From: Curtis E. Young (Lead editor and contributing author) and Amy Stone (Co-editor and contributing author).

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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 2nd 2013 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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APPENDIX - ADDITIONAL WEBSITE RESOURCES.

1. PLANTS OF THE WEEK.

*PERENNIAL - PASQUE FLOWER (Pulsatilla vulgaris). Rock gardeners and Alpine plant lovers may know this plant, but many gardeners are unaware of this early spring beauty. Pasque flower is currently blooming in perennial gardens of central Ohio. This plant's lovely purple flowers stand out because there is very little else in bloom to hide it other than spring bulbs. The plant looks really cool as it emerges from the ground in early spring with unfurling silky hairy leaves. The purple blooms on this plant are actually cup-shaped sepals and lack petals (apetalous). Another great feature of this plant is the feathery seed pod that lasts until the heat of summer. The entire plant goes dormant in the summer in our climate.

Pasque flowers must have well-drained soil and will not survive in wet soils. They like full sun and can be planted in the perennial border or rock gardens. The foliage gets around 5" tall and the blooms and eventual seed heads rise about 12" above the foliage. If you are lucky, the plants will re-seed and continue to give a great show year after year.

*WOODY - STAR MAGNOLIA (Magnolia stellata). Star magnolia is a small tree (eventually up to 15 - 20') with an upright habit that ages into small mounds. It is one of the early-blooming magnolias that bring cheer to
the springtime, or in some years, late winter landscapes in Ohio. The open, star-shaped tepals (petals and sepals of similar size and shape) of white to various gradations of pink are glorious now in central Ohio and coming very soon to northeast Ohio. Star magnolias do well in acid, organic soils, and though sometimes frosted, are worth it for the days they remind us of why spring in Ohio is world-class. The species is used for a number of hybrids, including the cross with Magnolia kobus which gives us the Magnolia x loebneri hybrids.

*VEGETABLE - PEAS (Pisum sativum var. sativum). Peas are being planted in Ohio gardens at this time of the year, with 3 main types of peas planted. Garden peas are used for harvesting, shelling and eating the seeds. Snow and snap peas are to be eaten pods and all requiring no shelling. Snow peas are harvested when the pods are flat and tender, before the seeds develop. Snap peas are similar in size to garden peas except that the pods are lower in fiber and are meant to be eaten.

Peas need full sun and good drainage. They mature anywhere from 54 - 70 days depending upon the variety. Plant them in early spring when the weather is cool as they produce best in cooler temperatures. Peas can be supported with trellises or fences in order to make picking a little easier and keep soil off of the pods.

*WEED - LESSER CELANDINE (Ranunculus ficaria). This low-growing herbaceous perennial belongs to the buttercup family and is sometimes called "fig buttercup." The 1" diameter glossy butter-yellow flowers are borne singly on stalks and have 8 petals. The succulent, shiny dark green kidney or heart-shaped leaves are tightly clustered at the base of the plant. This highly invasive plant is native to Eurasia and it was originally sold in the US as an ornamental. It prefers moist, forested floodplains; however, in recent years lesser celandine has escaped cultivation and is becoming widespread in parks, yards, and forests growing under a range of environmental conditions including drier upland areas.

Control of lesser celandine is challenged both by the plants unusual life cycle and its prolific reproductive potential. The weed is spread by seed and by movement of thickened underground stems or tubers in contaminated soil or by wildlife. For example, deer may transport pieces of tubers between their hooves or under their dew claws to new locations. In southwest Ohio, the plant spends most of its life underground from June through January. Typically, leaves begin to appear in February and colonies thicken through March and April. Blooms appear in late-March and early April. By May, the above-ground portion of the plant begins to fade.

Small colonies of lesser celandine can be removed by digging up the tubers; however, extreme care should be taken not to leave behind any of the tubers. Chemical control recommendations in the literature tend to focus on multiple applications of systemic glyphosate-based herbicides starting in February. Landscapers in Cincinnati have had success using pelargonic acid (e.g. Scythe) applied at the highest labeled rate in three monthly applications made in February, March, and April. Scythe is a contact herbicide. It does not translocate within plants so it will have a lower impact on non-target plants growing among the lesser celandine.

2. HORT SHORTS.

A. FIGHTING OHIO'S INVASIVE SPECIES: EVERYONE CAN BE PART OF THE BATTLE WITH AN APP. There is a new tool for fighting alien invasions, and it is your smart phone.

Not every bush, beetle, fish or fungus that lives in Ohio belongs here. Some of the species arrived through people's actions, either by accident or on purpose. These pests can escape their initial point of entry, sometimes spreading rapidly, reducing or eliminating native species by eating, shading, crowding, damaging, infecting, or simply out competing them.

Don't be discouraged; instead, join the battle! Recently, OSU has worked with other neighboring states and the University of Georgia's Center for Invasive Species and Ecosystem Health to develop a FREE smartphone app - the GREAT LAKES EARLY DETECTION NETWORK (GLEDN). The GLEDN app equips users to see photos and descriptions of threats and potential threats. The app also allows users to upload their own photos and
location information for verification. The data that is submitted by app users goes into the web-based Early Detection and Distribution Mapping System, which tracks the locations and spread of invasive species throughout the US and Canada. This information can be used to monitor the spread of these pests, while giving us the knowledge of where populations are.

Both the android and iPhone versions are available to be downloaded. This can be done by clicking on [http://go.osu.edu/GLEDN](http://go.osu.edu/GLEDN). Join the battle and spread the word to others too.

**B. USEFUL PUBLICATIONS ON FRUIT PRODUCTION.** Gary Gao reported that his red raspberry plants had leafed out in central Ohio while his blueberry plants had reached the bud swell stage on April 9, 2013. Many gardeners have started contacting OSU Extension offices all over Ohio to ask questions about home fruit production and management practices. Because of the nature of many of these questions, Gary would like to remind BYGL readers that OSU Extension has several excellent bulletins on fruit production and management. For cultivar selection, cultural management, pest identification, pruning and fertilization, gardeners should refer to OSU Extension Bulletin 940, "Midwest Home Fruit Production Guide." For information on pest spray schedules, labeled pesticides, and pesticide safety, gardeners should refer to OSU Extension Bulletin 780, "Controlling Insects and Diseases in Home Fruit Plantings." Both of these bulletins and many other OSU Extension bulletins can be purchased from OSU Extension offices or through OSU Extension's eStore at [http://estore.osu-extension.org/index.cfm](http://estore.osu-extension.org/index.cfm).

**C. SPRING HAS SPRUNG FOR OHIO BIRDS.** In the coming months, millions of birds will be arriving in Ohio as spring migration kicks-off. Some birds will only be passing through, stopping for a quick rest or a bite to eat. Others will begin setting up nesting territories and serenading the opposite sex. As it is April, Ohio is already seeing some of its early migrants like the RED-WINGED BLACKBIRD and EASTERN BLUEBIRD, and year-round residents like the NORTHERN CARDINAL, already staking their claim to nesting territories. That means, if you haven't already, it's time to dust off those nest boxes for bluebirds, TREE SWALLOWS, CHICKADEES, and HOUSE WRENS and get them sparkly and clean for this year's nesting season.

Eastern bluebirds were spotted in central Ohio checking out boxes as early as mid-March this year. A simple brushing out of any debris or mouse nests that may have accumulated in bluebird boxes over the winter will usually suit mom and pop bluebird. If you feel the box needs a more serious scrub down, use a 10% bleach solution, but be sure the box has a couple days to air out before bluebirds start sniffing things out. This is also a good time to do any needed maintenance on the box (reseat loose nails, seal up cracks, secure mounting, install a predator guard, etc.). For more information on bluebirds, visit the North American Bluebird Society at [http://nabluebirdsociety.org](http://nabluebirdsociety.org).

Bluebirds aren't the only ones setting up shop, many eagles, owls, and falcons have already bred and are incubating eggs! According to the Ohio Department of Natural Resources, Division of Wildlife's (ODNR-DOW) BALD EAGLE nest survey, there are 190 eagle nests in the state this year. Last year, 321 eaglets were hatched in Ohio, indicating a very healthy and robust population. PEREGRINE FALCONS, Durand and her mate, Spark, are incubating 4 eggs on the top of the Rhodes State Office Tower in downtown Columbus. Check out ODNR-DOW's live video streams of several falcon nests around the state at [http://ohiodnr.com/wildlife/dow/falcons/columbus.aspx](http://ohiodnr.com/wildlife/dow/falcons/columbus.aspx).

**D. SALAMANDER MEANDERS.** For some amphibians, spring marks the beginning and end of their most active time of year. Many salamanders around the state have already completed their spring migrations to vernal pools. Marne Titchenell discovered, the salamanders of the Ohio State University Mansfield Campus have 'been there, done that' when it comes to migrating, mating, and egg depositing. At the end of March, Marne and Stephanie West, a Columbus & Franklin County Metro Park naturalist and vernal pool expert, waded through several vernal pools in search of amphibians and egg masses. Egg masses from two different species of salamanders were discovered, meaning the SPOTTED SALAMANDER and SMALL-MOUTH SALAMANDER adults that had deposited them, had already vacated the area. Salamanders don't stick around long after they've
taken care of business. The young salamanders are left to undergo metamorphosis on their own. Check back in late April to early May for a BYGL update on the OSU Mansfield's salamanders!

In other amphibian news, wood frogs, chorus frogs, and spring peepers are calling around Ohio. These hoppers are some of the first to begin their nightly serenades in hopes of achieving their number one goal in life...to mate (followed closely by their second goal in life...to eat). SPRING PEEPERs are perhaps the loudest frog given their size in Ohio. An adult spring peeper is only 3/4 - 1 1/4" long, but encounter a body of water full of these tiny peepers and it can be deafening! As spring progresses into summer, all 15 of Ohio's frogs and toads will be out and about trilling, creaking, and croaking. Visit the Ohio Frog & Toad Calling Survey website ([http://ohioamphibians.com/frogs/frogspecies.html](http://ohioamphibians.com/frogs/frogspecies.html)) to learn more about Ohio's species, listen to each species' call, and sign up to volunteer on a frog & toad call survey.

E. ARBOR DAYS AT OSU. The best time to plant a tree was twenty years ago, but the next best time is - now. Keep that in mind as we approach Arbor Day in Ohio, officially Friday, April 26. There is some date flexibility throughout the country and in Ohio as we celebrate trees, and for Ohio State University and its' two Tree Campus USA campuses, we will celebrate on both Saturday, April 20 and Friday, April 26.

At the OSU Wooster Tree Campus USA celebration we will be formally designated as a new Tree Campus USA site, making OSU one of six universities nationwide to have two tree campus sites. On Saturday, April 20 in Wooster Ohio...we will have the OSU Wooster Arbor Day Celebration and the Tale of Five Oaks, complete with a Why Trees Matter Tree Benefit walk (check out the secrest.osu.edu website). The full schedule is:

9:00 a.m. Oak Planting by Doylestown Brownies in the Secrest Amphitheatre
9:45 a.m. Oak Planting at OSU's Agricultural Technical Institute with ATI Students
10:30 a.m. Oak Dedication at the Ben Stinner Memorial Garden on the OARDC Campus
11:15 a.m. Oak Planting from the City of Wooster at OARDC
12:00 p.m. Oak Planting from the College of Wooster at Secrest Arboretum

The following week, on Friday, April 26…join the Chadwick Arboretum Arbor Day Celebration at 10 a.m. on the OSU Main Campus Oval in Columbus. This celebration will include the bestowing of the Lorax Awards from Chadwick Arboretum. This is the Arboretum's highest award, and is given to those who speak for our trees. It will be a fine celebration.

Here are a few words about Arbor Day, as relevant today as when penned over a century ago:

"It is well that you should celebrate your Arbor Day thoughtfully, for within your lifetime the nation's need of trees will become serious. We of an older generation can get along with what we have, though with growing hardship; but in your full manhood and womanhood you will want what nature once so bountifully supplied and man so thoughtlessly destroyed; and because of that want you will reproach us, not for what we have used, but for what we have wasted."

- Theodore Roosevelt, 1907

3. BUG BYTES.

A. MAKE WAY FOR THE QUEEN! Cold spring temperatures don't deter BUMBLE BEE QUEENS from visiting flowers and beginning work on this year's nests. These cold-resistant bees can forage for pollen and nectar when temperatures are still in the 40F - 50F range, thanks to their ability to regulate their own heat by vibrating their wing muscles or "buzzing." This familiar "buzz" is also what makes bumble bees such good pollinators of blueberries, cranberries, tomatoes, and other flowers that require buzz pollination to release pollen from the anther.
Fertilized queens are the only members of last year's bumble bee colonies to survive the winter. On sunny spring days, she seeks out an abandoned mouse hole or other cavity to begin this year's nest, then forages for pollen and nectar to make "bee bread" to feed her first generation of daughters. Once these workers emerge as adults, they take over the foraging duties, leaving the queen to stay in the nest to lay more eggs. Later in the season, drones and virgin queens emerge and mate, with those fertilized queens surviving the winter to begin the cycle again next spring.

Of Ohio's dozen species of bumble bees, the common EASTERN BUMBLE BEE (Bombus impatiens) is the most widely observed species in the garden. Several other species that used to be commonly seen are now threatened, with some experiencing dramatic population declines (e.g. RUSTY PATCHED BUMBLE BEE (B. affinis)). CARPENTER BEES (Xylocopa virginica) are similar in size to some queen bumble bees, but have a distinctively shiny abdomen, while bumble bee abdomens are fuzzy. Learn more about bumble bee identification, garden plants to attract bees, and bumble bee citizen monitoring programs at: [http://www.xerces.org/bumblebees/].

B. EASTERN TENT CATERPILLARS ARRIVING SOON. Curtis Young noted that Cincinnati has accumulated 92 Growing Degree Days (GDD). This accumulation value is the exact predictor for eastern tent caterpillar (ETC) (Malacosoma americanum) egg hatch. Indeed, Joe Boggs reported that he received an e-mail message this past Thursday (April 4) from the "BYGL Early Warning System" (a.k.a. Larry Hanks, Pampered Properties, Lexington, KY) noting that ETC eggs were hatching in central Kentucky. Last year, BYGLers reported that ETC eggs hatched in southwest Ohio on March 15 (BYGL 2012-01, 04/05/12); yet another example of why accumulated GDD is a much more accurate predictor of insect development compared to calendar dates!

ETC caterpillars are accomplished and prolific tent-makers producing highly visible silk nests in the forks of branches. They begin producing silk nests immediately upon hatching from eggs. The caterpillars prefer to feed on trees in the family Rosaceae, particularly those in the genus Prunus, such as cherries. They also occasionally feed on ash, birch, maple, and oak. The caterpillars are covered in short, grayish-white hairs and they have a distinct, unbroken white stripe down their backs.

The caterpillars are capable of causing serious stress to their host trees. Leaves lost to caterpillar feeding this spring must be replaced using energy stored from last season. Small nests can be eliminated digitally using five-fingered "smash and/or smear" techniques. Less hands-on methods include applications of the naturally occurring bacterium, Bacillus thuringiensis (Bt), applied to early instar stages, as well as standard insecticides labeled for general caterpillar management. The cats may only meow now, but they will roar later in the season!

C. GROUND-NESTING BEES ON THE WING. Participants at this week's southwest Ohio BYGLive! Diagnostic Walk-About held at Spring Grove Cemetery and Arboretum observed heavy ground-nesting bee activity in several locations. Although there are a number of species of ground-nesting bees representing several hymenopteran families, the species currently on the wing probably belongs to the family Andrenidae. The common name for this family is "mining bees"; however, these important native pollinators are most often called "ground-nesting bees," as well as "burrowing bees," or "digger bees" owing to their soil excavating nesting habit. The small (3/16 - 3/4" long) black bees have narrow white stripes across their abdomens, one stripe per abdominal segment.

The female bees dig individual burrows several inches deep into the soil. They prefer to nest where the soil is lightly exposed due to sparse vegetation such as areas with weakened turfgrass. Each burrow consists of a hole about the diameter of a wooden pencil surrounded by a mound of loose, excavated soil particles. The size, shape, and color of the soil particles may cause the mounds to be mistaken for those produced by ants. The females become receptive to mating after they provision their burrows with wads of pollen to nourish their larvae.

These are very effective pollinators. Understanding their behavior may reduce fear of these highly beneficial insects. For example, while these are solitary bees with no social structure, large numbers of females often locate their burrows in close proximity to one another giving the appearance of an organized colony. The males will cruise menacingly just above large collections of burrows; however, the males lack stingers! While the females
are busily digging and provisioning their burrows, the males buzz back and forth chasing other males and possible predators. This presents the appearance of a "swarm of bees," but it's all a rouse!

Since these are beneficial insects, management efforts should focus on making the environment less favorable for the bees rather than on insecticide applications. The females prefer to excavate where the soil is expose by sparse vegetation. Turfgrass that is weakened and thin due to poor management provides ideal conditions. Thickening the turfgrass through applying good management practices will create an environment less favorable for these bees. The bees will simply move to other locations.

D. ASIAN LONGHORNED BEETLE (ALB) UPDATE. In recent news, New Jersey reported that ALB has been eradicated from the state. Good news has also come from our neighbors to the north, as Canada reported the infestation in Toronto has also been eradicated. Efforts in Ohio continue with a similar goal of eradication. As of April 6, 2013, 338,006 trees have been surveyed since July 1, 2011 in the Buckeye State. Of those trees, 9,539 have been found to be infested since survey work began in Clermont County in SW Ohio. Of those trees, 9,209 have been removed since November 14, 2011. To stay up-to-date of the infestation in Ohio, and North America, check out [www.AsianLonghornedBeetle.com].

E. EMERALD ASH BORER (EAB) UPDATE. This week, New Hampshire reported its first find of EAB, making it the nineteenth state in the US to join this unfortunate invasive species club. To stay up-to-date on EAB on the regional level, [www.emeraldashborer.info] is a website maintained by Michigan State University. While a majority of Ohio's counties have found EAB, there are still numerous counties, primarily in the east, south, and southeast that haven't confirmed an infestation. First finds need to be verified by the Ohio Department of Agriculture (ODA). Information about this process can be found on the ODA website at [http://www.agri.ohio.gov/divs/plant/eab/eab-index.aspx]. Click on the form icon for the paperwork that would be submitted with the insect for verification of identification. You can also call ODA's EAB hotline at 888-OHIO-EAB.

4. DISEASE DIGEST.

A. IMPATIENS DOWNY MILDEW. Here is a short Q&A relative to this serious invasive pathogen of bedding impatiens.

Q. - Will there be a shortage of impatiens this spring and summer?

A. - Almost certainly, yes. The toll of the downy mildew disease of bedding impatiens (Impatiens walleriana) will result in less of this former #1 in sales bedding plant being available in garden centers. This is a big deal for gardeners that are accustomed to the rivers of vibrant colors that impatiens provide to the landscape. Many impatiens are started in the south and finished in northern greenhouses and because of this disease larger growers are planting less. Sanitation and fungicide use will be rigorous in these greenhouses, but this is a difficult to control invasive pest. New Guinea impatiens and SunPatiens hybrids are not affected by the disease. Other shade-tolerant replacements for impatiens include wax begonias, coleus, and browallia.

Q. - Will this downy mildew spread to other plants than impatiens?

A. - No, the pathogen, Plasmopora obducens, only infects Impatiens walleriana, its hybrids, and certain other impatiens species, such as our native jewelweeds, Impatiens capensis and Impatiens pallida. This downy mildew pathogen is different from other downy mildews that infect rose, viburnums, cucumbers, and grape. The pathogen survives over the winter inside on infected plant debris in soil and potentially outside from overwintering oospores of Plasmopora obducens on diseased plant debris in gardens and at least theoretically on wild jewelweeds.

Q. - Where can more be learned about downy mildew of impatiens?
A. - Google the National Floral Endowment + downy mildew of impatiens and get everything from images of signs and symptoms to control recommendations to videos of the disease.

B.  NEW MUSHROOM BOOK.  "Mushrooms and Macrofungi of Ohio and the Midwestern States" ($26.25) is the perfect companion for your next mushroom foray!  This full-color, 166-page spiral-bound handbook contains concise descriptions of more than 140 mushrooms divided into 23 color-coded groups.  The most current scientific and common names are provided, and vibrant, high-quality images show fine details for easy identification.  Expert authors include Dr. Lanny Rhodes, retired and long-time teacher of the "Fleshy Woodland Fungi" course at The Ohio State University (OSU), Dr. Britt Bunyard, the editor of *Fungi* magazine, Walter Sturgeon, the president of The Ohio Mushroom Society, and Sarah Ellis-Williams of the OSU Department of Plant Pathology.  The fungus amongus really dress up well.

5.  TURF TIPS.

A.  RECOMMENDATIONS FOR SPRING TURF NITROGEN APPLICATIONS.  Cool season turfgrass species, including Kentucky bluegrass, fescues, and perennial ryegrass, require about 2 - 3 lbs. of nitrogen (N) per 1000 sq. ft. each year to maintain acceptable rates of growth and appearance.  Whether 2 or 3 lbs. of N are needed in part depends on grass clipping removal.  If grass clippings are left on the lawn, they add nutrients including N and organic matter back into the soil as they decay.  With grass clippings left in place, the lawn should not need more than 2 lbs. of N per 1000 sq. ft. each year.  If clippings are removed, 3 pounds of N per 1000 sq. ft. may be needed.  Some worry that leaving grass clippings on the lawn will lead to thatch buildup, but typically that does not happen.

Turfgrass fertilizers vary in their composition of water soluble (fast release) and insoluble (slow release) N compounds.  Water soluble N compounds are readily available to plants soon after they are applied to the soil.  However, being water soluble, they are also easily leached from and through the soil.  Water insoluble N compounds are not easily leached, but it takes time for them to be released into a form that is water soluble and available to plants.  Never apply more than 1 lb. of water soluble N per 1000 sq. ft. at one time.  Slow release fertilizers, including organic fertilizers and synthetic controlled release products, may be applied at higher rates (follow manufacturer's instructions) because much of their nitrogen is water insoluble.

It is generally recommended to apply approximately 1 lb. of N per 1000 sq. ft. of turfgrass in the spring to get the grass growing and greened up.  However, if one reads and follows the directions on many bags of commercial turfgrass fertilizers, one will be applying less than 1 lb. of N (0.75 - 0.91 lb. N per 1000 sq. ft.).  It is not exactly 1 lb., but it is close enough.  It is a greater concern to not apply more than 1 lb. of N per 1000 sq. ft.

6.  INDUSTRY INSIGHTS.

A.  WHITE PINE WEEVIL WARNING.  Curtis Young noted that with GDD accumulations finally rising in southern Ohio (92 in Cincinnati!), overwintered white pine weevil (*Pissodes strobi*) females should soon become active.  Indeed, the GDD for female weevil emergence is 84 which means that these snout beetles are probably already active in the southern part of the state.  Overwintered females deposit eggs in the terminals of a wide range of conifers including:  Douglas-fir; all spruces; and eastern white, Scotch, jack, red, and pitch pine.  The resulting white, legless, slightly curved, grub-like larvae tunnel downward just beneath the bark, feeding on phloem tissue until pupation.  The tops of weevil infested trees become wilted, turn brown, and die.  Main leaders are often curved into a "shepherd's crook."

Removing the paper-thin bark from infested leaders later in the season will reveal reddish-brown frass (insect excrement) and cream-colored weevil larvae.  As the larvae near pupation, they excavate tub-shaped chambers in the xylem and surround themselves in excelsior-like wood fibers.  This forms the so-called "chip-cocoon" within
which the larvae pupate. New adults emerge through the bark creating small, round exit holes. The adults mate and feed on bud and twig tissue; however, their damage is inconsequential. The weevils then move to the duff beneath conifers to spend the winter. There is one generation per year.

Trees may be protected by making topical applications targeting tree terminals using specially formulated "borer sprays" such as Onyx (bifenthrin) prior to the females laying their eggs. Populations may be reduced later in the season by removing and destroying infested terminals. Wilted terminals should be pruned from trees and the cut ends closely examined for reddish-brown tunnels in the phloem; no tunnels mean that all of the larvae were confined to the cut top. Infested material must be destroyed since the weevils will complete their development in cut tops left on the ground. A soil drench or soil injection application of imidacloprid (e.g. Merit, Xytect, etc.) in the fall has been shown be effective in protecting trees against white pine weevil infestations the following season. This application is generally considered economically feasible only for landscape trees and should be reserved for landscapes that have a history of white pine weevil activity.

7. WEATHERWATCH.

A. WEATHER UPDATE. The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from April 1 - April 9, 2013, with the exception of the soil temperatures which are readings from Wednesday, April 9, 2013 at 6:05 p.m.

Dry, dry, and dry! Of the five weather stations listed below, only one has reported receiving any precipitation this month and that amount was only 0.1".

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<td>63.97/53.94</td>
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<td>Central</td>
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For a link to the OARDC Weather Stations, visit: [http://www.oardc.ohio-state.edu/centernet/weather.htm].

B. GROWING DEGREE DAYS (GDD). GDD is a measure of the daily maximum and minimum temperature and directly relates to growth and development of plants and insects. The GDD of any zip code location in Ohio is estimated using the GDD of ten OARDC weather stations and available on the web at: [http://www.oardc.ohio-state.edu/gdd/].

The range of GDD accumulations in Ohio from north to south is 59 to 117. Following is a report of GDD for several locations around Ohio as of April 10, 2013: Painesville, 59; Cleveland, 64; Toledo, 66; Canfield, 65; Findlay, 66; Van Wert, 68; Wooster, 70; Coshocton, 86; Columbus, 91; Springfield, 85; Dayton, 88; Cincinnati, 108; Ironton, 116; Portsmouth, 117; and Piketon, 114.

To put these GDD accumulations into perspective, the following is an abbreviated listing of plant and insect species with their respective phenological event and average GDD accumulations at which these events occur. Due to variations in weather, temperature, humidity, etc., these events may occur a few days earlier or later than predicted by the average GDD. By looking at a city, town, or village nearby on the above list, or visiting the above website, one can see what is taking place in the landscape.

Silver maple, first bloom, 34; Corneliancherry dogwood, first bloom, 40; silver maple, full bloom, 42; red maple, first bloom, 44; speckled alder, first bloom, 52; northern lights forsythia, first bloom, 58; Japanese pieris, first
bloom, 60; red maple, full bloom, 75; star magnolia, first bloom, 83; border forsythia, first bloom, 86; eastern tent caterpillar, egg hatch, 92; Manchu cherry, first bloom, 93; northern lights forsythia, full bloom, 94; Norway maple, first bloom, 116; border forsythia, full bloom, 116; chainticleer callery pear, first bloom, 123; sargent cherry, first bloom, 127; larch casebearer, egg hatch, 128; Japanese pieris, full bloom, 129; and saucer magnolia, first bloom, 133.

8. COMING ATTRACTIONS.

A. WILDLIFE IN YOUR WOODS. The Ohio Woodland Stewards Program is offering an all-day program entitled Wildlife in Your Woods at the Ohio State University, Mansfield Campus, 229 Riedl Hall, 1760 University Drive, Mansfield, Ohio, April 19, 2013, 9:00 a.m. - 3:00 p.m. Information can be found on the website at [http://woodlandstewards.osu.edu]. Registration deadline is April 12, 2013.

B. WILDLIFE CONFLICTS WORKSHOP. The Ohio Woodland Stewards Program is offering an all-day program on Wildlife Conflicts at the Upper Valley Career Center (UVCC), Room 600, 8901 Looney Road, Piqua, Ohio, April 26, 2013, 9:00 a.m. - 3:00 p.m. Information can be found on the website at [http://woodlandstewards.osu.edu]. Registration deadline is April 19, 2013.

C. NEW APPLICATOR TRAINING, FULTON COUNTY. The OSU Extension Office in Fulton County will be hosting an Ohio Commercial New Applicator Class on Tuesday, April 30, 2013 from 9:00 a.m. - 3:00 p.m. at the OSUE Office in the Robert Fulton Agriculture Center, 8770 State Route 108, Wauseon, Ohio. This class will be geared to municipalities, school maintenance, lawn/landscape companies, property managers, and other government entities.

The morning sessions will review Commercial Core material including but not limited to Ohio pesticide laws and regulations, personal safety and environmental issues, and pesticide formulas and label reading. In the afternoon, the class will be split in two to provide an overview of the weeds, insects, diseases and problem solving that accompanies each of the Industrial Vegetation (Category 5) or Turfgrass (Category 8) tests.

Pre-register with the Extension office by downloading the registration form from [http://www.fulton.osu.edu], calling 419-337-9210 or emailing [richer.5@osu.edu]. Cost for the morning session is $30 and afternoon session is $30 or $60 for both and lunch. The workshop is limited to 30. Registration deadline is April 26.

D. OHIO'S NON-NATIVE INVASIVES. The Ohio Woodland Stewards Program is offering an all day workshop on Ohio's Non-Native Invasives at the Ohio State University, Mansfield Campus, 229 Riedl Hall, 1760 University Drive, Mansfield, Ohio, May 17, 2013, 8:15 a.m. - 4:00 p.m. Information can be found on the website at [http://woodlandstewards.osu.edu]. Registration deadline is May 10, 2013.

E. TREE SCHOOL. The Ohio Woodland Stewards Program is offering an all-day Tree School at the Ohio State University, Mansfield Campus, 229 Riedl Hall, 1760 University Drive, Mansfield, Ohio, May 18, 2013. Information can be found on the website at [http://woodlandstewards.osu.edu]. Registration deadline is May 10, 2013.

F. OHIO'S INVASIVE SPECIES SERIES, JUNE 2013, OSU MANSFIELD CAMPUS. Invasive species come in all shapes and sizes. Whether a plant, insect, fungus or vertebrate, each invasive species impacts their segment of the ecosystem in different ways. This seminar series focuses on some of the key issues associated with non-native, as well as how to identify them and deal with them in your own backyard.  

*June 4 - This evening's topic will cover two non-native invasive insects impacting Ohio's trees. Learn how to identify emerald ash borer (EAB) and Asian longhorned beetle (ALB) and understand their impact on your trees.  
*June 11 - While EAB and ALB have gotten a lot of attention lately, there are still other non-native pests that you should be aware of. This seminar will cover gypsy moth, thousand canker disease on black walnut, viburnum leaf beetle and hemlock wooly adelgid.
*June 18 - Non-native invasives don't impact just our trees. This evening seminar will focus on the impacts non-native invasives have on wildlife and the wood products our woodland produce.
*June 25 - The last seminar session will focus on specific non-native invasive plants. Characteristics for identification will be covered along with control options.

Registration for each seminar is $15 OR register for all 4 seminars for $45. Information can be found on the website at [http://woodlandstewards.osu.edu].

9. BYGLOSOPHY. "A weed is a plant that has mastered every survival skill except for learning how to grow in rows." - Doug Larson

APPENDIX - ADDITIONAL WEBSITE RESOURCES:

Ask a Master Gardener Volunteer (Consumer Gardening Questions)
http://mastergardener.osu.edu/ask

Buckeye Turf
http://buckeyeturf.osu.edu

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

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

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

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

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

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

USDA APHIS Beetle Buster Website (Asian Longhorned Beetle)

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

Following are the participants in the April 9th conference call: Pam Bennett (Clark); Joe Boggs (Hamilton); Jim Chatfield (Hort and Crop Science); Julie Crook (Hamilton); Denise Ellsworth (Entomology); Gary Gao (Hort and Crop Science); Francesca Peduto Hand (Plant Pathology); Denise Johnson (Master Gardener Volunteer program); Tim Malinich (Erie); Joe Rimelspach (Plant Pathology); Paul Snyder (OARDC and Secrest Arboretum); Amy Stone (Lucas); Nancy Taylor (C. Wayne Ellot Plant and Pest Diagnostic Clinic); Marne Titchenell (School of Environment and Natural Resources); Curtis Young (Van Wert); and Randy Zondag (Lake).

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 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.

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