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This is the 27th 2012 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.

**** BYGL NOTICE. As the days shorten, so will the BYGL...in frequency, not length. There will be NO BYGL next week (October 11, 2012). The BYGL will return the following week (October 18, 2012) for one final fall howl, and then it will retreat to its doghouse for a long winter nap.

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1. PLANTS OF THE WEEK.

*ANNUAL - NEMESIA (*Nemesia* spp.). *Nemesia* is a great plant for its outstanding show in the early spring and fall. The plant tends to fade a bit if it's really hot with high humidity. If this occurs and the plant gets a bit leggy, cut it back to rejuvenate. In the fall, it comes back with a vengeance and provides a great display in containers and hanging baskets. Some of the newer cultivars that are grown from vegetative cuttings actually tolerate the heat a little better than seed-grown varieties. *Nemesia* has delicate snapdragon-like flowers that are often fragrant and come in white, yellow, orange, pink, red, and mauve and blooms most of the summer in Ohio. The plant grows around 1 - 2' and as wide and takes sun to part shade.

*PERENNIAL - ASTERS (*Aster* spp.). Today's aster cultivars have an improved garden appearance because of their compact growth and better branching habits. In the past, the common aster sold were the New England and New York asters (*A. noveae-angliae* and *A. novi-belgii*). Today, there are great cultivars of these plants as well as hybrids on the market. The common New England aster is native to much of the Eastern US and its purple daisy-like flowers can be seen in fields in bloom now. It can grow up to 4’ tall and tends to have a floppy habit in the garden if not supported.
Cultivars such as 'Alma Potschke' is 3 - 4’ tall but has a much better compact habit with bright rose flowers. 'Purple Dome' is more of a mounded habit with purplish-blue flowers. New York aster cultivars include 'Woods Pink' and 'Woods Blue' and are dwarfs that grow 8 - 12” tall with pink and blue flowers respectively.

Asters are great for fall garden color and are quite hardy as long as they don't get overly wet. Colors range in the pinks, purples, blues, and reds. They bloom from late summer through October. Don't cut them back until next spring.

*WOODY - SOURGUM, BLACKGUM or TUPELO (Nyssa sylvatica). This hardy native tree really comes into its own now as we move into fall foliage season. Fall colors are somewhat variable, depending upon factors such as genetic variation and possibly soil pH, but most tupelos provide reds and red-oranges that outshine virtually all other deciduous trees. This slow to moderate grower reaches heights of 30 - 50’ with a pyramidal form that flattens out at the top over the years, often sporting an almost pin oak-like growth habit in youth. Features include glossy green leaves in the summer, attractive but usually sparse bluish drupes on female trees, and relatively new cultivars ranging from weeping to columnar forms. This tree does well in wet sites, prefers acid organic soils and open sunny sites.

*VEGETABLE - GARLIC (Allium sativum). Garlic is a member of the onion family that is best planted in the fall. Plants are started from individual cloves separated from the head. There are many varieties of garlic available, from red to white and mild to spicy. For planting, select heads that are firm and show no sign of deterioration. Plant about 4” deep in October. The goal is to allow the garlic to produce a root system prior to winter. Leaves may also emerge before the ground freezes - this will not harm the garlic, but a light layer of mulch can be used to prevent heaving or drying. The plant will put on most of its growth in the spring and send up flower heads in early summer. Some gardeners remove these heads to encourage larger cloves. Shortly after flowering the entire plant will begin to dry, signaling that bulb development is nearing completion.

As the tops dry up and turn brown, the heads can be carefully dug. The entire plant with bulb attached should be cured by leaving them to dry in a sheltered area for a day or two, either in the garden or in flats or drying racks. If rain threatens, move the garlic under cover. Do not pull the stems from the center of the garlic head as that will shorten the storage life. Soft neck varieties can be braided and hung in a cool dry area for long-term storage. Stiff neck varieties will not braid but can be bundled and tied with twine. The leaves and stems of either variety can be cut just above the head and the heads stored in trays or net bags. Best storage is achieved at low humidity and temperatures around 40F; this discourages sprouting and mold growth.

*WEED - BITTERSWEET NIGHTSHADE (Solanum dulcamara). Bittersweet nightshade is a perennial climbing or trailing vine that is found in many areas such as fence rows, yards, gardens, woodlands, and waste areas. This plant prefers areas that have been disturbed but it can also be found in natural areas. Bittersweet prefers partial to full sun and can adapt to a variety of different soil types. There are two shapes of leaves that can be found on bittersweet. The smaller leaves are ovate in shape and often are void of lobes. The larger leaves have a triangular shape with 3 deep lobes. The terminal lobe is much larger than the other 2 lobes. Foliage and stems can emit a foul odor if disturbed. This plant flowers during the summer and will be present for several months. The flowers are purple, approximately 1/3”, and have 5 triangular lobes with yellow anthers that are fused together. The flowers are then replaced with green shiny fruit which changes from green to yellow/orange to red later in the season. This fruit is eaten by various birds and small mammals such as skunk and raccoon. Humans should not eat the fruit because it is toxic; the foliage should also be handled with care as it is also toxic. This plant aggressively spreads by rhizomes therefore making it difficult to eradicate from areas.

2. HORT SHORTS.

A. FINAL CLEANUP. This mild weather has provided an opportunity to get into the vegetable garden for a final fall cleaning. The entire BYGL season, readers were reminded that garden hygiene is an important part of reducing disease and insect problems the following season. Now is the time to put those written words into action - the cold nights have already finished the beans, sweet corn and eggplant.

Clean out weeds that were missed or ignored in the garden in the latter part of the growing season. If they had gone to seed then they will provide thousands of new weeds for the pulling in 2013. Getting the undispersed seed to the compost pile will help, but only if the pile reaches high enough temperatures. Summer annuals like ragweed, velvetleaf or purslane that have already dropped all their seed are not a target for cleanup. On the other hand, winter annuals such as chickweed
and annual bluegrass can be removed now through cultivation, pulling or herbicide use. Perennial weeds can also be taken out prior to their re-emergence next spring.

Remove the old vegetable plants from the garden and into a compost pile. Chipper shredders will allow the material to break down more rapidly and the heat generated by a well-built pile will reduce the amount of disease and weed seed carried over to next year. Deep plowing will have the same effect, burying pests to a depth at which they can't survive. Pay special attention to crops that had significant insect or disease problems this year - many problem organisms spend the winter on the old plant material and emerge to the buffet of a newly planted garden. Destroying the vegetation that harbors the overwintering stage gives next year's garden a head start in the battle of the "bugs" (insects and disease).

B. SERENDIPITOUS FALL FOLIAGE TOURS. Joe Boggs and Jim Chatfield gave a "real-time" fall foliage report during the BYGL conference call on the eye-popping colors currently on display in southern, central, and northeast Ohio as well as western Pennsylvania and western Maryland; the mountainous panhandle region. Both gave their BYGL reports via phone as they were driving to Cumberland, MD, to make a presentation at the Mid-Atlantic Chapter of the ISA Annual Meeting (MAC-ISA); Joe driving from Cincinnati, Jim driving from Wooster. Joe reported that he observed a similarly breathtaking kaleidoscope of fall colors while driving with Ron Wilson (Natorps, Mason, OH) to the Bluegrass-Buckeye BYGLive! this past Monday in Lexington, KY. (see below).

What was particularly remarkable about the "foliage tour" reports was the synchrony of the fall colors over a relatively wide geographical region. Normally, fall colors progress in a general north-to-south direction in the U.S. with dramatic differences sometimes being seen within Ohio. BYGLers could only speculate on the reason(s) behind this year's synchronous display. Whatever the cause, the result is something to behold!

C. SEASONAL NEEDLE YELLLOWING. This fall appears to be a dramatic one relative to the normal inner leaf yellowing on white pine. Each fall this seasonal needle yellowing comes as surprise to many, as does the seasonal needle yellowing in springtime that is noted on American hollies and yews. As for pines, no one has ever topped the lyrical explanation of Aldo Leopold in *A Sand County Almanac* who wrote:

"Pines have earned the reputation of being 'evergreen' by the same device that governments use to achieve the appearance of perpetuity: overlapping terms of office. By taking on new needles on the new growth of each year, and discarding old needles at longer intervals, they have led the casual onlooker to believe that needles remain forever green."

"Each species of pine [and spruce, and fir, etc.] has its own constitution, which prescribes a term of office for needles appropriate for its way of life. Thus the white pine retains its needles for a year and a half; the red and the jack pines for two years and a half. Incoming needles take office each June and outgoing needles write their farewell addresses in October. All write the same thing, in the same tawny yellow ink, which by November turns brown. Then the needles fall, and are filed in the duff to enrich the wisdom of the stand. It is this accumulated wisdom that hushes the footsteps of whoever walks under pines."

D. OH DEER, OH DEER! Bow season in Ohio has officially begun as of September 29, 2012, so tis' the season for spending cool mornings in tree stands watching and waiting for the perfect shot. This season, hunters should be aware of localized outbreaks of a common white-tailed deer disease called Epizootic Hemorrhagic Disease (EHD) in several Ohio counties. EHD has been confirmed in 13 deer from Ashtabula, Columbiana, Geauga, Holmes, Paulding, Portage, Ross, and Summit counties. EHD is common in white-tailed deer and occurs annually, usually after a drought. Deer contract the disease from biting midges. The disease cannot be spread from deer to deer, deer to human, or deer to livestock. According to the Ohio Department of Agriculture, EHD does not pose a serious threat to livestock. Once infected, deer show symptoms within 5 - 10 days. Infected deer initially lose their appetite, show little to no fear of humans, grow progressively weaker and disoriented, often salivate excessively, and become unconscious. Many deer die within 36 hours of the onset of symptoms.

State wildlife officials stress that this disease does not impact humans or the safety of consumed deer meat. However, deer that appear unhealthy or sick should never be taken for food, and should be reported to a local wildlife officer. Once Ohio experiences a hard freeze, the midges carrying the disease will die.
E. WATCH OUT FOR THE DEER! It's fall once again, a time for falling leaves, cool temperatures, pumpkins on doorsteps, Halloween costume shopping…and deer-vehicle collisions. Of all the months out of the year, October and November are on record as having the highest number of deer-vehicle accidents. Deer are on the move this time of year and that movement frequently takes them across back roads, urban streets, highways, and other roadways. Motorists are advised to take special precautions this time of year to avoid collisions, especially at dawn and after sunset, and during the hours of 5:00 p.m. - 1:00 a.m. and 5:00 a.m. - 8:00 a.m. What can drivers around Ohio do to remain safe and decrease their chances of an accident?

* First of all, remember that breeding season for deer is October - December, and although most accidents occur in October and November, remain vigilant through December.

* Often times when there is one deer, there are more. If you see one deer cross the road ahead of you, slow down because there may be more on their way across.

* If a deer runs in front of your vehicle, brake firmly but try not to swerve. Swerving can cause the loss of control of your vehicle, which can lead to more damage to you and your car. The Ohio State Highway Patrol reports that more people are injured trying to avoid hitting the deer than those that don't.

* Pay special attention to deer crossing signs. They are there for a reason - to alert you of a high deer density area.

* Stay alert and constantly on watch especially during the dawn and dusk hours. Deer can be very unpredictable, especially when frightened. If you pass a deer on the road side, flash your lights at oncoming traffic to alert the other drivers of potential danger - a little warning can go a long way in avoiding an accident.

* Perhaps you have heard of the hood-mounted deer whistles and ultrasonic devices designed to scare away deer? Skip the purchase - wildlife biologists have found no evidence these devices work.

* Finally, and possibly most important - because a deer-vehicle collision cannot always be avoided no matter how vigilant you are - wear your seat belt. Luckily, most deer vehicle collisions don't result in human fatalities; however the number of crash deaths is increasing in almost every state, including Ohio, which is one of the top 5 states with the highest fatalities. In a study completed by the Highway Loss Data Institute, 60% of the people killed in an animal collision accident were not wearing their seat belts. So be sure to buckle up.

Be safe on the roads this fall season!

F. MICE IN HOMES. Cooler temperatures and the approach of winter bring thoughts of warm homes, fireplaces, and cozy sweaters to mind. It's not so different for wildlife. Shorter days and dropping temperatures alert them that it's time to find snug, warm quarters for the coming winter months. Unfortunately, sometimes those snug, warm quarters belong to homeowners! Marne Titchenell reported that several requests for information on how to rid homes of mice have come in the past couple weeks. Options include traps, glue boards, removing food sources, sealing up access points, and use of rodenticides. For help employing these manage options, see below for a publication on dealing with house mice.

3. BUG BYTES.

A. BAGWORM DEVELOPMENT UPDATE. Curtis Young reported that bagworms (Thyridopteryx ephemeraeformis) in NW Ohio are in the pupal, adult or egg stages. Curtis collected several bags to assess their development. A couple of males and females were still in the pupal stage progressing through metamorphosis from the larval stage to the adult stage. A couple of the females were in the adult stage, but had not begun laying eggs. And at least one female had completed her egg laying and was dead and gone from her bag. No late instar larvae were found, thus it appeared that there was no further feeding on the host plants.

B. RIDDLED PECAN LOG. Curtis Young reported receiving a chunk of a pecan log, the tree (Carya illinoinensis) not the dessert that was riddled with borer holes. There were dozens of exit holes in the 15" length of branch that was not much more than 2 1/4" in diameter. Concerns that the tree's owner had were what was the borer causing the damage, why was the borer attacking the tree, was the tree going to die because of the borer, and what should be done about the borer?
The first step toward an answer to all of these questions required an identification of the borer. With the aid of a small hatchet, the sample was split length-wise. The splitting revealed live larvae and pupae in the galleries that had been excavated inside of the branch and there were numerous galleries. The insect was easily recognized as a longhorned beetle (Family Cerambycidae). Fortunately, it was NOT the Asian longhorned beetle - big sigh of relief. Luckily, the beetle pupae were far enough along in their development that the elytra (front wings) were visible through the pupal case and the color pattern was recognizable. The beetle that had done all the damage to the branch was the PAINTED HICKORY BORER (*Megacyllene caryae*).

Painted hickory borers will only infest wood that has recently died. For example, live trees that were felled and cut for firewood are susceptible to borer infestation during the first year after cutting. They will not infest older dead wood, so they present no threat to processed wood products (e.g. furniture, siding, decking, etc.). As their common name indicates, the beetles prefer to infest fresh cut hickory. However, they will also infest the wood of several other hardwoods including: oak; ash; walnut and butternut; hackberry; mulberry; Osage orange; honeylocust and black locust. And not surprisingly, pecan is in the same genus as the hickories such as SHAGBARK HICKORY (*Carya ovata*) and BITTERNUT HICKORY (*Carya cordiformis*). Since the painted hickory borer is not a primary pest of the host trees, no management for them is necessary. However, there is still the question of what caused the death of the branch in the first place, but that has not determined at this time.

4. DISEASE DIGEST.

A. THOUSAND CANKERS DISEASE OF WALNUT. Thousand cankers disease of walnut is a fatal disease of black walnut (*Juglans nigra*), and has recently been determined to be fatal to butternut (*Juglans cinerea*) as well. The disease is caused by a fungus that is carried to trees by the WALNUT TWIG BEETLE (*Pityophthorus juglandis*) causing numerous cankers on the branches and killing the tree 5 - 6 years after infection. The University of Kentucky Cooperative Extension has recently developed a Plant Pathology Fact Sheet for sample submission protocol for diagnosis of thousand cankers disease in walnut. For more information, visit the University of Kentucky's Fact Sheet at the following URL: [http://www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/PPFS-OR-W-15.pdf](http://www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/PPFS-OR-W-15.pdf).

B. SANITATION, SANITATION, SANITATION. Get those black-spotted leaves out of your rose garden before winter. Remove impatiens with downy mildew infestations as soon as possible to lessen the potential for overwintering oospore development of the *Plasmopara obducens* pathogen.

Horticulturist cleanse thy gardens and landscapes. Eliminating a plant pathogen or pest is a time-honored cultural practice that pays big dividends, from removing black-spotted rose leaves and canes to pruning out infestations of oystershell scale. There is storied history to this aspect of natural control. We have an advantage today with our understanding of the importance of pest and pathogen life cycles, with our knowledge that tiny, sometimes invisible to the naked eye entities may cause plant problems, with our understanding of the infection process.

Think of how much more difficult it was when these ideas emerged, when for example late blight of potato was ravaging the fields of Ireland during the Irish potato famine in the 1840s. There was not even a germ theory of disease. Once people understood that the *Phytophthora infestans* fungus was involved and worked out the life cycle of the fungus and the disease cycle for late blight, they realized that leaving cull piles of diseased potatoes in the fields till the next season was a clearly bad idea. It helped reintroduce the pathogen to the next potato crop. A simple revolution - clean it up.

So too it goes with ornamental disease control today. Understand this natural cycle. *Diplocarpon rosae*, the fungus that causes rose black spot overwinters in black-spotted leaves from the previous season's infestations and on infected rose canes. Remove from the planting to limit reinfections the next season. If disease does develop from fungal spores blown in from nearby plantings, remove newly infected black-spotted leaves during the season. This sanitation protocol is a critical approach to managing black spot on susceptible roses, even if fungicide programs are also used. In wet years, total or even acceptable control of this disease even with fungicides is often not enough. There are many other diseases where this type of sanitation is critical, from cleaning up leaves and stems of hollyhock with hollyhock rust to not reusing pots with soil contaminated with soil-borne pathogens.
5. TURF TIPS.

A. HAYMAKER'S MUSHROOM...TAKE A TRIP AND NEVER LEAVE THE FARM? The haymaker's mushroom (Panaeolina foenisecii or Psathyrella foenesecii) (a.k.a. Lawn Mower's Mushroom) is a very common, little, somewhat non-descript, brown mushroom that pops up in lawns, on golf courses, along roadsides and in meadows. It will be found scattered singularly or in small groups amongst the grasses, clovers and weeds. It is recognized by its small, hemispherical cap that is about 1” in diameter to 1 3/8” in diameter if it flattens out. The caps often change color as they age from dark-brown when they are fresh to light tan with a speckled dark brown ring as they dry. It is a gilled mushroom that produces dark brown to purple-brown spores. It is reported as poisonous because it contains very small amounts of the hallucinogenic psilocybin chemical. Those looking for an easy "high" will probably be disappointed for the amount of the hallucinogenic chemical in the mushroom is barely detectable or non-existent in some cases. However, there still may be concern for very young children and toddlers.

This mushroom (as well as many others that may be found in lawns and other places) may well be dangerous for toddlers if they find and consume ones that do contain the hallucinogenic compound. Is there enough of a concern to "freak-out" and declare war on every and any mushroom that pops up in the lawn if one have a toddler in the house? Not really and it is not very practical either. Remember that the mushroom that one sees above ground only represents a small fraction of the overall body of the mushroom and it may be next to impossible to destroy the entire body of the fungus just to get rid of the mushrooms in the yard. It is also not very advisable to do so, since the fungi are so very important in nutrient recycling and mycorrhizal associations with so many different plants. It would be much better and more practical to teach young children not to eat everything they see - and if they aren't learning this lesson well, not to leave them unsupervised on lawns where these and other mushroom grow. Now for the adult thrill-seekers looking for a cheap hallucinogenic trip, don't get your hopes up. The chances that the hallucinogenic compound is present is very sporadic. Even where psilocybin does occur in this mushroom, it occurs in such small amounts that a thrill-seeker would need to eat tons of them to be thrilled. And, besides, the consequences of mistakenly eating the wrong little brown mushroom could be disastrous to one's health! Once again, a word to the wise, "There are old mushroom hunters and there are bold mushroom hunters. However, there are no old bold mushroom hunters!"

6. INDUSTRY INSIGHTS.

A. MORE FROM KANUGA. In last week's BYGL (BYGL Issue 2012-26), it was noted that OSU's Dan Herms gave a thought-provoking keynote address at the Camp Kanuga in Hendersonville, NC Insect and Disease Workshop. It was reported that Dan Herms discussed the matrix of plant and pest interactions and how origins matter, from the relative stability of native plants interacting with native pests to the flipside issues associated with "no evolutionary natural selection history/no or low resistance" with many native pest, non-native plant combinations (think bronze birch borer and European and Asian birches) and native plant, non-native pest combinations (think emerald ash borer). If one is interested in the PowerPoint presentation and the underlying review article that was one of the key sources, check these out: [http://www.oarde.ohio-state.edu/hermslab/images/Herms_Disasters_by_Design_Kanuga_25_Sept_2012.pdf] (Raupp, M.J., P.M. Shrewsbury, and D.A. Herms. 2010. Ecology of herbivorous arthropods in urban landscapes. Annual Review of Entomology 55:19-38). A PDF reprint can be downloaded from this site: [http://arjournals.annualreviews.org/eprint/frY8fACqrI2nGDeqwi7c/full/10.1146/annurev-ento-112408-085351].

B. HIGHLIGHTS FROM THE 15th ANNUAL BLUEGRASS-BUCKEYE BYGLIVE! Joe Boggs provided highlights from the 15th Annual Bluegrass-Buckeye BYGLive! held in Lexington, KY, this past Monday at Lexington Cemetery and at McConnell Springs. At the top of the highlight list was recognition for the program's host, Larry Hanks (Pampered Properties, Lexington, KY). All agreed that the program's success was directly related to Larry's planning and dedication to providing a truly memorable educational experience. Kudos to Larry!

While the BYGLive! got off to a wet start, the intermittent rain showers didn't dampen the spirits of the participants or diminish the enthusiasm of our gracious host, Miles Penn, Lexington Cemetery Horticulturist. Miles lead the umbrella wielding / rain gear clad group on a combination walk-about / drive-about to view some incredible horticultural and historical highlights of the Cemetery starting with the Henry Clay monument. The monument is the highest structure in the Cemetery with a 120' tall Corinthian column topped by a statue of Kentucky's most notable statesmen, senator, and 3-time presidential candidate. Clay's statue faces in the direction of his beloved Estate, "Ashland," which also located in Lexington not far from his final resting place.
Horticulture highlights included Kentucky's largest American basswood that is growing next to the Henry Clay Monument. The tree's 95' height, 82' crown spread, and 259" circumference makes it a stately companion to the monument. The Cemetery is also home to Kentucky's champion cucumber magnolia; 82' height, 72' crown spread, and 161" circumference, as well as the state champion American smoketree; 42' height, 42.5' crown spread, and 101.74" circumference. The diversity of tree species and size of the mature trees makes Lexington Cemetery a "must see" for tree aficionados, particularly in the spring when their large collection of mature weeping cherries are in full bloom; a real show-stopper!

The group moved to the pavilion at nearby McConnell Springs (site of the 2008 Bluegrass-Buckeye BYGLive!) for lunch, research updates, and diagnostic reviews. Here is a summary of some of the reports:

* Dan Potter (UK Entomology) and his graduate student Jonathan Larsin (Ph.D. candidate) summarized their research on the efficacy and ecotoxicology of the insecticide chlorantraniliprole (e.g. Acelepryn). The insecticide represents a relatively new class of pesticide chemistry, the anthranilic diamides. Many compounds in this class are considered "reduced risk" insecticides because of their extremely low mammalian toxicity. For example, Acelepryn does not require a signal word on the label to describe the acute toxicity of the formulated product (e.g. danger, warning, or caution). Anthranilic diamides have an unusual mode of action. The chemical binds to one of the receptors (the ryanodine receptor) that regulates the movement of calcium during muscle contractions and locks the calcium channel in a partially opened state. This results in an uncontrolled release of calcium and the subsequent disruption of muscle contractions. As Jonathan effectively describes it, the insect dies from a severe Charley horse.

Jonathan found that chlorantraniliprole is virtually nontoxic to beneficial insects (predators and parasitoids), turf-inhabiting non-pest arthropods, and non-arthropods such as earthworms. Using an important native pollinator, the COMMON EASTERN BUMBLEBEE (*Bombus impatiens*), as a model, he also found that unlike the neonicotinoid, clothianidin (e.g. Arena), chlorantraniliprole did not inhibit queen production. This is an annual bumblebee meaning that colonies do not overwinter; they produce queens which overwinter and start new colonies next season. Thus, queen production is essential to the survival of the species.

Dan noted that with the negative impacts of neonicotinoids on hymenopteran pollinators becoming a major concern in recent years, it is important to look at different types of pesticide chemistry in search of alternative insecticides. Acelepryn has been primarily aimed at the turf market; however, Dan's insecticide efficacy trials demonstrated that the insecticide is also effective against a wide range of notable woody ornamental insect pests including bagworms, rose slugs sawflies, and clearwing moth borers.

Dan and Jonathan also presented some interesting results from their pollinator census which revealed that there are actually a wider range of pollinators found in cities compared to rural areas. While this may seem counterintuitive, Dan speculated that it may be due to the greater plant diversity found in urban and suburban landscapes compared to rural farms and forests.

* Emily Dobbs, another of Dan's outstanding graduate students (M.S. candidate), presented a fascinating summary of some of her research findings. She is investigating the use cultural controls to manage turfgrass pests with minimal impacts on beneficial arthropods including plant pollinators as well as parasitoids and predators. One hypothesis she is testing is that there is greater diversity of beneficial insects found on "naturalized roughs" on golf courses, which are roughs comprised of a range of native plants, compared to standard roughs comprised of mowed turfgrasses. Emily noted that while she is still analyzing her data, it does appear that the results are tracking towards confirming her hypothesis particularly with spiders and certain lady beetles.

One counterintuitive result that came from her mowing height trials which compared the effects on caterpillars (e.g. black cutworm) of high-cut turf-type tall fescue (up to 4") versus low-cut tall fescue was that caterpillars that fed on the high-cut turf were much smaller than those that fed on low-cut turf. While there was no definitive explanation for the result, it was speculated that endophytic fungi may have had a greater rate of establishment on the more vigorously growing high-cut plants. These are symbiotic fungi that live within the turfgrass plants and produce alkaloid compounds that are toxic to top-feeding insects.
Julie Beale (Plant Diagnostician/Research Specialist, UK Department of Plant Pathology, UK Plant Disease Diagnostic Laboratories) provided an overview of some of the top plant diseases that are currently on the national radar based on what she learned during a recent gathering of plant pathologists and entomologists at Camp Kanuga in Hendersonville, NC. These diseases included BOXWOOD BLIGHT, ROSE ROSETTE VIRUS, and DOWNY MILDEW OF IMPATIENS. Julie noted that boxwood blight is not an easy "field diagnosis" with infected plants sometimes failing to express the "classic" symptoms often depicted in photographs. However, she did report that one strong diagnostic indicator of the disease is an extremely rapid defoliation of infected plants.

Julie also shared an interesting diagnostic challenge she recently encountered. Samples of spruces, white pine, and honeylocust were sent to her diagnostic laboratory that showed the plant malformation symptoms that were associated last season and this season with exposure to the herbicide Imprelis (aminocyclopyrachlor). However, Imprelis had not been applied anywhere near the plants. After some diagnostic sleuthing that included a confession from the landowner's son, it was found that an "off-label" application of the herbicide ForeFront (aminopyralid) had been made in a good faith gesture to help dad with his weed problems. ForeFront has a similar mode-of-action to Imprelis; however, it is not labeled for use on landscape or turfgrass sites; its primary use is on permanent pastures and hay field. Opps!

Jennie Condra with the Office of the Kentucky State Entomologist (Chair, UK Department of Entomology) presented some fascinating information on 1000 CANKERS DISEASE OF BLACK WALNUT and HEMLOCK WOOLLY ADELGID (HWA) (Adelges tsugae). Only HWA has been found in Kentucky, in the western part of the state. However, they have been closely monitoring for 1000 cankers since the disease was found in Knox County, TN, in 2010. Jennie effectively demonstrated the impact of 1000 cankers by baking some delicious black walnut muffins for the group ... the prospect of losing walnuts literally hit the group in the stomach!

Jennie also reported on efforts to utilize a small lady beetle, Laricobius nigrinus, that is native to the Pacific Northwest to manage HWA. The beetle was originally imported from British Columbia, Canada, to manage HWA in North Carolina. It has become established in North Carolina and has now been released in Kentucky. Thus far, predation rates as high as 90% have been observed on HWA in eastern Kentucky.

Next year's 16th Annual Bluegrass-Buckeye BYGLive! will be held on Monday, October 7, 2013, in Lexington, KY. So, mark your calendars!

C. HELP OHIO FIGHT INVASIVE SPECIES WITH NEW FREE SMARTPHONE APP. Ohio State University's (OSU) School of Environment and Natural Resources (SENR) recently announced a new smartphone app to help fight the battle of invasive species in the buckeye state through early detection efforts. The GREAT LAKES EARLY DETECTION NETWORK (GLEDN) version for Android phones is up and running. Users with iPhones will need to wait just a little longer before their version is ready to go. To download this app and begin looking for and reporting invasive species including insects, diseases, plants, mammals, and aquatic threats go to [http://go.osu.edu/GLEDN].

7. WEATHERWATCH. The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from January 1 - September 30, 2012, with the exception of the soil temperatures which are readings from Wednesday, October 3, 2012 at 6:05 a.m.

This week's weather summary is taking a look at temperatures and rainfall totals dating back since the first of the year. Each of the weather stations is still reporting precipitation totals below normal. Temperatures have cooled and rain has moved through much of the state over the past week. No additional frost or freezes had been reported on BYGL this week.

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<tbody>
<tr>
<td>Ashtabula</td>
<td>NE</td>
<td>65.0</td>
<td>45.9</td>
<td>23.52&quot;</td>
<td>29.0&quot;</td>
<td>59.06/60.90</td>
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<tr>
<td>Wooster</td>
<td>NE</td>
<td>67.9</td>
<td>45.6</td>
<td>21.21&quot;</td>
<td>30.9&quot;</td>
<td>62.96/62.74</td>
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<tr>
<td>Hoytville</td>
<td>NW</td>
<td>68.7</td>
<td>46.3</td>
<td>21.97&quot;</td>
<td>25.7&quot;</td>
<td>60.00/59.95</td>
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<tr>
<td>Columbus</td>
<td>Central</td>
<td>71.3</td>
<td>49.2</td>
<td>21.84&quot;</td>
<td>33.6&quot;</td>
<td>64.28/64.39</td>
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<tr>
<td>Piketon</td>
<td>South</td>
<td>71.7</td>
<td>47.4</td>
<td>25.44&quot;</td>
<td>30.0&quot;</td>
<td>65.24/66.11</td>
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For a link to the OARDC Weather Stations, visit: [http://www.oardc.ohio-state.edu/centernet/weather.htm].

8. COMING ATTRACTIONS.

A. GREENHOUSE TOUR AND SPRAY TECHNOLOGY program is being held at Green Circle Growers, 3:00 p.m. - 7:00 p.m. Tuesday, October 9, 2012, in Plant #2 (orchid range), 15809 St. Rt. 511, Oberlin. Green Circle has graciously provided their facility for a talk and tour on biological controls as well as a spray technology demonstration by USDA ARS Application Technology Research Unit. For registration/fee information, and pesticide credit information contact: [catheethomas@rocketmail.com] or see [http://www.gefga.org]. The program is being sponsored by Greater Cleveland Flower Growers Association and Green Circle Growers.

B. EABU PRESENTS ASIAN LONGHORNS BEETLE UPDATE - THE TRUTH IN BLACK AND WHITE WEBEX. Tuesday, October 9, 2012 at 11:00 a.m. (EST) Emerald Ash Borer University (EABU) will present an Asian Longhorned Beetle Update - The Truth in Black and White. The Webex presented by OSU Extension's Joe Boggs will cover a timely ALB update, an EAB and ALB comparison, and empower participants to join this battle of the borer by reviewing signs and symptoms that everyone should be on the alert. Joe Boggs is an Extension Educator in Hamilton County, and has an appointment with the Department of Entomology. He has lead efforts in the recent ALB Certification Program offered in Cincinnati, Ohio, the first program of this kind. The live session will provide an opportunity for participants to ask questions of the session presenter and moderators. To log into the session, go to [http://emeraldashborer.info] website. If you have questions, contact Robin Usborne with MSU at [robinu1@MSU.EDU].

C. WHY TREES MATTER FORUM: CANCELLED FOR 2012. The Forum scheduled for Wednesday, October 17, 2012 in Wooster is cancelled for this year due to scheduling difficulties. Look for its return in 2013.

D. THE GOOD, THE BAD, AND THE HUNGRY: DEALING WITH WILDLIFE CONFLICT. The Ohio Woodland Stewards Program and Medina County Park District is offering this all day session on Thursday, October 18, 2012 in Medina County. While the growth of cities and suburban areas can displace some wildlife, many species actually thrive in these areas. Viewing these species as they travel through your backyard can be enjoyable, but sometimes conflict arises - usually in the form of some type of damage such as eaten plants, dug up bulbs, or holes in the lawn. Fortunately, most wildlife damage can be managed with the right techniques and strategies. Please join Marne Titchenell and Stan Gehrt from OSU Extension in this all day workshop as they discuss a variety of wildlife species and the best strategies to lessen the damage that can occur. Check out the link to registration and more information on the class - [http://woodlandstewards.osu.edu/classes/events/wildlife-conflicts-workshop].

E. EMERALD ASH BORER (EAB) RISK MANAGEMENT WORKSHOP TO BE HELD IN ST. LOUIS PARK, MN. This program is schedule for October 22, 2012 and the target audience is municipal administrators, elected officials, planners, risk managers, and allied professionals. Employees of non-profit entities managing large numbers of trees that affect public safety are also encouraged to attend (i.e. colleges, nature centers, etc.). Registration is available online at [http://tinyurl.com/RSVP-4-EAB-RM]. Session topics include: EAB Myths and FAQs; Memo from Forester to City Manager: Don't Wait; Considerations for the City Attorney; What Can You Get For Your Money? Budgeting for EAB; Your Management Options vs. the Death Curve; and Getting the Word Out. This is the fifth program, with previous workshop's held in Ohio, Pennsylvania, and Wisconsin. Missed the session in Ohio? It might be time for a road trip!

F. YOUR WOODS, WATER AND WILDLIFE. The Ohio Woodland Stewards Program is offering this all day session on Saturday, November 10, 2012. We all own our woodlands for a variety of reasons. Spend the day with OSU Extension educators to learn more about what you have and what you can have. We will explore what you need to know about keeping your woodland healthy, what you can do to improve it for wildlife and timber and how to manage the other natural areas on your land. Check out the link to the brochure with a listing of the day's program - [http://woodlandstewards.osu.edu/sites/drupal-owoods.web/files/brochures/landowner%20workshop.pdf]. Session topics include: Want Wildlife?; Non-Native Invasives; Got Trees? Tip for Woodland Owners; Farm Uses of Wood; Attracting Non-Game Wildlife; Controlling Non-Native Invasive Plants; Algae, Plants and Fish in Ponds; Thinking About Selling Timber; and What You Need to Know About Ticks.
G. **SAVE THE DATE** - 2013 TRI-STATE GREEN INDUSTRY CONFERENCE on February 7, 2013 at the Sharonville Convention Center, 11355 Chester Rd., Cincinnati, OH 45246. The Tri-State Green Industry Conference is a collaborative effort between the Extension Services of Ohio State and Purdue, and the Cincinnati Flower Growers Association (CFGA). It features a variety of high quality education and training for professionals in the areas of Annuals & Perennials, Greenhouse Management, 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/2012-tri-state-green-industry-conference](http://hamilton.osu.edu/topics/horticulture/2012-tri-state-green-industry-conference).

9. **BYGLOSOPHY:** Let our tree-lovers freak flags fly this autumn. As Neil Gaiman writes in his poem *Going Wodwo*:

*I'll find a tree as wide as ten fat men,*  
*Clear water rilling over its grey roots.*  
*Berries I'll find, and crab apples and nuts,*  
*And call it home.*

**APPENDIX - ADDITIONAL INTERNET RESOURCES:**

- Buckeye Turf  
  [http://buckeyeturf.osu.edu](http://buckeyeturf.osu.edu)

- Emerald Ash Borer Information  
  [http://ashalert.osu.edu](http://ashalert.osu.edu)

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

- Hungry Pests Website  

- Ohio State University Department of Horticulture and Crop Science Plantfacts  
  [http://plantfacts.osu.edu/web/](http://plantfacts.osu.edu/web/)

- Ohio State University Extension Master Gardener Volunteer Program  
  [http://mastergardener.osu.edu](http://mastergardener.osu.edu)

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

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

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

Following were the participants in the October 2nd conference call: Joe Boggs (Hamilton); Jim Chatfield (Hort and Crop Science); Julie Crook (Hamilton); Tim Malinich (Erie); Cindy Meyer (Butler); Amy Stone (Lucas); Marne Titchenell (School of Natural Resources); and Curtis Young (Van Wert).

BYG is available via email, contact Cheryl Fischnich [fischnich.1@cfaes.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/].