim Downey of Aesthetic Landscape Care (page T-8). Downey has been advocating leaf mulching—and making it work for his business—since 2008. (*Turf* featured him in 2012!) Read how his method has revolutionized arduous autumn leaf clean-ups!

Christine Menapace

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ON THE COVER

The gorgeous fall colors of a sweetgum mean leaf clean-up season is here. Find a better alternative to traditional methods in this issue of *Tree Services*. (Image: Adobe Stock / Maslov Dmitry)

COVER: JESSICA TOAL,
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Performing A Tree Species Analysis

Promoting, justifying, and selling a plant palette of greater diversity and health.

By John C. Fech

Do your clients have too many of too few tree species? Probably. An over-abundance of just a handful—such as elm, eucalyptus, Austrian pine, ash, silver maple and linden—is problematic. With species-targeting maladies such as Dutch elm disease and emerald ash borer, over-reliance on a particular tree, tempting as it may be, usually leads to big problems. Any property can be greatly improved with an evaluation aimed towards achieving greater tree diversity.

Have The Conversation

Among the services you provide to clients, is a tree species diversity analysis one of them? Or maybe that's not the right term. "Right Trees, Right Place" or "Let's Grow the

Good Stuff" might get the point across better to customers. When you're making the pitch, use terms and concepts they can relate to, such as an HVAC service contract. Create the analogy that periodic landscape assessments are essential to the continued health of the plantings, just as regular heating and cooling system inspections ensure equipment is operating efficiently. When the time is right, a walk and talk with the property owner is a great opportunity to point this out and transform problem plantings into a profit center.

Create A Simple Sketch

No expensive tools are needed for this one—just a sketch pad, or graph paper, and a pencil. Identify each tree and plant grouping and look for ways to introduce a more

Kentucky coffeetree is a good example of a tree with attractive fruit, which can be a plus or minus depending on the client.

diverse group of species. A simple tear-off pad with your company logo and contact information on it will help keep the notes you make associated with your business. (Just about any printer can make one up for you in a few days at very low cost.)

When sketching, it's helpful to designate like-species with similar shapes such as ovals, circles, and other geometric shapes, even if there is only one tree involved. Doing so helps define the space and the plant within it, drawing attention to the current placement in the landscape. After the tree species are identified and marked on the pad, make a couple of quick notes about their obvious condition issues, such as "moderate Diplodia tip blight infection" or "constant Japanese beetle infestation." These notations will help make the case for removals and replacements as you progress through the process.

Identify Targets

In order to diversify, some ornamentals may need to be removed and replaced. (In

(Continued overleaf)

Performing A Tree Species Analysis

(Continued from previous page)

fact, “will” is much more likely than “may.”) The most logical approach is to inspect and document the condition of each tree on the property, especially ones close to targets. What are targets? Targets are people and items of value. In the “people” realm, pay close attention to areas where the clients are likely to congregate such as the deck, gazebo, driveway, and porch. How much time do they spend in these locations, aka the “frequency of occupation?” The valuable “items” are generally the obvious ones including the house, and such elements as swing sets and/or fences. However, it’s always helpful to ask the question, “Which areas do you, your family members, and guests tend to hang out?” This question often brings out a response you may not have expected. “Oh, we’re going to install a bocce court over there next week,” or “Herbert sometimes parks his car under that bigleaf maple way over there,” is the sort of information that can affect a landscape plan.

With the targets now in mind, go back to the simple sketch and color the target areas in with a red pencil or similar marker. The key point is to draw associations between problematic trees and property targets. When a client sees them together, s/he is more likely to be convinced to remove and replace less than desirable specimens.



Cracks are a physical separation of bark, sapwood, and often heartwood. Cracks pose a serious problem to the tree and the landscape.

Consider Condition

The next addition is to enhance the initial tree notations with a deeper dive on structural condition defects such as cracks, co-dominant leaders, girdling roots, basal decay, branch/trunk decay, and exposed root damage (See photos below for examples). Depending on the age of the tree and the length of time the defects have been in place, it may be feasible to take corrective action, especially if the tree is a valued species. If however, significant trunk decay is present on an overplanted species, then the best move is to mark it for replacement.

In addition to structural condition defects, previous poor arboricultural practices made by inexperienced tree service providers are common in a landscape. Problematic conditions caused by excessive elevation, lion’s tailing, topping (yes, that’s still done today), poor pruning, and lack of proper pest control

methods, often leave a tree suffering in a state where it is not likely to return to good health. Make the following four factors known to a client: 1. obvious visual appearance issues; 2. structural condition defects; 3. poor tree care history; and 4. valuable targets within reach. Pointing out these issues can decrease the hesitancy to remove a tree from the landscape.

If yet another convincing influence is needed, inform the client that the standard fall distance associated with any defective species is 1.5 times the tree height, not just the actual height. For clients still clinging to the desire to retain a tree in poor condition, creating a visual helps. Techniques such as asking the client to hold the end of the tape measure while you walk out to the potential fall distance, using bright colored marking paint on the ground, and/or making a dashed line on the simple sketch will provide the necessary visualization.



Trunk wounds that have failed to close can be problematic long term.



Co-dominant or tri-dominant leaders usually create included bark and cut off water and nutrient flow.



Girdling roots that wrap around the trunk create a significant structural weakness.

PHOTOS: ALL PHOTOS CREDIT OF JOHN C. FECH, UNL



Hackberry is a sturdy, relatively pest-free species for the overstory.



Seven sons tree is great for small to medium size spaces and has four-season appeal.

To add further credence to the tree species analysis, call in a specialist. An International Society of Arboriculture (ISA) Certified Arborist, especially one with the TRAQ (Tree Risk Assessment Qualification) has the training and experience to identify and evaluate the relative risk of each defect found, as well as to point out any additional flaws that were not immediately apparent. ISA Certified Arborists can assist with providing necessary details for the remove/retain proposal.

1/3 Rule, 1/10 Rule

In mowing operations, the 1/3 rule—never taking off more than a third of the leaf blade surface area—is a standard. The 1/10th rule is a good guide for ornamentals. In other words, no more than 10% of any one genus should exist in the landscape.

One tenth? Really? Yes, really. Oh, sure you can fudge a little when it comes to diversification within a genus, especially if there are lots of species choices, such as with oak. Shingle oak, red oak, sawtooth oak, bur oak, white oak, English oak, and other oak species can diversify a landscape almost as much as introducing different genera.

The key to following the 1/10th rule is having an “in-hand” list of well adapted, slam-dunk tree species that can work well in various settings. Sometimes called a Plant Palette, it can be created and customized for the local area based on information from nearby arboretums, botanic gardens, university extension staff, and relevant experiences from co-workers, distributors, and veteran nursery vendors. For example, if you’re in the Washington DC area, then Dumbarton

Oaks and the National Arboretum are good sources; the Leaning Pine Arboretum and the Santa Barbara Botanic Garden are great resources in the central California area; and the Morton Arboretum and Chicago Botanic Garden provide excellent species information for landscapes in northern Illinois. Just a few I like are the seven sons tree, hackberry, and Kentucky coffeetree (pictured page T-3).

The Final Pitch

So what does the final pitch look like? The best pitch has two parts—the current and the proposed. Since greater diversity and improved overall tree health are the goals, drawing in red Xs and adding up the total number of species before and after should be integrated into the tree species analysis. Breaking it down with lists of trees to be removed and replanted, and increased species introduced into the landscape, summarizes the overall plan well for the client. It also helps both client and landscaper start and stay on the same page. ■

Fech is a horticulturist with the University of Nebraska-Lincoln and certified arborist with the International Society of Arboriculture. The author of two books and over 200 articles, he focuses his time on teaching effective landscape maintenance techniques, water conservation, diagnosing turf and ornamental problems, and encouraging effective bilingual communication in the green industry. He works extensively with the media to extend the message of landscape sustainability, making over 100 television and radio appearances each year. All Photos Credit of John C. Fech, UNL.

Do you have a comment? Share your thoughts in the Comments section of the online version of this article at TurfMagazine.com. Or send an e-mail to the Editor at acosgrove@group.com.

PHOTOS: ALL PHOTOS CREDIT OF JOHN C. FECH, UNL



Noticing previous problems, such as hail damage, might be obvious or may require the assistance of an ISA Certified Arborist.



Included bark causes a constriction of each stem and reduction in nutrient and water flow; structural weakness is also a common outcome.

Three Tree & Shrub Pests To Watch

EAB, HWA, and SLF: Are they coming to a tree near you?

By Brian Feldman and Marc Mayer

Last December, a CNN article declared 2020 as the year of scary bugs. But 2021 has perhaps been worse with the return of the infamous murder hornets, 17-year-dormant Brood X cicadas, spotted lanternflies, and more.

Unfortunately, pests can sabotage the enjoyment of outdoor spaces. And 75% of people deemed outdoor spaces as indispensable this past year, according to a survey conducted on behalf of TruGreen by OnePoll. To ensure outdoor spaces remain a place of reprieve, here's the latest information on some of the most problematic invasives that affect trees and shrubs.

Emerald Ash Borer

Originally from Asia, the emerald ash borer (EAB) was first discovered in the Detroit area around 2002. Strong flyers, they have since spread to 35 states (AL, AR, CO, CT, DE, GA, IL, IN, IA, KS, LA, MD, MA, MI, MN, MO, Nebraska, NH, NJ, NY, NC, OH, OK, PA, TN, TX, VA, WV, and WI) and four provinces in Canada.

Though half an inch long, the metallic green EAB causes great damage to the circulatory systems of green, white, and black ash trees. Adults emerge in late May (or earlier in warm weather), with females laying eggs shortly thereafter. Upon hatching, larvae quickly bore into the tree, feeding on the cambium and disrupting the tree's vascular system. Feeding damage inhibits the tree's ability to transport photosynthates, water, and nutrients between the roots and leaves, resulting in canopy thinning, branch dieback, and epicormic sprouting.

Often, EAB presence and damage may not be obvious to clients after the first year. However, EAB use sensory organs to detect the presence of other insects and plant volatiles given off from feeding. Therefore, EAB will migrate where others are feeding year after year.

After pupation the next spring, adults dig their way out, leaving a distinct exit hole in the shape of a "D". The unique exit holes, coupled with flagging of branches or defoliation, are indications of infestation. Increased bird activity is another potential indicator, since birds will dig to reach larvae.

Early detection is critical to salvaging the tree; if defoliation is 40-60%, there may be no chance of remedying the damage. Before arriving at a property, know if possible infestations have been detected in the area; if so, chances of infestation are probable. Binoculars and a keen eye will be necessary to confirm infestation and determine the appropriate treatment plan—be it a root zone injection, direct trunk injection, or removal. After assessing the level of damage, and determining if the infestation is recent, a systemic insecticide is the preferred treatment option. Current guidance also suggests treating all ash trees within a 15-mile radius for protection.

The choice of insecticide is dependent upon formulation, timing, application technique, and equipment used. For best results when conducting soil drenching or injections, use dinotefuran or imidacloprid, or a combination of both in liquid form. For dinotefuran specifically, it's best to apply in early spring; imidacloprid can be applied in both spring and fall.

For direct trunk injections, emamectin benzoate is the recommended insecticide. This method requires drilling into the infected tree and using specialized equipment to administer the proper dosage per tree size. Using diameter at breast height tape (DBH), measure the tree trunk at chest height—approximately 4.5' off the ground.



Spotted lanternfly.

Once DBH is determined, cross-reference it with the product label for the dosage rate and administer accordingly. It's important to make sure the application is as uniform as possible around the tree to ensure material is well dispersed. Trunk injections can last up to three years, but a soil injection should be reapplied every one to two years, as long as there is pest activity.

When removing infected trees, check state and federal regulations. Many states have rules regarding removal and disposal of infested trees. Many have also banned distribution of firewood. The USDA Animal and Plant Health Inspection Service (APHIS) provides federal guidelines for tree removal and proper disposal for many invasive pests.

It's important to report any infestation to the local agriculture extension office. Reporting is more critical than ever following the lift of quarantine regulations in early 2021.

The USDA has begun developing a biological control using parasitic wasps to reduce EAB populations. These wasps are natural predators of EAB in Asia and have shown some promise for isolated control in the U.S. without negatively impacting ecosystems. It's currently too early to know how effective this strategy will be over time.

Hemlock Woolly Adelgid

Originating in Asia, hemlock woolly adelgid (HWA) was first found in Virginia in the 1950s; in the 1980s the infestation rapidly spread, wreaking devastation on the natural hemlock forests in the Southern Appalachian Mountains. Woolly adelgid has since spread into at least 17 states, from the Smoky Mountains through Maine.

According to the Arbor Day Foundation, “In 2007, the Virginia Tech College of Agriculture and Life Sciences reported an estimated 50% of the eastern hemlock range had been affected.” A more recent study published by Multidisciplinary Digital Publishing Institute forecasts that “by 2030 hemlock will be almost entirely lost from forests south of southern New England... and completely lost from forests by 2050.”

HWA are small—about a quarter of an inch—but are visible due to the white, cottony substance that covers their bodies, and their congregation in clusters along the base of twigs, under needles. (See photo).

Though small, their impact is mighty. As a year-round pest, their ability to reproduce asexually results in multiple generations between July and November. They extract sap—which contains beneficial nutrients necessary for tree survival—at a rapid rate. Infested hemlocks lose color, drop needles, and look increasingly bare. More dramatically impacted hemlocks may lose limbs.

While treatment of hemlocks in forests is problematic, according to the USDA Forest Service, “...chemical controls, such as the use of systemic insecticides and horticultural oil, have proven effective in controlling adelgids in yards, gardens, and parks.”

This is done by performing either an injection or soil drench with the active ingredient imidacloprid into the vascular system. With an increased HWA population

in the fall, timing treatment—whether systemic or foliar—to the spring and fall is best to maximize results; for soil drench or injection, the treatment period could extend from spring into early summer as long as the tree is not under serious stress. It’s also important to not fertilize affected hemlocks, especially while treating. Fertilization exacerbates infestation since it provides more nutrients suitable for adelgid feeding.

Spotted Lanternfly

As one of the more recent invasives, spotted lanternflies (SLF) were first reported in Pennsylvania in 2014 after arriving in a shipping container from Asia. In a few short years, they have migrated to NY, NJ, DE, CT, MA, VA, and OH.

The SLF completes its life cycle in one year. Eggs hatch into nymphs in the spring, around April; nymphs mature into adults in mid-summer, usually by July; and in late summer/fall, adults mate and lay eggs. Each lifecycle stage has unique identifiers: egg masses are brown and seed-like, arranged vertically; nymphs are black with white spots, and develop red patches; adults have an inch-long wingspan. (See photo.)

SLF feed on 70 species of plants, including some ornamental trees and shrubs. Other SLF favorites include tree of heaven (*Ailanthus altissima*), maple, and birch. By using its piercing mouthpart, SLF puncture a trunk or leaf to extract and feed on sap. As they feed, they excrete sap onto the tree, attracting other insects. The sap can also cause an unsightly fungus called sooty mold.

The best way to treat for SLF is prevention—making the trunk inhospitable for laying eggs by using sticky traps and applying a banded wrap. Unfortunately, while traps and guards can reduce populations, they don’t keep SLF from coming to the tree. (There are no known SLF natural enemies in the U.S., though some predators like spiders and birds will eat SLF.)

If SLF is already present on trees, proven insecticides—whether systemically applied (tree injection, soil drench) or by contact to the bark (sprays)—can help with control. If using spray, apply between two and five



Hemlock woolly adelgid.

treatments during the growing season.

Another technique is to spray horticultural oil directly on overwintering egg masses (which suffocates the eggs) in late winter through early spring. Alternatively, insecticide sprays using neem oil, pyrethroids, dinotefuran, and insecticidal soaps have all been proven to be effective at controlling nymphs and adults from late spring through early fall. However, timing must be considered since most products do not provide season-long protection.

If treating systematically with injections or soil drenching, imidacloprid or dinotefuran are most effective in controlling nymph and adult stages when timed during late spring through early summer. Note that systemic treatment is only effective when treating plants that receive insect feeding. It’s also advisable to cut down any trees of heaven on the property. This undesirable invasive weedy tree is a primary host species.

EAB, HWA, and SLF are just a few of the invasives that can wreak havoc on trees. But the more we educate ourselves—and our clients—the more we can help stop their spread. For more information, visit the USDA Pest Tracker. ■



Feldman (top) and Mayer are both directors of technical operations at TruGreen (trugreen.com), a leading lawn care company. Feldman, who oversees the North, and Mayer, overseeing the South, are seasoned green industry veterans. Both bring their collective horticultural, arboriculture, and agronomic expertise to help drive strategic program development and implementation, and provide chemical resource management,



operations training and development, associate health and safety, regulatory compliance, and product and environmental stewardship.

PHOTOS: (TOP) NUREICA - ADOBE STOCK, (BOTTOM) PHOTO: ADOBE STOCK



Emerald ash borer damage.

Fall Leaf Mulching

A real-world method for less labor, more profit, client buy-in, and better soil health.

By Tim Downey

For those in landscaping, fall is one of the hardest working seasons of the year with shorter daylight hours, large projects wrapping up, and the tsunami of leaves which “need” attending to before the snows fall. But what if the annual ritual of leaf clean-ups was reexamined? What about a simpler method, with a better understanding of the entire landscape, that leads to less labor, more profit, and satisfied customers?

The Why

When it comes to fall cleanups, you tend to see a lot of young bravado on display. I say that with certainty because in my younger days, I was long on biceps, but short on wisdom and learned intelligence. Then, in 2003, while walking in the woods one day, I noticed there was hardly a sound at my feet. The leaves hadn't started falling yet and there was virtually no leaf litter on the forest floor. I leaned over, looked more closely, and noticed the remnants of skeletonized leaves—and lots and lots of worm cast. Hmm, I had never thought about what happens to leaves in the woods? As a landscaper, leaves were something one got all pumped up about in October, something that had to be handled, literally, in the coming weeks. “Leaves are bad, I've got to clean them up,” was the mindset.

Around 2000, I had downsized my business. Gone were the leaf vacuum trucks, the workforce, and most of the equipment, so how was I going to handle leaves with a body that wasn't as strong as it once was? Maybe I was going about it all wrong? After all, it looked like some pretty good soil was created by those decomposed leaves. In the landscape business, aren't we suppose to understand and value soil? I realized then and there in 2003, I needed to be doing things differently, but how?



Leaf mulching has several advantages over typical fall clean-ups including efficiency, profitability, and overall soil health. But it takes the right method and equipment for success. Photo Credit: Pellenc

Getting Buy-In

Over the next five years, I experimented with ways to handle leaves each fall. I experimented with mulching and blade types as well as keeping a catcher on my machine to hold the leaves under the deck for further processing. I would scatter the more finely chopped leaves in planting beds, the lawn, and more—recording what happened over time, what things looked like by spring, noting weather, and so forth. By 2008, I'd figured out a system. I no longer looked at leaves with contempt. I was all-in and never looked back. Mulched leaves stayed on-site, with nothing removed. I was motivated to work through the learning curve.

Shortly after I figured out a system, I began to share my insights with others in the trade. Some began to experiment with my methods, others were skeptical. While leaf mulching already existed in many rural

areas, and golf courses, it wasn't seen as something for the manicured home. The timing coincided with the economic challenges of 2008/09 and I thought, “Here's a way for my local village's conservation board to spread the word to homeowners about helping the village save on large annual fall leaf handling costs.” That's when it took off. My village and a nearby city took notice, as did my county. So began a speaking tour with a group that developed with the hope this practice would become commonplace. Whatever the reason, be it ecological, profit, labor time savings, or shortening the use of blowers and noise, it's a system I believe deserves consideration.

I find one of the biggest hurdles to the system is eliminating fear, that somehow you'll “kill the lawn” or it won't “look clean.” For this reason, it takes a few seasons to trust the process, witnessing how the leaves

are gone by Memorial Day the following year. Often, depending on leaf type and weather, they are an early form of humus by season's end and/or an attractive mulch. To achieve this, use only finely mulched leaves in beds, neatly arranged with gentle use of a blower and rake for a refined look.

The fall's finely mulched leaves can then be top-offed, or "painted" as I call it, next Spring with store-bought mulch. As we know, mulch can have a short life span, and refreshing properties with leaf mulch can be a signature that sets you apart.

The How

To mulch leaves properly, it all comes down to the right equipment, mindset, and method. Typically, the purpose of leaf clean-ups is to remove the material so it doesn't adversely affect the lawn, clutter garden beds, and get tracked in the house. Equally important is achieving a neat and orderly landscape—whatever that means for the client. But does it make sense to handle a leaf over and over again—blowing it across a property, loading it with a vacuum, driving it on a truck, then dumping it somewhere else?

What about eliminating that leaf at its point of contact on the lawn? Instead of assembling leaf piles, thereby making bulk, what if you went in the other direction and reduced the leaf size into tiny confetti-sized pieces? Mulched leaves take up only about one-tenth the space of whole leaves. These pieces can then be "lost" in the lawn, planting beds, and tree beds, putting back what nature intended to nourish the soil. Then it's over and done. Might that save labor, fuel, disposal fees, and more? It did for me, by the wheelbarrow! And the cost to the client was kept low as well, which makes it an easy sell.

This process simply takes the right combination of attachment, blade, and method.

The right attachment. As to a mulching attachment, the Vulcher 2 is my choice. Vulchers are available to fit all commercial mowers; and depending on size, generally cost less than \$300. The Vulcher 2, in combination with proper blades, traps leaves and enables multiple impacts for fine shredding.

Proper mulching blades, in conjunction with a device that traps leaves for repeated

blade strike, is key. If you simply put mulching blades on and spit leaves out, you cut them in half or quarters at best. It's essential to be able to process the leaves with enough blade hits, which is why having a quick and versatile attachment like the Vulcher is so handy. You control clipping flow and discharge. Closing off the discharge, not completely, just enough to process the leaves but not create an airtight back pressure, is what you want.

We don't ever "bag." On the properties we care for, we've educated our clients on the benefits of not bagging, explaining how clippings are often (in the Northeast) 70% water by volume/weight and will shrink down in the sun and be lost into the lawn.

The right blade & approach. When purchasing a leaf mulching blade, make sure you get the right kind. The direction of the teeth is important. You don't want blades whose mulching teeth do not "yield" and bend away from the direction of contact; you want the opposite. You want the teeth to aggressively drive into the leaves. Gator blades, or similar, are worth every penny and pay for themselves because of the way they shred leaves on initial contact.

As to method, I actually timed myself over several years using different tactics and came away with a formula. Now, with my helpers, we do what I call the "rolling chop." Each man has a role. Initially, we'll all hit the ground and start forming up the piles/windrows. When I see the right amount, I drop off and start mulching, while the other men continue to stage the leaves. Then, one or more men also drop off to "dust off" the mulched leaves behind me. The key is to all end about the same time. The team works in a continuous circle flow, with no wasted steps.

The most inefficient work method is to have a man blow, stop, grab a rake and tarp, change over to lifting and loading or vacuuming, then go back to blowing. No one likes the constant change. Once you start to flow with your role, be it chop, prep, or dust off, that's it. You can pace yourself without lifting, changing over, and taking unproductive steps. This is not grueling. It's simply uninterrupted rhythm and flow. My men prefer this type of approach BY FAR!

The right prep. Even with the right equipment, if you simply do the process the same way as vac and tarp, making huge piles you think you can stomp on and hit with a mower, it won't work. You will fail and walk away unconvinced. It's all about the size and height of the leaf piles.

I instruct my staff to keep it no taller than a foot or so. I'll push down on the mower handles lifting the deck going over the pile on the initial pass, then drop the deck down on subsequent passes. If you simply make a 3' pile, you'll bulldoze into the pile and it will be a mess. You have to keep the mower deck atop the low piles. For ZTR mowers you likely have to have the windrows even lower, otherwise you'll bulldoze the leaves as they pile up over the mower deck. Just plowing into a pile of leaves on a ZTR ride-on won't work. I learned that in about 10 seconds in 2003.

Two tips for ride-ons: 1. Either back over the pile, initially taking a half deck at a top. This way your large back tires flatten the leaves and get under the deck more easily. 2. And/or take swing passes at the windrow, again half a deck. Your front tire will flatten leaves and the vacuum from the mower deck pulls leaves into the blades. Another option is to initially process with a walk behind (I use a Velke Sulky) to get the pile down lower and you move to the next pile while the ZTR man does the fine process work.

With the right equipment and method, it only takes time to gain confidence. Begin small and expand on success. Many companies I've taught mulch mowing have sold their vacuums, cut disposal costs by 70% or more, and seen profitability soar. They're also returning a valuable resource back to the land. I'm happy to spread the knowledge. Have a profitable fall rally! ■

Downey is the President of Aesthetics Landscape Care, Inc., located in Hastings-on-Hudson, NY, and has been working in the landscape industry for more than 40 years. Further information can be found on two websites where Downey is the chief technical educator, trainer, and contributor: www.leaveleavesalone.org/ and www.leleny.org. He is available for anyone wishing assistance.

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