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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/OSUEBYGL] or follow the BYGL on Twitter at [http://www.twitter.com/OSUBYGL].

This is the 2nd 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.

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**APPENDIX - ADDITIONAL WEBSITE RESOURCES.**

1. **PLANTS OF THE WEEK.**

*ANNUAL - PANSIES* (*Viola X wittrockiana*). These annuals (that sometimes act as perennials) are sure signs that spring has arrived in Ohio. The flowers have colorful "faces" of purple, maroon, burgundy, rose, yellow, apricot, and white. The fragrant flowers bloom throughout spring and sometimes into early June. The flowers are edible, and many like to put them in salads or decorate cakes and cupcakes with them.

Pansies don't like summer heat and decline as temperatures rise; however, cutting them back renews growth. As temperatures cool in the fall, they'll show-off again, lasting sometimes until a hard freeze. Many varieties do well throughout the winter months and come back again the next season. Given the mild weather this past winter, pansies were observed blooming off and on all winter. Plant pansies in full sun to partial shade or put them in containers for the spring season. Replant these containers with warm season annuals when the pansies begin to decline.

*PERENNIAL - MOSS PHLOX* (*Phlox subulata*). The response when one sees a sweep of this early spring bloomer is usually WOW! Creeping phlox is quite showy now in central Ohio gardens. When this plant is in
bloom, everyone wants to know where to buy it; retail outlets can't keep it in stock! On the other hand, if it's not sold in bloom, it's usually leftover to go to the discount table.

Creeping phlox provides an outstanding carpet of red, purple, and white flowers in the early spring. There are numerous cultivars available in a variety of colors. It gets about 3-6" tall and makes an excellent border plant or accent to a rock garden. The best thing to do to creeping phlox after it’s finished blooming is to give it a slight haircut, removing the blooms and some of the foliage. This rejuvenates the foliage and the plant looks pretty decent in the garden the rest of the season. It's extremely hardy but does not like wet soils. Creeping phlox takes full sun and tolerates hot dry areas during the summer. However, get it now because retail stores won't have it very much longer!

*WOODY - PAWPAW (Asimina triloba). This native Ohio plant can be found in bloom in woodlands across central Ohio at this time. However, if one doesn't know what to look for, it's easy to miss this incredible flower. When the bud begins to swell, it's a beautiful, velvety emerald green color. As it expands, the bud turns to a deep burgundy, and then opens into the burgundy-purplish rosette flower. However, they are held so tightly to the stems and so well camouflaged and that one has to look up when walking through the pawpaw patch.

This short understory tree grows to around 15-20' tall and about as wide. It's best planted in a woodland or at the edge of the woods. The large, droopy green leaves turn a nice golden yellow in the fall. The greenish-yellow fruits ripen to a brownish-black that many enjoy. The texture is somewhat like a very over-ripe banana, which is why others don't enjoy! There must be at least 2 genetically different pawpaw trees for pollination to occur. Pawpaws grow in colonies, with one tree sending out many sprouts from the roots. This appears as many trees, but it's genetically one tree. Plant another genetic strain in order to facilitate pollination.

*WEED - GARLIC MUSTARD (Alliaria petiolata). This very prolific, and often invasive, European native is starting to show its button-like clusters of small cross shaped white flowers with four petals across much of Ohio. It can be found in landscapes and woodlands and prefers moist shady locations. This weed is a cool season, biennial herb with stalked, triangular to heart-shaped, coarsely toothed leaves that give off an odor of garlic when crushed. First-year plants appear as a rosette of green leaves close to the ground. Rosettes remain green through the winter and develop into mature flowering plants the following spring. Flowering plants of garlic mustard reach from 2-3.5' in height.

Garlic mustard poses a severe threat to native plants, animals, and even a rare insect in forest communities in much of the eastern and mid-western U.S. Many native wildflowers that complete their life-cycles in the spring-time (e.g. spring beauty, wild ginger, bloodroot, Dutchmen's breeches, hepatica, toothwarts, trilliums) occur in the same habitat as garlic mustard. Once introduced to an area, garlic mustard out-competes native plants by aggressively monopolizing light, moisture, nutrients, soil, and space.

For further information on this weed, including control measures, refer to 'Garlic Mustard', Plant Conservation Alliance's Alien Plant Working Group at [http://www.nps.gov/plants/alien/fact/alpe1.htm].

2. HORT SHORTS.

A. 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 213 to 405. Following is a report of GDD for several locations around Ohio as of April 11, 2012: Painesville, 213; Cleveland, 223; Toledo, 269; Canfield, 237; Findlay, 267; Van Wert, 274; Wooster, 249; Coshocton, 291; Columbus, 334; Springfield, 322; Dayton, 327; Cincinnati, 377; Ironton, 404; Portsmouth, 405; and Piketon, 369.

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.

Koreanspice viburnum, full bloom, 205; azalea lace bug, egg hatch, 206; 'Spring Snow' crabapple, full bloom, 209; common flowering quince, full bloom, 214; birch leafminer, adult emergence, 215; 'Coralburst' crabapple, first bloom, 217; elm leafminer, adult emergence, 219; common chokecherry, full bloom, 221; alder leafminer, adult emergence, 224; honeylocust plant bug, egg hatch, 230; sargent crabapple, first bloom, 230; common lilac, first bloom, 234; Ohio buckeye, first bloom, 245; common horsechestnut, first bloom, 251; hawthorn lace bug, adult emergence, 253; hawthorn leafminer, adult emergence, 260; flowering dogwood, first bloom, 263; red buckeye, first bloom, 265; blackhaw viburnum, first bloom, 269; imported willow leaf beetle, adult emergence, 274; Sargent crabapple, full bloom, 298; red horsechestnut, first bloom, 304; pine needle scale, egg hatch - 1st generation, 305; cooley spruce gall adelgid, egg hatch, 308; eastern spruce gall adelgid, egg hatch, 308; common lilac, full bloom, 315; 'Pink Princess' weigela, first bloom, 316; blackhaw viburnum, full bloom, 322; redosier dogwood, first bloom, 323; dwarf fothergilla, full bloom, 325; 'Winter King' hawthorn, first bloom, 328; lilac borer, adult emergence, 330; slender deutzia, first bloom, 338; Japanese kerria, full bloom, 342; common horsechestnut, full bloom, 344; red chokeberry, full bloom, 351; doublefile viburnum, first bloom, 353; Pagoda dogwood, first bloom, 363; red Java weigela, first bloom, 365; black cherry, first bloom, 368; common sweetshrub, first bloom, 371; lesser peach tree borer, adult emergence, 372; Ohio buckeye, full bloom, 374; holly leafminer, adult emergence, 375; and Vanhoutte spirea, full bloom, 406.

B. THE GREAT DIVIDE. Perennials that are overgrown, have gotten out of control, are declining in overall growth, haven't bloomed quite as nicely as they should, or have died out in the center of the clump should be divided to improve health, growth, and appearance. A good rule of thumb is to divide perennials opposite of their bloom time. However, most perennials can be divided just about any time of the year providing that one provides extra care to get the plants established after dividing, especially during warm weather. It's easier to divide perennials in the early spring when they are smaller and easy to handle. Now is a great time to divide those that bloom in the summer or fall.

Begin by digging out around the edge of the plant and lift the entire plant, leaving as much of the root system as intact as possible. Or, if one just wants to "share" a portion of a perennial, dig around the outside edge and lift a segment of the plant.

If the perennial has fibrous roots (e.g. coreopsis, daisy), one can use a spade, pitchfork, or knife to divide these. This type of root system can be pulled or teased apart. Make sure that there are at least 2-3 shoots and a good mass of roots. If the plant has fleshy, thick roots (e.g. peony, daylily), use a sharp knife or even a hacksaw to cut pieces of the root, making sure that there are a few buds or "eyes" remaining on the fleshy root. If one is dividing ornamental grasses, well, the best recommendation is to call a neighbor to do it! Ornamental grasses can quickly become thick and woody and are sometimes quite difficult to divide. People have been known to use axes and even chainsaws to cut through the root mass! Try to divide these early before they get so difficult.
After digging, discard any roots that are dead, rotted, or mushy. Plant the divisions immediately or as soon after dividing and water to keep the roots moist. When dividing, take advantage of the empty root space and add organic matter prior to replanting.

C. SONGBIRDS FLYING INTO WINDOWS – WHY THEY DO IT AND HOW TO STOP IT. Despite what it may look (and sound) like, cardinals and robins are not blindly running into windows this time of year. These territorial species are actually defending their home ground against their own reflection that appears in the window. The ability to recognize oneself in a reflected image is rare in songbirds, with the exception of the corvid family (e.g. crows, jays, magpies). Breeding season is in full swing for Northern cardinals (March-April) and starting up for American robins (April-May), therefore laying claim and defending territories is of high priority for both males and females of these species. Cardinals and robins tend to be the most common culprits of window attacks. Often times, the agitated bird will give a warning call to the reflection in the window (if it is a cardinal, it will be a high pitched ‘chip’), vibrate its wings, and lower its body or open its mouth, all of which are intended to scare the reflection in the window away. Unfortunately reflections do not leave, and in addition, they match every aggressive posture until the cardinal or robin is forced into full-on attack mode. When this happens, the real bird hits the reflected bird and encounters the unyielding surface of the window, making the real bird even more intent on fighting the reflection. Sometimes, this fight can go on for weeks.

If a cardinal, robin, or other songbird is repeatedly attacking a window, simply cover the window with newspaper for a few days or soap the outside of the window to remove the reflection. Another option is to tape silhouettes of large birds, such as hawks or owls in flight onto the glass. These serve the dual purpose of disrupting the bird’s reflection, as well as eliciting fear. Decals on the inside of the window spaced no more than 2-4” apart may also work. Because birds can see in the ultraviolet range, there are decals available that are glow brightly to birds but appear clear and almost invisible to humans.

D. FROST DAMAGE TO FRUIT CROPS. Many areas of Ohio have experienced spring frosts during the first two weeks of April. These frosts have caused damage of varying severity to fruit crops, such as apple, pears, cherries, blueberries and strawberries. It is too early to determine how severe the frost damage is since more frosts are still predicted for the next few days.

Gary Gao examined a few apple blossoms in central Ohio. A small percentage of apple blossoms were killed. He also noticed that the ovaries in a few apple blooms have turned brown. These flowers will not produce a crop. The healthy ovaries in apple blooms are green. As of April 10, there were still many flowers in full bloom. He ran into Mark Schmittgen of Heartland Orchard. Mark jokingly said that "As of April 10, I am still optimistic!"

Blueberries are in full bloom in southern and central Ohio. Gary Gao did not see any frost damage to blueberry flowers. However, it is still too early to tell. Gary noted that some unprotected strawberry flowers were "zapped" by frosts. The center of the blossoms have turned black. The center of a healthy strawberry in bloom is light green.

Erik Draper reported that frost damage in northeastern Ohio may have been more severe. He has been very busy assessing frost damage during the last two weeks.

E. POOR PLANT SAMPLES PROVIDE UNCLEAR ANSWERS. Nancy Taylor, director of the C. Wayne Ellett Plant Pest Diagnostic Clinic (CWEPPDC), reminded BYGLers to think big when examining or submitting plant samples. Of the many brown, dead twig samples that have come into the CWEPPDC, few, if any, are useful to assist in the correct diagnosis of plant problems. The main reason for this lack of definitive
answers is typically due to the wrong portion of the brown, dead branch being submitted. To help with a positive identification of pest problems, the branch or sample must contain the all-important section called the transition zone.

The transition zone is the area of the sample where the obvious dead, brown tissue transitions back to apparently healthy tissue. It is in this area where pathogens infecting healthy tissue can be isolated and identified. The old, brown, dead stuff is contaminated by other fungi called saphrophites, which break down organic matter, and often confuse the true disease issues. In fact, Nancy stated that she believes many of the plant dieback problems are in reality a symptom of compromised root systems. The only accurate way to determine what exactly caused the problems, would be to look at the entire plant, roots and all; however, all of this impossible to do if the only sample sent in was a portion of a dead twig! Bigger is better when taking plant samples and while the transition zone is extremely important for successful disease identification, the entire plant, roots and all, is best to accurately diagnose plant problems.

F. CRABAPPLE BLOOM IS EARLY. At OSU’s Secrest Arboretum we have data for first bloom (1 of 20 blossoms) and full bloom (19 of 20 blossoms) for those wonderful ornamental Malus in our Crablandia collections. There is always quite a range of timing for bloom arrival from the earliest-blooming crabapples such as 'Strawberry Parfait' and 'Spring Snow' to the late bloomers such as 'Golden Raindrops' and 'Silver Moon'. With our mid-March madness of degree day explosion in 2012 which included a string of 80F days, it was a record year for crabapple bloom, even though conditions have moderated the past few weeks.

Prior to this year, we have no records of first bloom for the earliest-flowering crabapples at Secrest Arboretum until April 4. As for the usual date of first bloom for early bloomers, in recent years, it’s been during the third or fourth week of April. This year, ‘Strawberry Parfait’ first bloom was on March 23. As of April 11 this year, a date when typically no crabapples have even had first bloom, we already have 62 of the 75 crabapple taxa in the Crablandia research plots that have bloomed, and 44 of the 75 have reached full bloom. Quite a year already!

3. BUG BYTES.

A. HYDRANGEA LEAF-TIER MOTH. Joe Boggs reported that participants in this week's Southwest Ohio BYGLive! Diagnostic Walk-About were treated to a sample of the handiwork of the hydrangea leaf-tier moth (Family Tortricidae; Olethreutes ferriferana) on its namesake host. The plant sample was brought to the Walk-About by a nurseryman who experienced high populations in his field hydrangeas last season and again this season.

Individual moth caterpillars apply silk along the edges of two newly expanding hydrangea leaves to cement or tie the leaves together creating an envelope-like structure surrounding newly developing leaves and flowers. The caterpillars then feed upon the leaves and flowers enveloped within these odd looking structures. The leaf structures created by this leaf-tier caterpillar tend to occur near the tips of plant stems and may be very obvious. The two tied leaves fail to fully expand and become dark green, wrinkled and gnarled; the structure superficially resembles a plant gall. Opening the tied leaves will reveal the caterpillars housed within silk littered with dark green frass pellets. The light green semi-transparent caterpillars have shiny black head capsules and a black thoracic shield on top of the segment just behind the head.

Published records indicate that high populations may occasionally cause significant harm to wild and cultivated hydrangeas; however, it is more common for the caterpillars to be viewed as an oddity affecting plant aesthetics. If control is deemed necessary, the caterpillars may be eliminated by squeezing the leaf structures to
kill the caterpillars. Unfortunately, the leaf structures shield the caterpillars from direct exposure to a topical insecticide. BYGLive! participants speculated that a systemic insecticide might reach the caterpillars enclosed in the protective leaf structures.

B. EMERGENCE OF EMERALD ASH BORER (EAB) NEAR西湖？？？.Joe Boggs reported while driving in southwest Ohio, he observed some black locust blooming. While the white fragrant flowers caught him by surprise, what was even more amazing is that black locust is the plant indicator that coincides with the adult emergence of the emerald ash borer (EAB). While these trees, as Joe described were in micro-climates, he began thinking that adult emergence will likely be earlier than ever before.

When EAB adults emerge, both males and females feed on ash leaves before they mature and find a mate. This feeding resembles notching on the outside edges of the ash tree’s leaflets. In medium to heavy infestations of EAB, this feeding damage can be very evident. More beetles equals more notches!

Additional EAB news includes an announcement by the Ohio Department of Agriculture (ODA) last week. ODA distributed a media release to communicate the EAB specimens had been submitted to ODA from Columbiana and Guernsey counties – both first detections in those counties. A current infestation and quarantine map can be found on the AshAlert website at [http://ashalert.osu.edu]. Click on the map of Ohio on the right-hand side of the website for a link to the latest map.

C. WINDSHIELD WIPES. BYGLers also ran into several other insect pests this week including:
* Joe Boggs reported observing SPINY OAK SAWFLY (*Periclista albicollis*) larvae causing noticeable damage to the newly expanding leaves of a mature chinkapin oak in southwest Ohio. The tiny, light-green, semi-transparent larvae have shiny black head capsules and are covered with rows of forked (bifurcated) spines. They consume interveinal tissue on newly expanding leaves. Although the sawfly has only one generation per season, the feeding damage will remain evident long after the larvae vacate trees to pupate. Holes produced now will enlarge as the leaves expand and eventually impart a "Swiss cheese" or tattered appearance to the leaves.

* Joe also reported that two types of pouch-like leaf galls are appearing on forest and landscape trees in southwest Ohio. The light-green to deep-red, globose, MAPLE BLADDER GALLS produced under the direction of the eriophyid mite, *Vasates quadripedes*, are adorning the upper leaf surfaces of some red and silver maples. The hairy, elongated, ELM POUCH GALLS produced by the aphid, *Kaltenbachiella (= Pemphigus) ulmifiusus*, are rising from the upper leaf surfaces of several species of elms. Neither of these very different gall-makers causes significant harm to the overall health of their host trees. Indeed, Joe contended the galls actually add ornamental value to the affected trees; therefore, beauty is always in the eye of the entomologist beholder.

4. DISEASE DIGEST.

A. THE TWISTED STORY OF ROSE ROSETTE DISEASE. BYGLers discussed the relatively recent appearance of rose rosette disease (RDD) on Knock Out roses. Roses in this group have been heavily used in landscapes because of their relative adaptability to a wider range of landscape conditions compared to their hybrid-tea cousins. However, in recent years, RDD has become a serious issue in Ohio landscapes, particularly in mass plantings.

RDD was first reported in 1941 on multiflora rose Manitoba, Canada, Wyoming, northeastern California, and Nebraska; however, it took many years for scientific sleuthing to reveal the exact cause of the disease and the
mechanism for disease transmission. Indeed, until very recently, the pathogen was thought to be a phytoplasma; these are prokaryotic (no nucleus) cells that lack crosswalls. However, phytoplasmas did not "fit" with the discovery that RDD is transmitted by an eriophyid mite, specifically the ROSE LEAF CURL MITE (*Phyllocoptes fructiplilus*) that inhabits the shoot tips and leaf petal bases of roses. Phytoplasmas inhabit plant phloem and eriophyid mites do not have the phloem-piercing mouthparts of leafhoppers or psyllids; two common vectors of phytoplasma diseases.

Research published in 2011 by scientists from the University of Arkansas and Oregon State University showed the true causal agent for RDD to be a new negative-strand RNA virus that has been tagged, ROSE ROSETTE VIRUS (RRV). Readers may recognize the name because "RRV" was used before on the road to discovering the true culprit when it was believed a virus was involved prior to the phytoplasma side-trip. A virus once again "fits" because virus particles are not limited to phloem and may be readily available within a range of plant tissue to hitch-hike on eriophyid mites. Currently, the disease is diagnosed based on observed symptoms since there is no laboratory method to detect the virus; however now that the virus has been identified, diagnostic tests may be developed.

The mite alone causes little damage; however, the virus produces a range of symptoms that first become evident in the spring and intensify as the season progresses. Infected plants produce succulent bright red shoots covered in stunted, twisted stems, and leaves. The leaves may also appear red, chlorotic, or a combination of both symptoms and the shoots may be covered by an abnormally high number of thorns. The twisted growth may be mistaken for damage caused by a plant growth-regulator herbicide such as 2, 4-D.

The disease is lethal to multiflora rose and it was originally thought that the pathogen was specific to this non-native noxious weed. However, it has become clear in the intervening years that RDD also infects virtually all cultivated roses. Once plants become infected, all parts of the plants are infectious. Pruners used on infected plants can spread the pathogen to non-infected plants. There are no pesticides available that will control the disease, so management focuses on removing the pathogen by removing infected plants. Entire plants, including the roots, should be removed and destroyed; while the pathogen does not survive in the soil, it will survive in roots. If possible, rose growers should focus their attention on eliminating nearby multiflora rose plants since the plants can serve as reservoirs for this disease.

5. TURF TIPS.

A. TURF CAN BE TOPS FOR STORMWATER MANAGEMENT SYSTEMS. While meeting with school officials to provide assistance on the design of rain gardens to be installed at new schools in southwestern Ohio, Dave Dyke noted that native herbaceous perennials are often promoted for rain gardens and other landscape stormwater management systems. It is important to note that any plant material, including trees and shrubs that are known to do well in the area, are adapted to the site, and not overly aggressive, are acceptable to be used in a rain garden.

One official then said that she really wanted some of the proposed sites to be vegetated with turfgrass. She appeared to be both surprised and happy when Dave stated that turf could indeed often provide wonderful vegetation for green infrastructure installations such as rain gardens and vegetated swales. Many turfgrasses do well under both wet and dry conditions and the high density of their roots and stems resist erosion while eliminating large volumes of water through evapo-transpiration. In fact, many publications state that the average suburban lawn area of 10,000 square feet will eliminate the first 6,000 gallons of water from a rain event if the turf is thick and healthy. Turf will also eliminate the need for mulch.
Of course, many think of turfgrass as a high maintenance proposition. However, unless it is in a high profile area such as a front lawn in which perfect aesthetics might be a must, turfgrass does not have to be high maintenance. A couple of fall fertilizer applications and proper mowing at a height of 2.5-3” is often all that is required to produce an attractive and healthy turf area … in a very effective rain garden.

Photo Node ID:  4199 (Stormwater infiltration system with turf flooded)
Photo Node ID:  4201 (Stormwater infiltration system vegetated with turf)

6. INDUSTRY INSIGHTS.

A. BOXWOOD BLIGHT. As noted in last week’s BYGL (2012-01), boxwood blight was discovered in Ohio, making it the 10th state to find this disease and the invasive fungal pathogen Cylindrocladium pseudonaviculatum. Here is some additional information about this disease.

All boxwood species appear to be susceptible, though new studies will provide information on relative susceptibility of different boxwood species and cultivars within these species. As far as we know, this fungus does not have wide host range outside the genus Buxus, although recent inoculation studies indicate that Pachysandra and Sarcococca, other genera in the boxwood family (Buxaceae) can be infected by Cylindrocladium pseudonaviculatum.

Symptoms of boxwood blight include: brown spots or lesions on leaves, sometimes with dark borders; spots eventually growing together, often with a zonate or target-like appearance; areas of straw-colored foliage and overall stem dieback and blighting of shoots; significant leaf drop when the disease is severe; dark-brown to black angular spots on stems; and stem dieback if disease is severe.

Signs of the fungal pathogen and the disease cycle include "Sporodochia" with masses of spores may become present on the undersides of leaves and stem cankers with these spore masses having a whitish, downy appearance. The microscopic spores are easily dispersed by wind and splashing water, causing new infections especially when boxwood plants are growing closely together. The pathogen thrives at temperatures from the mid-60s to mid-70s and with high humidity. The fungus survives during and between seasons in cankered areas on the stems and in leaves and leaf debris as fungal strands (mycelia) and as resting bodies known as microsclerotia which allow the fungus to survive long periods in the soil.

As noted last week, diagnosis can be tricky. If you suspect that you are seeing boxwood blight, Nancy Taylor with the CWEPPDC urges the samples be submitted for diagnosis. Do not rely on field diagnosis.

Diagnosis of other boxwood problems include:

VOLUTELLA BLIGHT, in which you will see salmon-colored spore bodies on undersides of leaves. Though you will also see leaf discoloration and lesions, this disease, caused by the fungus Volutella buxi is not as severe as boxwood blight. SUNSCALD and WINTER BURN on boxwood are also common. Symptoms include blanching of leaves due to water loss in the winter and spring. Soil-borne diseases are also a factor from PHYTOPHTHORA ROOT and CROWN ROT disease to NEMATODE problems resulting in long-term decline and stunting which require soil assays to determine if microscopic plant parasitic nematode populations have reached damaging levels. Again careful monitoring and sending samples to the CWEPPDC is essential.

Management options for boxwood blight by growers include:

1. Sanitation by removing infected plants and by cleaning up fallen and decomposing leaves.
2. Buying from reputable sources that practice good plant health management.

3. Growers should isolate and monitor new boxwood purchases for several months.

4. Avoid overhead irrigation to the extent possible.

5. Use of fungicides. Check labels for legal use of fungicides containing, e.g. mancozeb, chlorothalonil, azoxystrobin, and fludioxonil products and rotate to limit fungicide resistance issues. The dilemma is that these products are not curative and must be applied before symptoms occur and of course we never see infections occurring prior to these symptoms and thus preventive schedules must be developed.

For more detailed information, check out: "Boxwood Blight – A New Disease for Connecticut and the United States" by Dr. Sharon Douglas of the Connecticut Agricultural Experiment Station. This is easy to find if you Google-it, but as always be careful with your googling practices. For example, if you use Google Images for "boxwood blight", you will get a potpourri of images, including boxwood blight of interest here due to *Cylindrocarpium pseudonaviculatum*, but also images of everything from *Volutella* blight of boxwood, a different disease (see above) to *Volutella* blight of pachydsandra, a totally different disease on a different host caused by a different fungus. Go figure.

B. GET YOUR GREEN INDUSTRY FIX WEBINARS. Stay tuned...starting in mid-May for a new monthly webinar series on developing plant and pest issues geared for Ohio’s green industry. This series is brought to you by the Ohio Nursery and Landscape Association (ONLA) and the OSU Extension Nursery Landscape and Turf (ENLT) Team. More details in upcoming weeks.

7. WEATHERWATCH. The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from April 1-11, 2012, with the exception of the soil temperatures which are readings from Wednesday, April 11, 2012 at 6:05 p.m.

BYGLers from north to south and east to west reported dry soil conditions. This is further illustrated in the table below. Each of the five weather stations have recorded less than normal precipitation amounts. Another common report among BYGLers was recent frosts. While many as still determining the extent of damage, temperatures dipped below 30F from Springfield north. The consecutive days ranged from two to three. Even a few flakes were flying in northern Ohio on Tuesday afternoon – brrrrrr!

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<td>Central</td>
<td>63.5</td>
<td>39.5</td>
<td>0.31</td>
<td>1.5</td>
<td>51.00/50.81</td>
</tr>
<tr>
<td>Piketon</td>
<td>South</td>
<td>66.1</td>
<td>38.2</td>
<td>0.00</td>
<td>1.2</td>
<td>52.36/52.11</td>
</tr>
</tbody>
</table>

For a link to the OARDC Weather Stations, visit: [http://www.oardc.ohio-state.edu/centernet/weather.htm](http://www.oardc.ohio-state.edu/centernet/weather.htm)

8. COMING ATTRACTIONS.
A. WOOSTER CAMPUS SCARLET, GRAY and GREEN FAIR. On Tuesday, April 17, 2012 the Wooster Campus will be home to the 5th Annual Scarlet, Gray, and Green Fair. The festival celebrates, educates, and demonstrates that Green is for Life! It is free to the public and features exhibits, demonstrations, student contests, and food vendors in a fun-filled indoor and outdoor environment. The 2011 fair was a signature community event featuring nearly 70 exhibitors and 2000 attendees. The event will be held at the Fisher Auditorium and Lawn. For additional information contact the Secrest Arboretum at 330-464-2148.

B. SECREST ARBORETUM’S GUIDED SPRING WALK. A spring walk through the arboretum is scheduled for Tuesday, April 24, 2012. Participants will stroll through the arboretum and listening to our experts pointing out the signs of spring. Parking and admission is free. Dress for the weather. For additional information contact the Secrest Arboretum at 330-464-2148.

C. 19TH ANNUAL PLANT DISCOVERY DAY – SATURDAY, MAY 5, 2012. Plant Discovery Day is a premier plant and art sale featuring hard-to-find annuals and perennials, herbs, woody plants and art for the home and landscape on the OARDC campus in Wooster, Ohio. The Bug Zoo and lunch will also available. Proceeds support arboretum programs and internships.

Schedule of Events: 9:00 a.m.-12:30 p.m., Silent Plant & Art Auction; 10:00-11:00 a.m., Guided Walk; 11:00 a.m.-12:00 p.m., Oral Plant & Art Auction; 11:00 a.m.-12:00 p.m., Guided Walk; and 1:30-2:30 p.m., Guided Walk. Additional information can be found on the Secrest Arboretum website at [http://secrest.osu.edu/].

D. 2012 COMMERCIAL NEW APPLICATOR TRAINING SCHEDULED. The Ohio State University Extension’s Pesticide Safety Education Program has scheduled four training dates for those preparing to take the commercial applicator’s exams including Core, 8 (Turf), 5 (Industrial Vegetation); 6c (Ornamental Weed) and 2c (Agricultural Weed). The morning session also qualifies as Trained Serviceperson training. The dates are April 18, 2012; May 9, 2012; August 29, 2012; and September 26, 2012. Registration begins at 8:30 a.m. Additional information, including pre-registration is available on the web at [http://pested.osu.edu/commnewapp.html].

9. BYGLOSOPHY: "Spring would not be spring without bird songs." - Francis M. Chapman

APPENDIX - ADDITIONAL WEBSITE RESOURCES:

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

Following were the participants in the April 10th conference call: Pam Bennett (Clark); Joe Boggs (Hamilton); Julie Crook (Hamilton); Erik Draper (Geauga); Dave Dyke (Hamilton); Gary Gao (Piketon Center); Amy Stone
BYGL 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/].

BYGL is a service of OSU Extension and is aided by support from the ONLA (Ohio Nursery and Landscape Association) [http://onla.org/; http://buckeyegardening.com/] to the OSU Extension Nursery, Landscape and Turf Team (ENLTT). Any materials in this newsletter may be reproduced for educational purposes providing the source is credited.

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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