BUCKEYE YARD AND GARDEN LINE 2014-29
10/23/2014

From: Curtis E. Young (Lead editor and contributing author) and Jim Chatfield (Co-editor and contributing author).

Contributing authors: Pam Bennett, Joe Boggs, Jim Chatfield, Julie Crook, Erik Draper, Gary Gao, Denise Johnson, Jacqueline Kowalski, Ashley Kulhanek, Cynthia M. Meyer, Amy K. Stone, Nancy Taylor, Marne Titchenell, Danae Wolfe, and Curtis E. Young.

Buckeye Yard and Garden Line (BYGL) enhanced with photos and links is available online at: [http://bygl.osu.edu]. Become a fan of the BYGL on Facebook at [http://www.facebook.com/OSUBYGL] or follow the BYGL on Twitter at [http://www.twitter.com/OSUBYGL].

This is the 29th 2014 edition of the Buckeye Yard and Garden Line (BYGL). BYGL is developed from a Tuesday morning conference call of Extension Educators, Specialists, and other contributors in Ohio.

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END OF SEASON BYGL NOTICE. This is the last BYGL ("Beagle") for the 2014 season; the BYGL is retreating to its doghouse for a long winter’s nap. We’re sure we all agree: the 2014 BYGL season went too fast, doggone it!
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SPECIAL NOTICE. OSU GREEN INDUSTRY SHORT COURSE and OTF CONFERENCE AND SHOW: DECEMBER 9 - 11, 2014. This event, at the Kalahari Resort in Sandusky, Ohio will feature over 165 educational presentations, the Ohio Turfgrass Foundation trade show, and…Well, look at it this way:

Why should you attend? Here are just a few reasons...
* Get the credits you need to retain your professional certifications and licenses.
* Learn about the latest practices, products, trends and issues in your industry.
* Network and re-connect with your colleagues.
* "Re-charge" your batteries after another long season and prepare the one ahead.
* It's affordable education, close to home.
* Meet Ohio State and NBA legend Jerry Lucas after the keynote address presented by Syngenta.

Conference and show revenue helps us support those that provide you with training, extension, research and more. Revenue generated during the conference plays an important role in supporting research and education within the industry.
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1. PLANTS OF THE WEEK.

*PERENNIAL - LITTLE BLUESTEM* - *(Schizachyrium scoparium).* This North American prairie grass is being used more often in landscapes and large commercial designs due to its great drought-resistance, ease of maintenance and excellent foliage color. It is being used in mass plantings along roads and highways as well as in home landscapes. Little bluestem has a clump-growth habit and grows to around 1 - 2' in height and about as wide. The flowers appear in August and September and develop well above the foliage, giving it an airy appearance.

The silver-blue foliage looks great all summer and some cultivars have a nice fall color as well. 'Blue Heaven', introduced by the University of Minnesota has beautiful fall foliage of dark burgundy fading to red and eventually pink. Other little bluestem cultivars available include 'Carousel', 'The Blues', 'Jazz', and 'Prairie Blues'.

Little bluestem prefers well-drained, drier sandy sites; however, it tolerates heavier clay soils. The cultivars in the OSU Extension trials in Springfield, planted in heavy clay, have all done well this season. These trials are part of the National Grass Trials focusing on 17 species and cultivars of *Panicum* and 5 cultivars of little bluestem. There are 12 universities and one public garden participating in this 5 year trial. For more details and blog reports, go to: [http://www.grasstrials.com](http://www.grasstrials.com).

*Author: Pamela J. Bennett*

*WOODY - MULTIPLE SPECIES.* Welcome to the Show! Starring WORLD-CLASS FALL FOLIAGE, completing its final acts now, and it was and is spectacular, though muted by rains and winds that knocked some leaves off earlier this week. Check out still the luminous gold of sugar maples, the fleeting burnt sugar aromas and water-droplet-pooling of fallen katsuratree leaves, the burnt orange-red foliage of three-flowered maple, the radiating needles of goldenlarch spurs, and somewhat unexpectedly - how beautiful fall can be for redbuds and kousa dogwoods and bottlebrush buckeyes.
Stay tuned for that annual ritual - the often in a single day showers of golden ginkgo leaves. Till next year.

*Author: Jim Chatfield*

“WEED - HENBIT (*Lamium amplexicaule*) and PURPLE DEADNETTLE (*L. purpureum*). These winter annuals, which are part of the mint family, are commonly confused with each other. Both plants have red and purple tinted upper leaves, but unlike purple deadnettle, henbit has a purplish, square stem.

Henbit grows approximately 4 - 12" tall and is covered with sparse, fine hairs. The leaves are oppositely arranged and are circular to heart-shaped with rounded toothed margins. The upper leaves of the plant clasp the stem, thus the Latin specific epithet is *amplexicaule*, which means ‘clasp.’ Seeds of henbit germinate in either fall or early spring. Plants flower in early spring and continue flowering into early summer.

Purple deadnettle can reach heights of 16 - 18", with leaves that are opposite, triangular to heart-shaped, sparsely hairy and have course rounded teeth at the margins. Leaves can be up to 1" long with upper leaves appearing stacked, overlapping and bent downward.

Controlling henbit and purple deadnettle is easily done by promoting a healthy, thick turf or by applying a mulch layer. Once henbit is established, seed production of henbit can be controlled by hand-pulling, tilling, or mowing. Henbit, as well as purple deadnettle, are overwintering hosts of soybean cyst nematode. Henbit is also known to be an alternate host for corn earworm and an overwintering host for two-spotted spider mites in areas of the southern US.

*Author: Cindy Meyer*

2. HORT SHORTS.

A. FLASHY COLORS FALL? One of the vivid discussions during BYGL was how was everyone enjoying the fall colors. Curtis Young, in Van Wert County (NW Ohio) said that they have not yet experienced a frost and a number of trees are still very green! Meanwhile, Erik Draper reported in Geauga County a killing frost occurred in NE Ohio this past Sunday morning. But the fall colors in NE Ohio, especially red and sugar maples, along with sassafras, sourgum, white ash and other species have been absolutely GLORIOUS! The colors in Southern Ohio appear to have been nice but not a "knock your eyes out" kind of season.

It is always fascinating to try and guess which environmental factors caused the colors to be incredibly vibrant or pale and muted. Although we don't totally understand all the details or interactions, we do know the basics. There are 3 main factors which influence autumnal leaf color; specifically, the existing pigments in the leaf, increasing length of night, and weather conditions. We do know that the initiation of color change in leaves and when they senesce or fall off, are closely synchronized with the calendar; specifically, it is the decreasing day length and the corresponding increase in the duration of night. No other environmental factors, such as temperature, rainfall, carbohydrate supply, etc., are as consistent and influential as the steadily increasing length of night.

Autumn colors are a biochemical response because daylight drives chlorophyll (green leaf color) production, so as the days of shorten in length, less chlorophyll is produced. The masking effects of chlorophyll decrease because the decomposition rate of chlorophyll remains constant, and other leaf pigments are revealed, initiating the autumnal color palette. During this period of decreasing
chlorophyll content, the photosynthates or sugar concentrations in the leaf surge, augmenting the production of anthocyanin pigments.

If the leaves contain primarily anthocyanin pigments, leaves will appear to the human eye as one of the infinitely incredible shades of red, so arrestingly eye-popping in Nyssa sylvatica (black gum, black tupelo or sourgum). Carotenoids are another type of leaf pigments found in plants. Carotenoids can be orange, yellow, or red, but most of these pigments found in leaves appear mainly as some shade of yellow or gold. Carotenoid production is independent of daylight length; consequently, carotenoid levels in the leaf aren't directly affected by the decreasing day length. Leaves with high quantities of both anthocyanins and carotenoids will appear to the human eye as one of the infinitely incredible shades of orange, so treasured in sugar maples.

Leaves containing primarily carotenoids but little or no anthocyanins, will appear to the human eye as one of the infinitely incredible shades of yellow, so enjoyed by all in the Gingkoes. In the absence of anthocyanins and carotenoids, other plant chemicals in the leaves can also affect color. For example, tannins, which are a compound found in some oak leaves, are responsible for the characteristically subdued, ordinary, brownish leaf colors of some of the oaks.

Ambient fall temperatures also affect the rates of these chemical reactions occurring in leaves, therefore, it too plays a part in the fall color of leaves. Bear in mind however, it's mainly the levels of sunlight that are in charge and driving the intensity or lack thereof, for many of our fall foliage colors. Sunny autumn days are needed for dazzling displays of fall color, since anthocyanins require light, while those dreary, overcast days lead to an increase of the yellows and browns in leaves. So your task, right now, is to get outside and get some biochemical stimulation we call fall color!

Author: Erik Draper

B. MASTER GARDENER VOLUNTEER (MGV) PROGRAM SPREADS TO SOUTH KOREA. Since 2012, Dr. Wonsuk Lee and several other representatives from the GyeongGi-do Agriculture Research and Extension Service have been exploring models for a volunteer outreach program that would focus on urban agriculture. After attending several U.S. Extension Master Gardener conferences, Dr. Lee and his colleagues selected the U. S. model to be used to develop their Master Gardener program. The culture of volunteerism is growing in South Korea, and Dr. Lee is looking to the Extension MGV Coordinator's in the US for advice and in building their program.

In late September, 2014, a group of Extension staff and MGVs from the U.S. went to South Korea for the 2014 Master Gardener Korean International Conference to speak as well as to support the effort. Representatives were from Kentucky, Nebraska, Washington, Michigan, Virginia, and Ohio (Pam Bennett and Denise Johnson). The South Koreans were extremely excited to show us their country as well as their efforts in developing the program.

In 2012, they trained their first group of volunteers. Today, they have 250 MGs around the country with a goal of 50,000 MGs in 10 years. In addition, the Director of the Rural Development Administration pledged $50,000.00 to each Extension office for this effort. The South Koreans are extremely excited about the MGV program. Their focus will be urban agriculture and community neighborhood gardens. We were able to visit some of their successful community garden projects during the tour.

Author: Pamela J. Bennett

C. TWO MORE BOOK REVIEWS.

Scott Zanon enlivens the Columbus-area scene with a full range of his eclectic entrepreneurial passions, including this book about landscape trees. His business, LifeServers Inc., sells automated external defibrillators, but his horticultural interests bore fruit as early as the 1980s with his degree in agronomy and landscape horticulture at The Ohio State University. Today his passion for plants has resulted in this highly useful book, his own wine - Zanon Dry Creek Valley Zinfandel, which he blends in Sonoma Valley and sells here in Ohio, and his truly tasty hot pepper sauce, featured recently in an article in the Columbus Dispatch, titled "Hot-sauce Expert Shares Tricks for Making Flavorful Pepper Condiment".

Back to Scott's book, published by Ohio University Press, follows his Desirable Trees for the Midwest: 50 for the Home Landscape and larger Properties that he published in 2009, which came about from Scott's experiences and observations, including another passion, golfing at OSU's Scarlet Course (where he has long served on a number of committees). In golf, trees are often categorized in rule books as "immovable obstructions", but Scott saw them in a much broader sense.

This comes across well in the new book, which now features 65 selected trees, replete with information on hardiness zone, mature size, habit, growth rate, bark, leaf color, fall color, flowers, fruit, diseases & insects, culture, recommended cultivars and additional notes. Hundreds of vivid color photographs are included in the soft bound book, over 90% taken by Scott, and for each tree they feature the overall tree form at mature size and several other ornamental aspects of each tree, such as bark, flower, fruit, fall color, and others. Additionally, there are notes such as this for Persian parrotia:

"One of the best specimen trees, the Persian parrotia is known for its foliage, bark and pest resistance...this fine four-season plant should be used more extensively in landscapes, parks, and golf courses. Author has an 11-year old tight upright form (likely 'Vanessa') and marvels at the beauty of the tree in all 12 months of the year. It has been selected as the 2014 Society of Municipal Arborists urban tree of the year."

In addition to the 65 tree profiles there are a number of handy "tree usage" lists in the book as well as special sections on topics such as "trees versus turf", emerald ash borer, and Scott's version of Why Trees Matter ("Why Plant Trees").

Landscaping with Trees in the Midwest is available on Amazon and Barnes & Noble, the Ohio University Press website, and locations such as Oakland Nurseries. It is available for $26.95 undiscounted, but is often available for as low as $20 with shipping online. Scott will be available for book signings and is available to speak at educational programs.

Full disclosure: BYGL writer Chatfield was the Teaching Assistant for the Plant Pathology 401 lab back in 1980 and still has Scott's grades in one of my little notebooks my daughter unearthed a few years ago. He did well, and his book and pepper sauce - magnifique. Next, the vino.

Garden-pedia - by Pamela Bennett and Maria Zampini

This handy dictionary of garden and landscape terms is designed to help those who grow plants to better understand common horticultural terms. The over 200 terms, replete with over 100 color photos and additional illustrations are meant to teach, to provide perspectives on terms such as "volcano mulching" and why this is not conducive to root health. Common plants are included, but always to illustrate commonly-asked questions.
The entry for "hydrangea" explains the differences in pruning for hydrangeas that develop from new growth vs. those types developing from last season's growth. "Disease triangle" defines how to use this concept for practical garden practices such as the use of rose hosts resistant to black spot, sanitation and preventive fungicides to control this pathogen, and managing environmental conditions conducive to disease through practices promoting leaf drying.

More extensive side bars explain key distinctions between soil texture and soil structure. Understocks and grafting are explained, the practice of balled-and-burlapped trees is covered. The idea for the book starting with Maria Zampini needing to explain basic terms and practices to new hires in the nursery and was expanded by Pam Bennett's experiences with teaching home gardeners and Master Gardeners a common ground of terms needed to understand garden resources. From binomial nomenclature for species on up to plant families and why it matters to a context for exotic invasive pests and plants and the term "aggressive" for native plants that may also cause problems in certain landscape contexts, this book helps us all to rethink what we think we know.

The book ($16.95) will not be available for the holiday tree, but can be preordered through Amazon and Barnes & Noble and gift cards will be available to order the books that will ship in early January.

Full disclosure: BYGL writer Chatfield works with and admires Pam Bennett and her efforts as OSU's Master Gardener Volunteer Coordinator and many other roles, and Maria Zampini for her garden writing and speaking and the innovative green industry marketing business she runs with her father Jim Zampini, UpShoot LLC.

Both Maria and Pam are available for garden talks and book signings featuring the terms for success in growing plants.

To close, heed these words of the Roman scholar Cicero - "If you have a garden and a library, you have everything you need."

Author: Jim Chatfield

3. BUGBYTES.

A. EMERALD ASH BORER AND WHITE FRINGETREE. BYGLers had a lengthy discussion about the recent announcement that emerald ash borer (EAB) (Agrilus planipennis) was discovered on white fringetree (Chionanthus virginicus) in the Greater Dayton area by Don Cipollini of Wright State University. On October 14, 2014, the USDA Systematic Entomology Laboratory (SEL) at the Smithsonian confirmed the partial adult and larval specimens recovered from a white fringetree were indeed EAB. BYGLers agreed that as the EAB/fringetree story unfolds, it will be important to focus on what is actually known rather than to wander too far afield with conjecture. As with any new discovery, it is easy for speculation to outpace facts.

What is currently known is that EAB can select and complete its development on our native white fringetree; thus far it has not been found on Chinese fringetree (C. retusus). We do not yet know whether it will be a major pest on this plant. We do not know if an EAB infestation on this plant is related to other factors such as plant age, stress, etc. Indeed, we do not yet have the answers to some very basic questions relating to the biology of EAB on this plant; we are on the fringe of our knowledge.
However, we do know that this discovery was not totally out of the blue. Ash belongs to the genus *Fraxinus* which is one of the genera grouped in the olive family (Oleaceae) as is *Syringa* (lilac), *Forsythia*, *Ligustrum* (privet)...and *Chionanthus* (fringetree). Early host preference studies suggested EAB was limited to Ash. Obviously, this new discovery should give us pause to investigate further.

With this in mind, OSU Extension will be partnering with others to conduct an "observational survey" in late spring, about the time white fringetrees are in full bloom. We will be asking horticulture professionals to take a close look at fringetrees and perhaps other members of the olive family for "D"-shaped holes and to report their findings. One goal of this survey will be to identify plants that can be further studied.

Alert eyes have already provided useful information on this developing story. Students in Steve Foltz’s University of Cincinnati Woody Plant ID class found "D"-shaped emergence holes on white fringetrees at Spring Grove Cemetery and Arboretum in Cincinnati. Although EAB has not yet been confirmed, additional visits were made, images taken, and the suspected EAB find was reported to Don Cipollini and Dan Herms (OSU Department of Entomology and OARDC) in support of furthering our knowledge of EAB and fringetrees. So, stay tuned.

Authors: Joe Boggs, Jim Chatfield, and Curtis E. Young

B. MINUTE MARAUDING PIRATES. Curtis Young reported that MINUTE PIRATE BUGS (Order Hemiptera; Family Anthocoridae) are emerging from crop fields to assault unsuspecting folks enjoying the outdoors in northwest Ohio. As with other hemipterans, the bugs are equipped with piercing-sucking mouthparts which they normally use to inject paralyzing and pre-digestive enzymes into their prey. They then use their mouthparts like soda straws to suck the essence-insect from their hapless victims. However, the bugs will occasionally bite people targeting exposed skin on necks, legs, and arms. Their bites can be very painful with the resulting "AAARrrrrr" arising from skewered victims rather than from these tiny pirates.

Although all members of the Anthocoridae family are collectively referred to as minute pirate bugs, one of the most common species, *Orius tristicolor*, is sometimes called the minute pirate bug. The triangular-shape, slightly flattened black and white bugs are indeed minute measuring less than 1/8" long. The bugs spend most of the season preying upon other insects; they are considered important bio-control agents for a number of crop pests including aphids, thrips, and spider mites. However, for reasons not clearly understood, as the growing season draws to a close, the bugs sally forth on marauding raids delivering painful bites on people. Thankfully, the onslaught usually only lasts for a few weeks before the bugs are sunk by cold temperatures.

Author: Joe Boggs

C. STINGING CATERPILLARS. Several BYGLers have sighted HICKORY TUSSOCK MOTH (HTM) (*Lophocampa caryae*) this autumn (refer to BYGL Sept.18, 2014). Recently, reports of the resulting allergic reactions to HTM hairs have stirred up the question, "Is HTM poisonous?"

Stinging hair caterpillars are not new to Ohio. Many caterpillars have stinging or "urticating" hairs that can cause itching, pain, irritation, redness, swelling and potentially more severe symptoms depending on an individual’s own reaction to the hair itself, or potential secretions on the hairs, or venom injected from within the hairs. Individuals who handle these caterpillars can end up with a nasty rash or worse.

Caterpillars that have venomous spines and can be found in some areas of Ohio include the SADDLEBACK CATERPILLAR (*Acharia stimulea* - formerly *Sibine stimulea*), HAG MOTH (*Phobetron...*
pithecium), PUSS CATERPILLAR (Megalopyge opercularis), and IO MOTH CATERPILLAR (Automeris io).

Caterpillars that can produce irritations of the skin include: WOOLY BEARS (Pyrrharctia Isabella), GYPSY MOTHS (Lymantria dispar), and several species of tussock moths (e.g., hickory tussock moth and WHITE-MARKED TUSSOCK MOTH (Orgyia leucostigma)). BYGLers were unable to find research by the time of this posting that clearly defined exactly how HTM hairs irritate humans (be it secretions or venom glands or detachable setae), but we do know reactions to this caterpillar can range from mild irritation to severe and unsightly.

Because reactions can be severe, it is no wonder that people claim these insects to be poisonous or dangerous. We must use caution when making wide claims that all hairy caterpillars are venomous or poisonous, and we must not assume that because a reaction is bad, there must be venom associated with it. Even our beloved banded-wooly bear caterpillar can irritate some people, though we readily scoop them up to the thrill of children and adults.

As with any allergy, using caution to avoid the trigger is helpful regardless of the caterpillar’s relative hairiness. First and foremost, don’t handle a caterpillar you don’t know. A good rule of thumb is that, if it has fur or hair, it may have the potential to cause a range of irritation and some degree of an allergic reaction. This does not mean the insect must die. Simply use a tool or glove to move the caterpillar away from areas frequented by foot traffic, including your pets’ feet. These hairs can irritate or cause reaction in pets, just as in humans. Second, become educated about our caterpillar friends. You can send photos of caterpillars to your county extension office for help identifying and learning about its habits and habitat. Encourage a “look but don’t touch” mentality for curious kids.

Keep in mind that BYGL Writers are NOT medical doctors and cannot give medical advice. We can only tell you about our bug friends (or foes). If you have questions about allergies, concerns about a reaction from any bite or sting, or require treatment, seek out a physician. Those experiencing severe allergic reactions of any sort should immediately seek medical assistance.

References:

Author: Ashley Kulhanek

4. DISEASE DIGEST.

A. SANITIZE IT - YOUR LANDSCAPE THAT IS! Autumn is a wonderful time to begin the reduction of disease inoculum that may be assaulting plants and reducing their impact in your landscape. This incredibly effective technique is called - FALL CLEAN UP! For example, cutting off and getting rid of all of this past year’s foliage on those peonies is a huge help to reduce disease. This is an effective way to start a new season off clean and help manage this year’s universally pervasive fungal leaf spot caused by the pathogen Cladosporium paeoniae. If this year’s foliage is left in place and next year’s herbaceous stems and foliage are allowed to grow up to cover the detritus, then there is a very good chance that the problem will be just as bad next year as it was this year.

Another interesting example of the impact of sanitation is found in one of the practices used by apple growers in orchards. Orchardists are encouraged to apply a nitrogen fertilizer, to the floor of the orchard, when all of the leaves have fallen off of the trees. This practice is intended to help to break
down the apple leaves on the ground. WHY you ask? Because if there was a problem last year trying to control the APPLE SCAB fungus, pathogen *Venturia inaequalis*, in that orchard, the best way to start clean the next year is to speed up the decomposition of all of the old leaves! The dead apple leaves contain asci (sacs) which allow the fungal ascospores to persist, overwinter and fully develop. In the spring, during rainy, wet weather, as new leaves develop and emerge from buds, the asci in the old leaves release their ascospores into the air. These spores land on the new succulent leaf tissue, germinate and begin the infection process and disease cycle for apple scab all over again. Why should you care... because the same thing occurs in landscapes all across Ohio with the apple scab fungus infecting the leaves of susceptible crabapples!

Remember one of the best ways to contend with diseases is to use genetics. The selection and use of disease resistant plants is a wise use of time and money. Less time, effort and resources will be used to try and prevent of certain diseases. If most of the energy put into attempts to thwart disease and maintain a landscape; ideally, in this situation, the best approach is to pull out those susceptible plants and replace them with a disease resistant variety. This approach allows more time to kick back, put the feet up and enjoy the view...and that would be the perfect way for most to care for their landscape!

*Author: Erik Draper*

**B. FALL CLEAN UP FOR A BETTER SPRING GARDEN!** Fall is an important time in landscape maintenance. Many pest problems and diseases encountered this season may survive until next season on or in plant debris. Cultural practices completed prior to the beginning of winter will ensure a healthier landscape for next spring.

Some of the fall crops can still be left in the garden for a while, however warm season vegetables are about done for the season. Remove all annual vegetable plants from garden beds in order to prevent overwintering insect and diseases. Diseased plants should not be composted unless the compost pile reaches temperatures that kill the pathogen; bag this material and place in the trash. Compost should be added to improve garden soil for next spring.

Take advantage of the autumn sunshine and spend some in your annual and perennial beds. Annuals should be pulled out of the ground with the roots included. Dead stems and foliage should be pruned on most perennials and wildflowers. Of course, this task is garden specific as some people prefer to leave certain herbaceous ornamentals such as tall grasses uncut to enjoy their winter interest. Seed heads of achillea (yarrow), echinacea and rudbeckia and other perennials are also important food sources for many of our overwintering bird species. Fall is also a great time to divide perennials and plant new perennials. Applying 2” of organic mulch to these newly planted perennials will help retain the soil temperature to encourage root growth and prevent heaving of plants over winter’s freeze and thaw cycles. Tender bulbs and tubers such as tuberous begonias, cannas and dahlias should be dug up and stored after the first frost.

Be sure to take advantage of other great sources of organic material abundant this time of the year. Rather than disposing of fallen tree leaves just run the lawn mower back and forth mulching the leaves into the lawn. You can also put the shredded leaves directly into your garden or compost bin.

Fall is also an excellent time to do corrective pruning of your trees and shrubs. Corrective pruning encompasses removal of dead, damaged, or diseased branches and the elimination of limbs that may be causing structural problems. Structural problems include branches that may be rubbing, those that are growing back to the center of the tree, and those with abnormally narrow crotch angles. As leaves drop from deciduous woody plants, it is easy to inspect and identify defects in your trees and shrubs.
When not obscured by foliage it is easier to see canker formations, rubbing branches, splits or cracks in wood.

Putting your garden to bed this fall is just as important as any other growing chore you perform throughout the season.

Author: Julie Crook

5. TURF TIPS.

A. JUST KEEP MOWING! There is an age-old suggestion to lower mowing heights in the fall to avoid turf diseases developing during the winter. This is not necessarily accurate. Ohio State University turfgrass specialists say that it is more important to KEEP MOWING until the grass stops growing for the season. Often grass requires mowing late into October-November in Ohio and the mowing height should be maintained at 2.5 - 3” until snow cover.

Snow mold is more likely to develop on turfgrass buried under fallen leaves and where objects laid for several days than from a higher cut, or in areas that did not receive many hours of sunshine in the afternoon. Grass not mown going into the winter may slump over and mat down creating the perfect environment for snow mold. Some professional turfgrass managers may lower mowing heights 1/2” at the end of the season, but the advice to most turf managers is to just to keep mowing!

Author: Curtis E. Young

B. WHAT TO DO WITH FALLEN LEAVES. It is not a good idea to allow whole tree leaves to accumulate and lie on lawns over the winter. The dense layer of leaves will decompose very slowly if at all. The matted down leaves hold excess moisture over the grass potentially promoting turfgrass diseases such as snow mold. They provide harborage for animals such as voles. And once spring returns, the leaves may kill the covered grass. Thus, it is time for fall tree leaf cleanup, but what to do with them, bag’em, burn’em or mulch’em?

Obviously, these are three different ways of taking care of the fallen leaves. Raking and bagging the leaves removes the leaves from the lawn, but then disposal of them becomes a problem. In some towns, there is municipal leaf pickup which may keep them separate from the normal waste stream or setting the bags at the roadside may result in them being picked up by the garbage collector and transport to the land fill, a waste of a nutrient resource. Out in the country, one might rake and burn them, again, a waste of a nutrient resource. A better method to deal with the fallen leaves is to mow them into organic mulch.

Mulching leaves into the turfgrass effectively requires a little extra effort. To mulch leaves well, they need to be ground up into half-inch sized pieces or smaller. Three passes at right angles usually does the trick. While the ground up leaves are very noticeable on the surface of the lawn at first, within a couple of days they disappear! What happens to the leaf pieces? The earthworms pull the pieces down to and into the soil surface where they add organic matter to the soil. And, an extra benefit is that the lawn gets greener as the fall progresses and stays green for the rest of the following season! Basically, the ground-up leaves are a very cheap, slow-release fertilizer.

Author: Curtis E. Young
C. BROADLEAF WEED CONTROL. Although proper turfgrass maintenance programs can greatly reduce the invasive pressures of the various turfgrass weeds, even the highest quality turfgrass areas will occasionally be invaded by one or more weed species. While a few weeds can be physically removed, considerable weed encroachment may require chemical controls. Fall is the best time of year to control many of the perennial broadleaf weeds (e.g. dandelions, violets, ground ivy). Fall applications of herbicides are more effective than applications made in other seasons because of the natural direction of movement of materials within the plants in the fall. At this time of the year, materials are primarily being translocated downward into the roots and underground storage system of the plant. Fall applied herbicides go with the "flow" and are carried along with the other materials. Herbicides such as 2,4-D, dicamba, MCPP, and combinations of these products function very well in managing perennial broadleaf weeds in the fall.

Fall is also the ideal time to control other problematic weeds around landscapes, parking lots and road sides such as poison hemlock, wild carrot, common and cut leaf teasel, and common burdock. The targets for fall herbicide treatments are the low-growing, rosettes of biennial plants that are at the end of their first year of growth. These weeds are much more easily controlled when in this stage, compared with next spring/summer when plants are large with a well-established root.

Author: Curtis E. Young

D. OH, THE EDUCATION YOU'LL GET! How would you like to participate in an EDUCATIONAL CONFERENCE that covers the ENTIRE landscape from TURFGRASS to TREES & SHRUBS? Wouldn't that be ideal? Maybe you're a turfophile that suddenly is responsible for the ornamental plants on the job and you don't know where to start! Maybe you're a landscaper who was told that if you could just take care of the turf, like you do the planting beds on a job, that one company would hire you to do all 20 of their million dollar properties! Would you like to be a part of that kind of educational offering? Well, you are in luck because that is exactly what is going to happen on December 9-11 at the 2014 OHIO TURFGRASS FOUNDATION CONFERENCE and SHOW and OHIO STATE UNIVERSITY GREEN INDUSTRY SHORT COURSE!!

Perhaps Dr. Suess best described this 3-day educational opportunity in his book "Oh, the Places You'll Go!" He said..."Congratulations! Today is your day. You're off to Great Places! You're off and away! You have brains in your head. You have feet in your shoes. You can steer yourself any direction you choose. You're on your own. And you know what you know. And YOU are the one who'll decide where to go..." WOW, you will be able to attend two educational conferences and tradeshows, covering the entire landscape, FOR ONE PRICE! Not only is that amazing that but think about this - after four regular paid registrations by a company, ALL OTHER EMPLOYEES REGISTER FOR ONLY $35 EACH - for all 3 days including the tradeshow!! You really can afford to bring the WHOLE CREW with you! If that is not enough, the rooms are only $99 per night, with free parking, and each registered room will receive 4 water park resort tickets, absolutely FREE, for the Kalahari Resort and Convention Center in Sandusky.

There will be something for every interest and everyone who wants or needs answers can find them in the more than 168 educational sessions offered. There will be sessions for employers and employees on communications to build strong relationships in trust, removing barriers to communication and improving skills and helping employees. There will be sessions on natural weed control in lawns and how to best use industrial weed control; fertilizers for the landscape, soil amendments, top-performing perennials, winter kill and dead golf greens, maintaining over-trafficked sports fields; truth about soils and organic matter use, fungicides, insecticides, and other pests (both 2-legged and 6- or 8-legged); lawns, politics and Lake Erie algae and urban landscapes; new pesticide changes to rules and regulations, herbaceous plant diseases and preparing compacted soils for growing trees and which
trees work best for Ohio. Again, there will be incredible educational learning opportunities for everyone and every interest in the landscape environment. Registration information can be found online at [http://www.otfshow.org]. I'll be there and hope to see you there...learning the latest and greatest!

Author: Erik Draper

6. INDUSTRY INSIGHTS.

A. THE 87TH OHIO STATE UNIVERSITY GREEN INDUSTRY SHORT COURSE & THE 48TH ANNUAL OHIO TURFGRASS CONFERENCE AND SHOW. Come one, come all - It's a jungle out there...let us be your guide - in the ever competitive green industry! These programs are at the Kalahari Resort in Sandusky, Ohio on December 9 - 11, 2014. Complete schedules and registration materials are now on line at: [http://osushortcourse.com], [http://otfshow.org], and [http://ohioturfgrass.org].

Check out registration, schedule and education panels on the sites for the full range of registration options for the three days and for the over 165 presentations at the joined conferences. Here are just a few of the talks at the Green Industry Short Course: Prescription Organic Matter - John Lloyd, Plant Health Doctors (MN); What is Happening in the World of Herbaceous Diseases - Janna Beckerman, Purdue (IN); Plant Picks: Shrub Roses for the Landscape - Charles Martin, Dow Gardens (MI); The Best Bulbs - Cincinnati Zoo and Botanical Gardens (OH); Challenges and Realities of Sustainability - John Devore, Devore's Land and Water Gardens (OH); Plant Selection for Specific Sites - Bobbie Schwartz, Bobbie's Green Thumb, LLC (OH); Trees and Turf Matter! Portraying Our Story of Benefits to the Industry and the Public - Pam Sherratt and Jim Chatfield, OSU (OH); Landscape Designs That Will Limit Pest Pressure - Dan Herms, OSU (OH); Plant Defense: How Plants Defend Themselves and Why It Matters - Enrico Bonello, OSU (OH); Weed Control in the Landscape: What You Need to Know to Control Unwanted Plants - Hannah Mathers, OSU (OH); Soil Preparation for Trees in Compacted Soils - Mark Hoenigman, Busy Bee Services (OH); Landscaping with Trees in the Midwest - Scott Zanon, Desirable Trees and Turf (OH); The Latest in i-Tree Benefits - Jim Zwack, Davey Tree Expert Company (MN); Rain Gardens: Site and Plant Considerations - Cheryl Rice, USDA (OH); Bee Friendly Landscapes - Denise Ellsworth, OSU (OH); and Disease and Insect Pest Updates for 2014 - Nancy Taylor and Joe Boggs, OSU (OH).

A small taste of the big educational feast awaiting you in the jungle!

Naturally, there will be a wide range of professional credits and certifications from ODA pesticide recertification credits (a full five hours+ of ornamentals and turf credits and Core each day) to ONLA’s Ohio Certified Nursery Certification credits (one credit per each day of educational programs).

Author: Jim Chatfield

7. WEATHERWATCH. The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from October 1 - 20, 2014, with the exception of the soil temperatures which are readings from Wednesday, October 8, 2014 at 5:20 p.m.

Temperatures have turned colder; Erik Draper reported that NE Ohio was hit hard by a killing frost. The rest of the Buckeye State is still in pretty good shape however the biggest challenge in parts of Ohio is the regular 0.1 - 0.5” of rain that they have received every other day or so.
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<td>NW</td>
<td>63.5</td>
<td>44.2</td>
<td>1.98</td>
<td>1.6</td>
<td>62.71/62.08</td>
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<tr>
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<td>Central</td>
<td>65.1</td>
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<td>58.99/58.57</td>
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<td>45.0</td>
<td>3.71</td>
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For a link to the OARDC Weather Stations, visit: [http://www.oardc.ohio-state.edu/centernet/weather.htm].

Author: Julie Crook

8. COMING ATTRACTIONS.

A. TWO PROGRAMS FOR THE PRICE OF ONE! TWO PROGRAMS FOR THE PRICE OF ONE! THE 87TH OHIO STATE UNIVERSITY GREEN INDUSTRY SHORT COURSE & THE 48TH ANNUAL OHIO TURFGRASS CONFERENCE AND SHOW. Come one, come all - it's a jungle out there...let us be your guide - in the ever competitive green industry! These programs are at the Kalahari Resort in Sandusky, Ohio on December 9 - 11, 2014. Complete schedules and registration materials are now online at: [http://www.osushortcourse.com], [http://www.otfshow.org], and [http://www.ohioturfgrass.org].

Check out registration, schedule and education panels on the sites for the full range of registration options for the three days and for the over 165 presentations at the joined conferences. Tracks or themes include: Business Management; General Pest Management; Golf Turf Management; Landscape Maintenance; Lawn Care; Plant Health Management; Safety; Communication and Technology; Sports Field Management; Top Must Have Plants; Design with Sustainability in Mind; Greenhouse and Nursery; Managing Pests in the Landscape; Plant ID and Selection; Technicians Training; Arborists; Bees and the Landscape; and Landscape Systems and Design.

Some of these tracks are on multiple days, and all of this is coupled with plant and weed ID displays and contests, along with all the amenities of the comfort and luxury of the Kalahari Convention Center resort. Naturally, both programs include a wide range of certification credits, from ODA Pesticide Recertification credits to the wide range of relevant turfgrass and green industry certification credits. So, come register for your Education in December opportunities: the cost of the programs - the trade show and the over 165 presentations in all of the above tracks (two major programs for the price of one) is: $210.00 for all three days; $170.00 for two days; and $85.00 for one day. These are the prices if you register by November 25, 2014. Prices are higher for later registration. There are a number of special price breaks for multiple registrations from one company. There are also great group (A group registration includes four (4) people from the same company. Additional registrants beyond four may be added for just $35 per person!) registration options: Group One-Day - $250.00 ($270.00 after 11/25); Group Two-Days - $500.00 ($540.00 after 11/25); Group Three-Days - $555.00 ($615.00 after 11/25); and Additional Group Registrants (beyond 4) - $35.00/person.

Again, check out all the details at: [http://www.osushortcourse.com], [http://www.otfshow.org], and [http://www.ohioturfgrass.org].
Couple the above prices with free parking and outstanding hotel rooms starting at $99.00, and this is a whole lotta bang for your bucks, a whole lotta green (industry) though not too much green (money) for your gray (not to mention scarlet) matters.

B. TRI-STATE GREEN INDUSTRY CONFERENCE. Save the Date - 2015 Tri-State Green Industry Conference on February 5, 2015 at the Sharonville Convention Center, 11355 Chester Rd., Cincinnati, OH 45246. The Tri-State Green Industry Conference is a collaborative effort between Ohio State University Extension, Purdue Extension, Cincinnati State Technical and Community College, and the Cincinnati Zoo and Botanical Garden. It features a variety of high quality education and training for professionals in the areas of Annuals & Perennials, Garden Center & Greenhouse Innovation, Tree & Shrub Care, Turfgrass Management, Green Infrastructure and General Pest & Disease Management and also features a vendor trade show. Pesticide recertification credits for Ohio, Indiana and Kentucky will be given, OCNT training credit is available, ASLA CEUs are available and CEUs will be available for ISA Certified Arborists.

For more information visit: [http://hamilton.osu.edu/topics/horticulture/2015-Tri-State-Green-Industry-Conference].

C. 2015 COMMERCIAL PESTICIDE RECERTIFICATION CONFERENCES. Registration for 2015 Commercial Pesticide Recertification Conferences is now open. There are four conferences being offered in 2015. The locations for the conferences are Sandusky, Ohio, Kalahari Convention Center (Thursday, January 22, 2015), Dayton, Ohio, Dayton Convention Center (Thursday, January 29, 2015), Akron, Ohio, John S. Knight Center (Wednesday, February 18, 2015), and Columbus, Ohio, Columbus Convention Center (Wednesday, March 11, 2015). Commercial pesticide applicators needing recertification credits for the renewal of their pesticide applicator's license should register to attend one of these four state commercial pesticide recertification conferences. For more information on each of these sites and to register, visit the OSU Pesticide Education Program's web site at: [http://pested.osu.edu]. The links to each of the conferences are on the front page of the PestEd web site.

8. BYGYLOSOPHY.

"Magnificent Autumn! He comes not like a pilgrim, clad in russet weeds. He comes not like a hermit, clad in gray. But he comes like a warrior, with the stain of blood upon his brazen mail. His crimson scarf is rent....The wind....wafts to us the odor of forest leaves, that hang wilted on the dripping branches, or drop into the stream. Their gorgeous tints are gone, as if the autumnal rains had washed them out. Orange, yellow, and scarlet, all are changed to one melancholy russet hue.... There is a melancholy and continual roar in the tops of the tall pines.... It is the funeral anthem of the dying year." - Henry Wadsworth Longfellow

APPENDIX
ADDITIONAL WEBSITE RESOURCES:

Ask a Master Gardener Volunteer
http://mastergardener.osu.edu/ask

Buckeye Turf
http://buckeyeturf.osu.edu

Emerald Ash Borer Information
http://ashalert.osu.edu

National Plant Diagnostic Network and First Detector Program
https://www.npdn.org/first_detector

Growing Degree Days and Phenology for Ohio
http://www.oardc.ohio-state.edu/gdd/

Hungry Pests Website
http://www.HungryPest.com

Ohio Pesticide Safety Education Program
http://pested.osu.edu/

Ohio State University Department of Horticulture and Crop Science Plantfacts
http://plantfacts.osu.edu/web/

Ohio State University Extension Bee Lab
http://u.osu.edu/beelab/

Ohio State University Extension Master Gardener Volunteer Program
http://mastergardener.osu.edu

Ohio Woodland Stewards Program
http://woodlandstewards.osu.edu

The C. Wayne Ellett Plant and Pest Diagnostic Clinic (CWEPPDC)
http://ppdc.osu.edu/

USDA APHIS Beetle Buster Website (Asian Longhorned Beetle)
http://www.beetlebusters.info/

USDA APHIS Beetle Detective Website (Asian Longhorned Beetle and Emerald Ash Borer)
http://beetledetectives.com/

Following are the participants in the October 21st conference call: Pam Bennett (Clark); Joe Boggs (Hamilton); Jim Chatfield (Hort and Crop Science and Plant Pathology); Julie Crook (Hamilton); Erik Draper (Geauga); Denise Johnson (State Master Gardener Volunteer Program); Ashley Kulhanek (Medina); and Curtis E. Young (Van Wert).

BYGL is available via email, contact Cheryl Fischnich [fischnich.1@osu.edu] to subscribe. Additional fact sheet information on any of these articles may be found through the OSU FactSheet database [http://plantfacts.osu.edu/web].

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BYGL is a service of the OSU Extension Nursery, Landscape, and Turf Team (ENLTT). BYGL is available online at: [http://bygl.osu.edu], a website sponsored by the Ohio State University Department
of Horticulture and Crop Sciences (HCS) as part of the "Horticulture in Virtual Perspective." The online version of BYGL has images associated with the articles and links to additional information.

Where trade names are used, no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely, and accurate, the pesticide user bears responsibility of consulting the pesticide label and adhering to those directions.

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Keith L. Smith, Associate Vice President for Agricultural Administration; Associate Dean, College of Food, Agricultural, and Environmental Sciences; Director, Ohio State University Extension; and Gist Chair in Extension Education and Leadership.