

BYGL Newsletter

[May 8, 2014](#)

This is the 6th 2014 edition of the Buckeye Yard and Garden Line (BYGL). BYGL is developed from a Tuesday morning conference call of Extension Educators, Specialists, and other contributors in Ohio.

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Plants of The Week »

* Annual - Stocks (*Matthiola incana*)

This is considered an "old-fashioned" garden plant that has been around for many years and doesn't enjoy the popularity that pansies garner as a cool-season, spring annual. However, I encourage gardeners to use these plants in the early spring like you would a pansy or snapdragon as they thrive in cooler temperatures. The blooms are long-lasting and make a great cut flower and with a wonderful fragrance. I planted stocks in containers near the front door last year and enjoyed the spicy, sweet clove scent every evening when the door opened and the wind gently wafted the fragrance through the house. Their fragrance makes them a very unusual member of the mustard family as most plants in this family don't have a great smell. When I was ready to plant my summer annuals, I transplanted the stocks to my flower beds and enjoyed them again in the fall.

There are newer cultivars on the market that have bigger flowers than older varieties. Dwarf cultivars grow around 1' tall and taller varieties can get around 2' tall. Flowers appear on the top of the stem and last until temperatures warm up in the summer. They also make a very nice cut flower for containers. Colors include white, purple, lavender, maroon, pink, crimson, and creamy yellow. Plant stocks in full sun in flower beds and/or in containers. Stocks tolerate a light frost but must be protected from a freeze. Another great feature is that deer rarely graze on them! Give them a try for something different in the early spring.

For More Information:

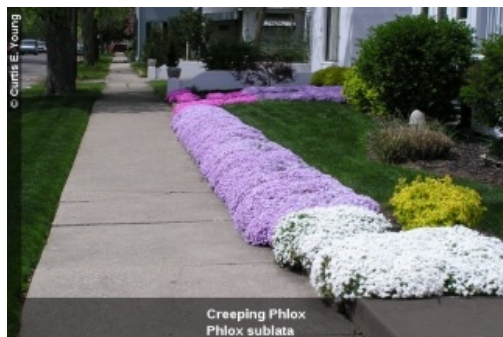
Missouri Botanical Garden information on *M. incana*

<http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/b757/matthiola-incana.aspx>

University of Vermont information on *M. incana*

<http://pss.uvm.edu/pss123/fcmatt.html>

* Perennial - Creeping Phlox (*Phlox subulata*)



This is one of those perennials that has incredible flower-power but isn't very show after bloom. However, it's certainly worth planting because it really puts on a flower show in the early spring. The masses of colorful flowers in pink, purple, white, and maroon cover the ground and create a traffic-stopping display. The plant gets around 4 - 6" tall and about 2' wide. As a ground cover, it's well-suited to be in the front of a border, in a rock garden, or wall garden where it hangs down over the edge.

Plant in full sun for best flower display; it can take partial shade. Make sure the soil is well-drained as it will rot if it gets too wet,

especially in the winter. Creeping phlox tolerates hot dry summers and is deer resistant. After blooming, a light shearing will encourage new growth and provide a half-way decent ground cover for the summer. It also has the tendency to be semi-evergreen in the winter. The only major problem comes when weeds start to encroach. Don't let weed populations become a problem - pull them early.

For More Information:

Ohio State University information on *P. subulata*

http://hvp.osu.edu/pocketgardener/source/description/ph_ulata.html

Missouri Botanical Garden information on *P. subulata*

<http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/plant-finder/plant-details/kc/c268/phlox-subulata.aspx>

* **Woody - Three-Flower Maple (*Acer triflorum*)**



Look for much more on the High Line, a great example of landscape design for public spaces, at the 87th OSU Green Industry Short Course (formerly the OSU Nursery Short Course) held in conjunction with the 48th Annual Ohio Turfgrass Foundation Conference and Show December 9 - 11, 2014 at Kalahari in Sandusky, Ohio.

Back to *A. triflorum*, this Asian maple grows to become a small to medium-sized tree (20 - 25'). Like its cousin paperbark maple, it has exfoliating bark but not as papery or with the cinnamon color of *A. griseum*. Leaves have trifoliate leaflets. Flowers are

arranged in three as the name suggests. In the "Chatscape" in northeast Ohio, the three-flower maple from Secrest Arboretum is about 12' tall and 7' wide despite 9 years of neglect. The three-flower maple provides season-long interest in the landscape with a somewhat sprawling form, soft foliage at emergence and through the season, and a spectacular orange-red fall color. The details, including the downy hairs on the emerging foliage and black scales on the leaf buds, are truly transcendent this time of year.

Winner of many landscape design awards throughout the world for its multi-season appeal of bark and foliage characteristics, three-flower maple is something you should try in your specimen garden. According to the National Arboretum website, plant explorer Ernest Wilson found *A. triflorum* on the Korean peninsula in 1917 on a plant exploration trip and described it as "perhaps the best find of the trip." Three-flower maple grows best in well-drained soil.

* **Vegetable - Radish (*Raphanus sativus*)**



Radishes are a cool-season, fast-growing, easy to grow vegetable crop. They can be eaten fresh, added to salads, dips, and sandwiches or used as a garnish or for decoration. Radishes can be planted as soon as the soil can be worked in the spring. Successive plantings can be made every 7 - 10 days through May. Early varieties such as Champion and Cherry Belle usually grow best in the cool days of early spring. Varieties such as French Breakfast and Icicle hold up and grow better in the summer heat if watered regularly. Several plantings can also be made in late summer for a fall crop.

Radishes grow well in almost any soil that is prepared well, is fertilized before planting and has adequate moisture provided. Sow radish seeds 0.25 - 0.50" deep in rows that are 12" apart. Thin the planting after the seedlings emerge so the remaining plants are 2" apart.

Radishes can be harvested 3 - 5 weeks after planting. Radishes mature rapidly under favorable conditions so it is best to periodically check their development by pulling one or two plants as they approach maturity. Harvest radishes when roots reach about 1" in diameter. Overcrowded plants can produce small, malformed roots. Hot, spongy radishes can be the result of hot weather or harvesting too late.

For More Information:

University of Illinois Extension – Watch your Garden Grow - Radish

<http://urbanext.illinois.edu/veggies/radish.cfm>

Iowa State University Extension-Yard and Garden: Radishes

<http://www.extension.iastate.edu/article/yard-and-garden-radishes>

* **Weed - Dandelion**



Dandelion is a common perennial weed found in yards and fields. It is known by many names. Some of these names are: fairy clock, clock flower, cankerwort, milk gowan, monk's head, swins snout, white endive, witch gowan, and yellow flower earth nail. These plants are tough to kill because of the thick, long taproot; when segmented, roots can resprout from the individual sections. Mature dandelion form a puffball like seed structure called a pappus. Pappus have the ability to scatter seeds everywhere with the help of wind, machinery, people, and animals.

Dandelion is either loved or hated. For children, this weed is a favorite for mudpie toppings, make-believe dress-up, and as a game when they blow the puffballs to see how far the seeds will fly. For grown-ups who value a weed free lawn, this weed wages a constant battle for them. The easiest thing to do to combat a few dandelions is to go out and remove the flowers by hand before they go to seed. Rototilling, using a special dandelion removal tool, and/or hoeing can also help to get rid of these plants. Treating with a non-selective herbicide like glyphosate should only be done as a spot treatment. When using any herbicide apply according to label instructions.

Dandelions are not useless though, the entire plant is edible! From dandelion wine, dandelion salad, to dandelion beer the possibilities are endless. So next time you are frustrated with the amount of dandelions in your lawn just think of all the dandelion wine you could make!

For More Information:

Washington State University, Spokane County extension

http://www.spokanecounty.wsu.edu/spokane/eastside/Weed_Information/weed_text/Dandelion.pdf

Penn State - Plant Science

<http://plantscience.psu.edu/research/centers/turf/extension/plant-id/broadleaf/dandelion>

Hort Shorts »

A Litany of Winter Injury - Thte Winter of 2014 Continues



Pam Bennett and others continue to report a wide variety of plant damage due to cold temperatures. We have already mentioned the damage to English ivy, boxwood, and roses in earlier issues of BYGL. Below are additional observations of plant injury that have been discussed on BYGL. (Note: for the sake of brevity, Latin names have been omitted in this article.)

Trees: Japanese maples and redbud (branch dieback and in some cases, death).

Evergreen Trees and Shrubs: Southern magnolia, nandina, Oregon grapeholly, Dwarf Alberta spruce, holly, and mountain laurel (windburn and branch dieback). Deciduous Shrubs: Bayberry, elderberry, spiraea, burning bush, hardy (yea, right!) crape myrtle, golden vicary privet, sweetspire, cotoneaster, rose of Sharon, and deutzia (branch dieback and in some cases, death).

Perennials: Lavender, butterfly bush, Russian sage, candytuft, and liriopie (severe branch dieback on woody perennials, and in some cases, death, winter burn or dieback on others).

On all of these plants we are adopting a wait and see attitude. Dave Shetlar noted that even though he scraped one of the stems on his plant and the stem showed green tissue, it eventually succumbed. Pam Bennett has several Japanese maple cultivars and some are slowly leafing out on parts of the plant. If you have some of the above deciduous shrubs that are leafing out sparsely, you can either wait to see if they develop as time goes on or you can rejuvenate them now by cutting them back severely.

BYGL writers would love to hear what you are seeing in the landscape in terms of winter injury. Go to our BYGL facebook

page www.facebook.com/OSUBYGL and tell us what part of Ohio you live in and what you are seeing in the landscape.

For More Information:

Cornell University information on Winter Injury

<http://plantclinic.cornell.edu/factsheets/winterinjury.pdf>

University of Minnesota Extension Winter injury on trees

<http://www.extension.umn.edu/garden/yard-garden/trees-shrubs/winter-injury-on-trees/>

Yellow-Bellied Sapsuckers



April through May is the time of year when YELLOW-BELLIED SAPSUCKERS are stopping over in Ohio, resting from their migratory journeys before moving on further north. The sapsucker is a woodpecker, a group of birds known for their skills at excavating for insects in wood. While sapsuckers supplement their diet with insects, they are really after the sap in trees, as their name implies. Sapsucker feeding typically appears as a neat horizontal row of tiny holes along the trunk of a tree. This is the result of the sapsucker pecking into the bark to reach the tree sap, which it laps up. While a sapsucker, true to its name, does drink sap it does not, untrue to its name, suck it up. A sapsucker's

tongue is tipped in tiny bristles, much like a paint brush - all the better to soak up the sap. Perhaps it should be called the 'sapsoaker' instead!

Sometimes, sapsucker feeding can lead to damage to trees and homes. Unfortunately, it can be a challenge to deter sapsucker feeding and the subsequent damage they can cause to trees. Some homeowners can successfully deter sapsuckers by hanging shiny reflective material, such as Mylar tape or old CDs around the tree. This isn't guaranteed to work and may cause the woodpeckers to turn to the next available tree. Other management options include wrapping the area of the tree where damage has occurred with hardware cloth or burlap to prevent the woodpeckers from reaching the bark. Tactile repellents can be smeared on the bark to deter feeding. Perhaps the better news is that most of the time trees are able to withstand the occasional sapsucker feeding. In addition, sapsuckers are benefiting other animals. The small sap wells sapsuckers leave behind are visited by other critters in search of a sticky meal, such as hummingbirds and butterflies. However, sometimes sapsuckers will feed repeatedly on the same tree year after year, creating larger holes to get at the sap, which can lead to long term damage.

The yellow-bellied sapsucker is only seen in Ohio during migration season, which is good news for those suffering from tons-of-holes-in-your-trees syndrome. By this time last year, the majority of yellow-bellied sapsuckers had progressed north and out of Ohio. Given the slow start to spring this year, sapsuckers may be around for a few weeks more. Currently, they are still being seen around the state, but as May continues on, expect sapsuckers and their feeding damage to decline.

For More Information:

Woodpecker Damage Management

http://icwdm.org/handbook/birds/bir_e139.pdf

Great Online Resource for Bird Information

I am a frequent user of the site I am about to mention. It's an excellent online source of information on bird species. The site is Cornell Lab of Ornithology's All About Birds website (www.allaboutbirds.org). For example, if you wanted to read more about yellow-bellied sapsuckers, the feature of my previous article, you could find out a plethora of information about them, such as cool facts about the bird, identifying features, what its call sounds like, habitat requirements, and mating information. In case there are any bird enthusiasts out there on BYGL, I wanted to be sure you were aware of this great site!

Planting Strawberries in the Home Garden



Gary Gao reported that strawberry plants were in full bloom during the week of May 6 in Central Ohio. Now is a good time to plant strawberries. Strawberries, like many berries, are very high in antioxidants and vitamins. Strawberry growing in the home gardens can be a very rewarding experience.

There are three main types of strawberries, Junebearing, everbearing, and day-neutral, respectively. Junebearing strawberries are the predominant type in Ohio. Their berries mature mostly in June, hence the name, Junebearing. Everbearing strawberries produce 2 - 3 crops a year while day-neutral may

flower and fruit throughout the season. Most nurseries "lump" everbearing and day neutral types together. Junebearing types are most productive in Ohio while other two types are much less productive.

Typically, two dozen plants are a good start for a family of 3 - 4. Most of the plants should be of Junebearing type, with some everbearing and some dayneutral. Common Junebearing cultivars are "Earliglow," "Annapolis," "Honeoye," "Allstar," "Lateglow," and "Ovation." Common cultivars of day neutral types are "Albion," "Tristar," and "Tribute" while "Ozark Beauty" and "Quinault" are two common cultivars of everbearing type.

Strawberry plants should be planted in raised beds. When planting strawberries, only bury half of the crown, which is the short stem between roots and leaf stems. Please refer to OSU Extension strawberry fact sheet at <http://ohioline.osu.edu/hyg-fact/1000/1424.html> and OSU Extension bulletin, #949, "Midwest Home Fruit Production Guide," for more information.

For More Information:

OSU Extension Strawberry Fact Sheet

<http://ohioline.osu.edu/hyg-fact/1000/1424.html>

Purdue Extension Fact Sheet

<http://www.hort.purdue.edu/ext/HO-46.pdf>

Sustainable Landscape Maintenance

The quality of the students at Ohio State University is quite inspiring. As noted in last week's BYGL Issue 2014-05, May 1, 2014, BYGLers and ENLTers teach a class on main campus, titled "Sustainable Landscape Maintenance", Horticulture and Crop Science 3410. In the midterm for their just completed course, one of the essay questions was, "What is your definition of sustainable landscaping?" Here is the answer by student Lindsay Davidson:

"Ken Cochran said in his lecture, 'You must learn to be a practicing ecologist.' That statement hit home. To landscape sustainably, we must look at the built/constructed landscape as an ecologist would look at a prairie or old growth forest, or wetland. Recognizing that there are hundreds or thousands of pieces that fit together to create a complete puzzle of an ecosystem is the first integral step in sustainable landscape design. Removing or changing of any individual piece alters the puzzle in some way.

Balance would be the key pillar of my landscape business. The ultimate goal would be to create landscapes that are cost efficient, have minimal or positive effect environmentally, have purpose being both functional and aesthetically pleasing, and finally serve as a positive example and educational tool for others. I want my business to not only develop and practice a "land ethic" but to educate and encourage others to do so too. Theodore Roosevelt said something along these lines: 'A nation behaves well if it treats its natural resources as assets which must be passed on to future generations undiminished.' My business would aim to do just that.

The future of horticulture is bright. Could any of us have written so skillfully and with such ecological perspective on a midterm exam - or at all? Mostly not, but theoretically we could have, since the perspectives of environmental stewardship are not new. Two of the books the students read as part of this class, Aldo Leopold's *A Sand County Almanac* (1949) and Jen Jensen's *Siftings* (1939), both teach us of the land ethic. Here is an example from Aldo Leopold:

"That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics. That land yields a cultural harvest is a fact long known, but latterly often forgotten."

Bug Bytes »

Oystershell Scale on Knockout Roses



Joe Boggs noted that the widespread winter dieback of roses, including Knockout Roses, may have an up-side: cutting and removing winter damaged stems can also help to remove pests and pathogens. Joe reported that as he was pruning dead stems from his Knockout Roses, he came across a heavy OYSTERSHELL SCALE (*Lepidosaphes ulmi*) infestation on one of his rose plants. On a bright note, Joe observed numerous scale bodies with round parasitoid emergence holes in their coverings (tests); evidence that bio-allies were providing some help with killing the scales!

Oystershell scale is tiny with females measuring no more than 1/16" in length. Their elongate and slightly convex shape causes the scale to resemble miniature clam or oyster shells; thus their common name. Their size, dark gray to brown color, and slight banding cause the mature females to blend-in with the bark making low populations difficult to detect. As with all armored scales, the oystershell scale feeds by inserting their piercing-sucking mouthparts into plant stems to withdraw nutrients from non-vascular stem cells. Since they do not extract juices from vascular tissue, oystershell scales do not exude the sugary, sticky "honeydew" that is associated with "soft" scales. Thus, black sooty molds do not develop to help disclose an oystershell scale infestation.

The scale has a wide host range and may be found on over 130 host plants including trees as well as shrubs. Although this scale has only one generation per year in Ohio, undetected infestations can rapidly build within 1 - 2 years to levels that cause significant plant injury including branch dieback and even plant death. Unfortunately, this is one of the most difficult scale insects to control. Removing and destroying heavily infested stems is a recommended "first step" in an oystershell scale management program.

The scale spends the winter as eggs protected by the bodies of dead females with the eggs hatching in mid-to-late spring. While the resulting mobile first instar nymphs are susceptible to standard contact insecticides including soaps and oils, if the infestation is heavy, the bodies of dead females may protect some crawlers from contact with the insecticide. Systemic neonicotinoid insecticides are effective against soft scales, but some, including the imidacloprid (e.g. Merit), will not kill oystershell scale or other armored scales. Dinotefuran (e.g. Safari) is a highly soluble neonicotinoid insecticide that moves rapidly into plants and has been particularly effective against armored scales as well as soft scales. However, insecticide applications should be coupled with selective pruning to reduce the overall oystershell scale infestation.

For More Information:

Penn State University Entomology Fact Sheet

<http://ento.psu.edu/extension/factsheets/oystershell-scale>

University of Illinois Extension Hortanswers

<http://urbanext.illinois.edu/hortanswers/detailproblem.cfm>

Tent Cats are Going a Walk-About



In BYGL 2014-02 (04/10/14), we reported that overwintered EASTERN TENT CATERPILLAR (ETC) (*Malacosoma americanum*) eggs had hatched in southwest Ohio. This week, Joe Boggs reported that the caterpillars are completing their development and are beginning to abandon their highly visible silk nests located in branch forks to crawl off trees and go on a walk-about in search of pupation sites. Their abandoned football-sized nests will remain evident throughout much of the early summer as they gradually disintegrate.

Dave Shetlar noted that ETC continues to feed and expand their softball-size nests in central Ohio. Dave and Joe both noted that while ETC is not widespread throughout the state, there are some heavy localized populations in the central and southern parts of the state.

The caterpillars are covered in short, grayish-white hairs, and they have a distinct, unbroken white stripe down their backs. The caterpillars prefer to feed on trees in the family Rosaceae, particularly those in the genus *Prunus*, such as cherries. However, once the caterpillars commence their walk-about, they may appear on a wide variety of plants. Fortunately, they do little or no feeding so damage is inconsequential.

For More Information:

Let the Galling Begin



Arthropod plant galls can only form from newly differentiating tissue (= meristematic tissue). This is why spring is the time of year when leaf galls created under the supervision of insects or mites begin to appear on plant leaves. Despite their often unusual appearance, few plant galls cause significant harm to the overall health of their host trees. Indeed, Joe Boggs contended the galls actually add ornamental value to the affected trees; beauty is in the eye of the beholder.

Everyone's favorite gall, the light-green to deep-red, globose, MAPLE BLADDER GALLS produced under the direction of the eriophyid mite, *Vasates quadripedes*, are now adorning the upper leaf surfaces of some red and silver maples in southern Ohio. The hairy, elongated, ELM POUCH GALLS produced by the aphid, *Kaltenbachiella* (= *Femphigus*) *ulmifusus*, are rising from the upper leaf surfaces of several species of elms. If gall-aficionados are lucky, they may also spot the worm-like early forms of the ELM COCKSCOMB GALLS produced by the so-called elm cockscomb aphid, *Colopha ulmicola*. The galls are currently tubular-shaped and light green to reddish green. As they mature, the galls will take-on the appearance of their descriptive common name: they will look like bright red chicken cockscombs rising up from elm leaves; it's a wondrous sight!

Oaks are prime gall-fodder providing support for over 700 different types of galls! Joe reported observing light green, ball-like SUCCULANT OAK GALLS produced under the direction of the gall wasp, *Dryocosmus quercuspalustris* (family Cynipidae) decorating newly expanding pin oak leaves. The hollow galls are around 0.5" in diameter; their common name comes from the fleshy (succulent) walls of the galls. They are sometimes called "roly-poly galls" because of the unattached, white, seed-like structure that rolls around inside the galls. The structure houses a single wasp larva.

Joe also reported observing tiny, deep crimson red, hairy-looking galls sprouting from pin oak flowers. The galls form from individual flowers and the red "hairs" appear to be modified flower parts. Joe could not identify the galls, but believes they are formed under the direction of a cynipid wasp, possibly in the genus *Callirhytis*, because several species of wasps in this genus produce flower galls on oaks. He is seeking help with identifying the galls, so stay tuned.

May is Lyme Disease Awareness Month

With May being Lyme disease awareness month, now is the time to become more aware of the dangers of ticks and how to prevent tick bites. According to the Ohio Department of Health, there are currently 24 Ohio counties that are known to be endemic with Lyme disease. Lyme disease, which was named after Lyme, Connecticut, where cases were first reported in 1975, is transmitted by the blacklegged tick (deer tick) and is the most prevalent tick-borne disease of humans in Ohio and the United States. A common idea is that the blacklegged tick (deer tick) is most active during the summer but in fact, fall, winter, and spring is when blacklegged tick adults and larva are most active. Outdoor enthusiasts, gardeners, parents, hunters, pet owners, and just people who frequently visit the out of doors need to ensure that they are doing tick checks and properly protecting themselves.

Symptoms of Lyme disease may include a bull's-eye rash developing at the site of a tick bite within 2 - 32 days. This rash is diagnostic for Lyme disease. However, up to 40% of infected humans do not develop a ring-rash. Fever, headache, fatigue, or joint pain also may be symptoms of Lyme disease. Immediate antibiotic therapy for Lyme disease reduces the risk of neurological, arthritic, or cardiac complications developing days to years later.

Prompt removal of an attached tick reduces the chance of Lyme disease infection. Tick attachment of several hours or more is often required for disease transmission. When removing a tick use tweezers to grasp embedded tick as close to your skin as possible and near the tick's mouthparts. Use steady pressure to pull it straight out. Do not twist or jerk the tick, as its mouthparts may be left in the skin.

To prevent bites it is best to wear long-sleeved shirts and long pants and tuck pants into socks, and tuck shirt into pants. Also, wearing light colored clothing makes it easier for you to see crawling ticks. If using a tick repellent, make sure to follow the manufacturer's instructions. Note that DEET formulations of at least 25% are needed to repel ticks.

For More Information:

Windshield Wipes



BYGLers also ran into several other insect pests this week including:

Curtis Young reported observing recently hatched EUROPEAN PINE SAWFLY (*Neodiprion sertifer*) larvae feeding on the needles of a SCOTS PINE (*Pinus sylvestris*) in Allen County, Ohio. This sighting comes three weeks after Joe Boggs reported the same event occurring in SW Ohio (see BYGL Issue 2014-03, April 17, 2014). The European pine sawfly larvae in Joe's area are close to completing their development and there would be very little benefit in treating these populations while those in Curtis's area are just beginning their feeding cycle and treating them would limit their damage to host plants. The separation in these events from southern to northern Ohio

emphasizes how different things can be developmentally across our state and the need to monitor in one's own area to successfully manage problematic pests.

- Dave Shetlar reported that captures of adult COMMON ARMYWORM (*Pseudaletia (=Mythimna) unipuncta*) has been occurring for about a month. Dave expressed mild concern for where these adults might be laying their springtime eggs. They typically lay their eggs on grasses of different species. Some of the common hosts are agricultural crops such as corn and winter wheat. This spring, corn planting has been delayed and winter wheat acres are down for 2014. A more abundant choice for these moths to lay their eggs on could be turfgrasses. Dave wanted to make turf managers aware that there is a possibility that some turfgrass areas could be the target of army worms this season. In addition to the army worm, BLACK CUTWORM (*Agrotis ipsilon*) adults are also flying in Ohio. Black cutworm can be problematic on golf course greens. Watch for cutworm damage on greens over the next couple of weeks.
- Dave Shetlar also reported calls about CARPENTER BEE (*Xylocopa virginica*) deaths discovered in areas of Ohio. Carpenter bees overwinter as adults inside of the brood chambers in which they developed. A number of the bees did not survive the winter. Those bees that did survive must push their way past these dead bees. The dead bees eventually get pushed out of the brood chambers and fall to the ground where they may pile up.

For More Information:

Penn State University FactSheet on European Pine Sawfly

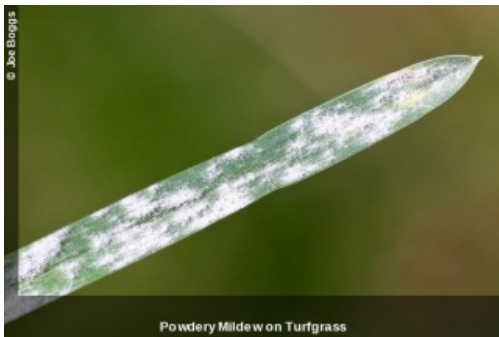
<http://ento.psu.edu/extension/factsheets/pdf/eupinesawfly.pdf>

Ohio State University FactSheet on European Pine Sawfly

<http://ohioline.osu.edu/hyg-fact/2000/2055.html>

Turf Tips »

Powdery Mildew on Turfgrass



Joe Boggs reported observing powdery mildew on turfgrass in southwestern Ohio. The disease is caused by a fungus (*Erysiphe graminis*). All species of turfgrass are susceptible to the powdery mildew fungus; however, infections are usually most severe on bluegrasses and ryegrasses. Powdery mildew generally occurs on grass growing in shady areas with poor air circulation and symptoms are most severe during the spring and fall when cool temperatures are coupled with extended periods of high humidity and cloudy conditions.

Symptoms appear as powdery or felt-like patches of whitish growths on the upper surfaces of the grass blades. Chlorotic areas that correspond to these powdery growths appear on the lower surfaces. Grass may look like lime or flour has been sprinkled on the blades. From a distance, heavily infected turfgrass may appear off-colored. As the disease progresses, blades become yellowish-tan, then brown as they die. The fungus does not infect the crowns to directly kill the turfgrass plants; however, plants that are weakened by severe infection may succumb to drought stress or other environmental challenges.

Disease prevention starts with not growing turfgrass under heavy shade conditions. Select cultivars that are resistant to powdery mildew if the turfgrass will be partially shaded. Fertilization programs should provide sufficient nutrients to promote vigorous turfgrass growth without supplying an excessive amount of nitrogen. Grass should be mowed frequently in areas where mildew has been a problem to promote light penetration and enhance drying conditions. Likewise, if

possible, shrubs and trees should be pruned to improve air circulation and allow more sunlight to reach the turfgrass. Fungicides are available for powdery mildew; however, they must be applied before symptoms appear.

For More Information:

OSU Extension Fact Sheet

<http://ohioline.osu.edu/hyg-fact/3000/pdf/3081.pdf>

Turfgrass Insect Updates



Dave Shetlar reported two turfgrass insect pest discoveries over the past week in the Cleveland area. Obviously, Dave is actively involved in research in the management of multiple turfgrass insect pests and now is the time of year for Dave and his research assistants to setup insecticide trials. Most recently, the main pest that he was targeting was the ANNUAL BLUEGRASS BILLBUG (*Listronotus maculicollis*). Dave has some favorite sites in the Cleveland area to conduct these trials and over the past couple of weeks he has been checking via soap solution flushes on the emergence of the weevil to correctly time his applications. His first visit a couple of weeks ago produced nothing; Dave was concerned he had missed the emergence. Last week, he repeated his visit and discovered the weevil's emergence had just begun.

Last year by this time, he would have definitely missed the weevil's emergence. This year, he was right on time. This just goes to show how different on year can be from another. Dave additionally checked Syngenta's Weevil Trak web site (<http://greencastonline.com/WeevilTrak/Home.aspx>) and confirmed that they too are reporting that now is the time for applications of billbug management materials such as synthetic pyrethroids (e.g. bifenthrin, cyfluthrin, lambda-cyhalothrin, and deltamethrin).

In addition to the billbugs, a second insect that was discovered with the soap solution flushes was the MARSH CRANE FLY (*Tipula oleracea*). The larvae, called leatherjackets, of this invasive species of crane fly are turfgrass consumers. Dave was picking up multiple crane fly larvae in the samples he was taking at the research site. In past years, Dave has confirmed that the marsh crane fly has become established in the Akron-Canton-Cleveland areas of Ohio. They most likely migrated into Ohio from the states of New York and Pennsylvania. In New York, the marsh crane fly is rapidly spreading to new locations. They are not a major problem in turfgrass in Ohio as of yet, but it may not be too far into the future when they do become more problematic.

There is a second species of invasive crane fly that may eventual accompany the marsh crane fly, the EUROPEAN CRANE FLY (*T. paludosa*). Both species are in the US, but the marsh crane fly appears to be spreading faster than the European crane fly. This may be the result of the marsh crane fly having 2 generations per year. The marsh crane fly has an adult emergence in the spring and a second adult emergence in the fall. The European crane fly appears to have only one generation per year and the adults emerge in the fall.

For More Information:

OSU Extension FactSheet on Annual Bluegrass Billbug

<http://bugs.osu.edu/~bugdoc/Shetlar/factsheet/turf/AnnualblueGweevil.htm>

Cornell University FactSheet on Annual Bluegrass Billbug

<http://www.nysipm.cornell.edu/factsheets/turfgrass/abw.pdf>

Crane Fly Report

<http://buckeyeturf.osu.edu/index.php>

Cornell University FactSheet on European Crane Flies

<http://www.nysipm.cornell.edu/factsheets/turfgrass/ecf.pdf>

Industry Insight »

An Herbicide by Any Other Name



Most BYGL readers are no doubt aware of the Imprelis story as a cautionary tale of unintended consequences. Most are probably also aware that the book is closed on this herbicide. However, the book is not closed on aminocyclopyrachlor which was the active ingredient of Imprelis. BYGLers had a discussion on what this means in terms of "product awareness," "label awareness," and



"application site awareness."

There are three DuPont herbicides currently on the market that contain aminocyclopyrachlor. These are "mixture" products and they are labeled for industrial vegetation control. Commercial applicators in Ohio would need applicator category 5 (Industrial Vegetation) on their license to apply these products. The three products with their active ingredients are: Perspective (aminocyclopyrachlor (39.5%) and chlorsulfuron (15.8%)); Streamline (aminocyclopyrachlor (39.5%) and metsulfuron methyl (12.6%)); and Viewpoint (imazapyr (31.6%), aminocyclopyrachlor (22.8%) and metsulfuron methyl (7.3%)). This is product awareness.

Jim Chatfield and Joe Boggs noted that while teaching at the Indiana Professional Lawn and Landscape Association's Regional Workshops this past winter, they learned from fellow speaker Joe Becovitz of the Office of the Indiana State Chemist that Indiana had its first case last season of "Imprelis" injury to non-target trees from a right-of-way (ROW) application of Viewpoint. There are 18 "Do Nots" under "Important Restrictions" on the Viewpoint label. The first two are: "Do not apply this product in areas where the roots of desirable trees and/or shrubs may extend unless injury or loss can be tolerated. Root zone areas of desirable trees or vegetation are affected by local conditions and can extend well beyond the tree canopy." And, "Do not apply this product if site-specific characteristics and conditions exist that could contribute to movement and unintended root zone exposure to desirable trees or vegetation unless injury or loss can be tolerated." This is label awareness.

Now for the importance of application site awareness. Industrial vegetation management covers a lot of ground. Indeed, commercial category 5 is described by the Ohio Department of Agriculture as, "application of pesticides to non-agricultural lands such as roadways, public water courses, utility rights-of-way, or in close proximity to industrial sites, power stations, parking lots, or similar areas for the control or eradication of unwanted vegetation." Consider a mature Norway spruce, or an eastern white pine, or a honeylocust growing next to a utility right-of-way or a parking lot. It would be likely their root systems could extend into the application zone and these trees were found to be particularly susceptible to injury from root uptake of aminocyclopyrachlor when this was the active ingredient in Imprelis. Nothing has changed: aminocyclopyrachlor by any other name is still aminocyclopyrachlor.

The bottom line: read and follow label directions! Viewpoint, Perspective, and Steamline have detailed labels aimed at providing guidance to applicators. You can view the most updated labels by visiting DuPont's Land & Vegetation Management website and using the Label Locator tool at:

http://www2.dupont.com/Production_Agriculture/en_US/label_msds_info/labe...

Gypsy Moth Hatch Across Ohio



The gypsy moth (*Lymantria dispar*) is an invasive insect that can defoliate over 300 species of trees and shrubs. In its caterpillar stage, the moth feeds on the leaves of trees and shrubs and is especially fond of oak. A healthy tree can usually withstand a single season or two of defoliation before the plant becomes more susceptible to other pests or even dies. Plants already under stress for other reasons can succumb in a single season. In Ohio, 51 counties are currently under gypsy moth quarantine regulations.

Amy Stone reported that egg hatch began in western Lucas County on Saturday, May 3, 2014. Egg hatch coincides with the bloom of eastern redbud (*Cercis canadensis*). The caterpillars were hanging out on top of and near the egg mass patiently

waiting to the leaves of oaks and other hosts to expand so they can begin their feeding frenzy this season. Ideal timing of treatments either by homeowners, arborists, nurseries, or the Ohio Department of Agriculture (ODA) is when caterpillars are in early instars and feeding on plant foliage.

The ODA will soon begin aerial treatments designed to manage the gypsy moth population in Ohio. Treatments will begin as early as today in southern Ohio, as larva and leaf development reaches the optimal threshold for treatment. Treatments are administered using a low-flying aircraft that flies just above the tree tops. High humidity, low temperature and minimal wind are crucial for a successful application. Treatment will most likely take place during early morning hours.

The department uses three programs to manage the gypsy moth population in Ohio. The suppression program is used in counties where the pest is already established, but landowners voluntarily request treatment to help suppress populations.

The second program, slow-the-spread, occurs in counties in front of the larger, advancing gypsy moth population. The third program is the eradication program, used in counties where isolated populations develop ahead of advancing moth populations due to human movement of the moth. Officials work to detect and control isolated populations to slow the overall advancement of the gypsy moth infestation.

In total for the state, 5,470 acres in 10 counties will receive treatment in 2014. For more information about the gypsy moth quarantine or for specific treatment locations, visit www.agri.ohio.gov.

Ohioans can view maps of treatment blocks at www.agri.ohio.gov. Daily updates on treatment progress across the state are available by calling 614-387-0907 or 1-800-282-1955, ext. 37, any time after 5:00 p.m.

For More Information:

Ohio Department of Agriculture

<http://www.agri.ohio.gov>

WeatherWatch »

Weather Update

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

As we begin a new month, rainfall totals remain below the normal amount at each of the five stations listed below.

Thunderstorms did move through the northern portion of the state early Wednesday morning. Thunder, lighting, and rain moved from west to east.

Weather Station	Region of Ohio	Ave. High Temp. F	Ave. Low Temp. F	Total Precip."	Normal Precip."	Soil Temp. F 2"/3"
Ashtabula	NE	56.3	38.9	0.27	0.7	60.43/56.98
Wooster	NE	60.2	42.0	0.14	0.7	61.27/58.32
Hoytville	N	59.8	42.5	0.02	0.6	64.15/59.24
Columbus	Central	62.9	46.4	0.00	0.8	67.79/63.87
Piketon	South	66.9	44.1	0.14	1.1	76.53/71.50

For More Information:

OARDC Weather Stations

<http://www.oardc.ohio-state.edu/centernet/weather.htm>

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 143 to 356.

Following is a report of GDD for several locations around Ohio as of end of the day of May 7, 2014: Painesville, 143; Cleveland, 157; Toledo, 170; Canfield, 1169;

Findlay, 173; Van Wert, 181; Wooster, 190; Coshocton, 239; Columbus, 262; Springfield, 253; Dayton, 262; Cincinnati, 328; Ironton, 354; Portsmouth, 356; and Piketon, 353.

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 web site, one can see what is approximately taking place in the landscape.

Common flowering quince, first bloom, 137; Bradford callery pear, first bloom, 142; **European pine sawfly, egg hatch, 144**; weeping Higan cherry, first bloom, 145; P.J.M. rhododendron, first bloom, 147; chancicleer callery pear, full bloom, 149; Norway maple, full bloom, 149; **inkberry leafminer, adult emergence, 150**; sargent cherry, full bloom, 151; star magnolia, full bloom, 151; Allegheny serviceberry, first bloom, 153; Manchou cherry, full bloom, 155; spring snow crabapple, first bloom, 155; apple serviceberry, first bloom, 159; **spruce spider mite, egg hatch, 162**; Bradford callery pear, full bloom, 164; Allegheny serviceberry, full bloom, 169; saucer magnolia, full bloom, 174; P.J.M. rhododendron, full bloom, 178; **boxwood psyllid, egg hatch, 179**; weeping Higan cherry, full bloom, 179; Koreanspice viburnum, first bloom, 185; regent serviceberry, first bloom, 186; Japanese flowering crabapple, first bloom, 189; eastern redbud, first bloom, 191; **gypsy moth, egg hatch, 192**; 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; and red Java weigela, first bloom, 365.

For More Information:

Growing Degree Days and Phenology for Ohio

<http://www.oardc.ohio-state.edu/gdd/>

Understanding and Using Degree-Days

http://ohioline.osu.edu/sc165/sc165_14.html

Coming Attractions »

Emerald Ash Borer University (EABU) Spring Schedule

Be sure to tune into EABU this spring to learn more about EAB and other related topics. Sessions can be accessed through the Regional Emerald Ash Borer website <http://www.emeraldashborer.info>. The last live session is scheduled for:

May 19, 2014, 11:00 AM (EST) EAB101 - What Happened and What's Happening Now - Amy Stone, Extension Educator, Ohio State University and Robin Osborne, Communication Manager, Michigan State University

Have questions about EABU? Contact Amy Stone at stone.91@osu.edu.

Wildlife in Your Woods

Interested in learning more about the wildlife that is in your woods? Want to learn how to attract deer, birds, and amphibians to your woods? Then this class is for you! Come to the Ohio State Mansfield campus on May 9, 2014 to spend a day learning how to not only attract a variety of these species to your woodlot with proper management but also how to monitor them! We will begin indoors in the morning and end outdoors with a walk through the woods where we will further discuss monitoring techniques, management tips, and search a vernal pool for frogs and salamanders. Registration is now open at: <http://www.woodlandstewards.osu.edu> and closes May 2, 2014. Don't wait - register now!

Southwest Ohio BYGLIVE!



The second 2014 Southwest Ohio BYGLive! Diagnostic Walk-About will be held this coming



Monday, May 12, at the Cincinnati Zoo and Botanical Garden from 12:00 - 3:00 p.m. This monthly hands-on training series for Green Industry professionals focuses on diagnosing plant pest, disease, and physiological problems. ISA Certified Arborist CEU's and Landscape Architecture Continuing Education System (LA CES) CEU's for Landscape Architects will be available. Visit the following website for registration information: <http://hamilton.osu.edu/topics/horticulture/byglive-diagnostic-walk-about> . You can also e-mail Joe

Boggs boggs.47@osu.edu to learn more about this diagnostic training series.

The Buckeye Lady Beetle Blitz 2014!

The Agricultural Landscape Ecology Lab is hosting three sessions of a workshop this year in May to kick off The Buckeye Lady Beetle Blitz 2014! This workshop will focus on the 'secret lives' of beneficial garden arthropods. You will learn about the diversity of predators, parasitoids, and pollinators that inhabit your garden. They will discuss foraging strategies, courtship, parental care of young, shelter and nest building, and much more! Participants can also get involved with two exciting research projects, the Buckeye Lady Beetle Blitz and a NEW study examining pollination services in home gardens!

They have three locations for this workshop:

- May 14, 2014 at OARDC's Fisher Auditorium, 1680 Madison Ave, Wooster, OH
- May 15, 2014 at the Rocky River Nature Center, 24000 Valley Parkway, North Olmsted, OH
- May 16, 2014 at the Civic Garden Center, 2715 Reading Road, Cincinnati, OH

For more information visit: <http://gardinerlab-dev.cfaes.ohio-state.edu/node/31/person-workshop-new-and-existing-blbb-volunteers> .

Byglosophy »

"The city of tomorrow will demand the living green as a most important part of its composition - the buildings in a garden. Man does well to study nature's way, and if a man is to be successful in city planning, it will be man and nature, not just man." - *Jens Jensen, "Siftings"* (1939)

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