BUCKEYE YARD AND GARDEN LINE 2014-24
09/11/2014

From: Curtis E. Young (Lead editor and contributing author) and Ashley Kulhanek (Co-editor and contributing author).

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

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

This is the 24th 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.

In This Issue:

1. PLANTS OF THE WEEK: Annual (Ornamental Cabbage and Kale); Perennial (Windflower); Woody (River Birch); and Weed (Common Ragweed).
2. HORT SHORTS: No Report.
3. BUGBYTES: Fall Webworm Wrap-Up; Baldfaced Hornet Blitz; and Windshield Wipes (Oak Plum Gall, Baldfaced Hornets, Yellowjackets and Oak Bullet Galls).
4. DISEASE DIGEST: Botryosphaeria Canker on Redbud and Tubakia or Not Tubakia...That is the Question.
5. TURF TIPS: Gray Leaf Spot in Ohio and Grub-A-Dub-Dub (Whitegrubs).
6. INDUSTRY INSIGHTS: Late-Season Pine Sawflies.
7. WEATHERWATCH.
8. COMING ATTRACTIONS: Farm Science Review; Pesticide Safety Training - September 24; Special Training for Green Industry Professionals: Asian Longhorned Beetles (ALB); Special Training for Master Gardener Volunteers: Asian Longhorned Beetle; Arboreatum Feast, Part Deux: Maple Syrup Tasting is Added to the Mix!; Wood Destroying Insect Inspection Training - October 8; The 87th Ohio State University Green Industry Short Course (Formerly the Nursery Short Course) December 9 - 11; and Tri-State Green Industry Conference.
9. BYGLOSOPHY.

APPENDIX - Additional Website Resources.

1. PLANTS OF THE WEEK.
ANNUAL - ORNAMENTAL CABBAGE AND KALE (*Brassica* spp.). Normally this is the time of the growing season when people begin to tire of looking at their rundown old annuals. Annuals that have run their course and are a little straggly right now can be replaced with fall ornamental annuals such as ornamental cabbage and kale. These plants are available now in garden centers and can provide color all fall, into winter, and sometimes throughout the entire winter, depending on the temperatures. These ornamental sisters of the cabbage and kale that we plant in the vegetable garden have more of an ornamental value as opposed to a tasty value. They have a tendency to be a little more bitter and the cabbage doesn’t form true heads that you would find on a plant such as ‘early flat Dutch’ or ‘Golden Acre’.

These plants perform best in full sun and are best planted in the fall or very early in the spring season for early interest. They do not tolerate heat. Plant in masses for a dramatic effect or plant 1 - 2 in a container along with other fall plants. There are numerous cultivars of each available that have different characteristics such as curly leaf margins, variegation, and height.

Since they are in the *Brassica* family, they are susceptible to those pests that you deal with in the vegetable garden such as flea beetle and cabbage loopers and caterpillars. Therefore, be on the lookout for these in the late summer and early fall as they are still active.

Author: Pamela J. Bennett

PERENNIAL - WINDFLOWER (*Anemone* hybrid). The fall-bloomers of the group of plants are showing off in the gentle breezes around the state. The name windflower comes from the Greek word "anemos" which means wind. *Anemones* come in various heights depending on the cultivar. The flowers are born at the top of the stems and move with the breeze, adding motion to the garden. Don’t let their delicate nature fool you. These plants are pretty tough in the garden once established.

Plant them in partial shade for best performance; they will take full sun if the soil remains moist and doesn’t dry out. They don’t like to be disturbed once planted so pick the spot carefully. Taller varieties such as ‘Honorine Jobert’ that grow up to 3 - 4’ tall are great in the back of the perennial border. They just sort of hang out all summer and then this time of the year; send up beautiful silky white flowers that last for about 3 - 4 weeks. Other varieties such as ‘Margerete’ grow to about 2’ tall and have pink double flowers. Flowers are usually pinks and whites and come in singles and doubles and can sometimes last until November. Some of the varieties have a tendency to reseed prolifically but the seedlings are easily eradicated with a hoe in the spring. On the plus side, they are considered deer resistant.

Author: Pamela J. Bennett

WOODY - RIVER BIRCH (*Betula nigra*). Although river birch has been previously written about this year (BYGL 18th edition, July 31, 2014) BYGLers Joe Boggs and Julie Crook thought it was worth writing about it again after seeing how great a particular cultivar of river birch looked this time of the year. During the Southwest Ohio BYGLive! Diagnostic Walk-About at the Boone County Arboretum this past week the arboretum director, Kris Stone, pointed out the River Birch ‘Whit XXV’ City Slicker. This particular cultivar is a vigorous grower and tolerates the heat of our summers with less foliage damage and dieback than other river birches. City Slicker has distinctively darker green and thicker leaves with an extremely white bark appearing as it matures. This cultivar also has nice fall color. Most river birches do best in acid soils however City Slicker performs well in alkaline soils. According to Michael Dirr’s *Manual of Woody
Landscape Plants this cultivar is resistant to bronze birch-borer and has a superior drought and cold tolerance. This is a beautiful cultivar that one might consider when adding a river birch to the landscape.

Author: Julie S. Crook

*WEED* - COMMON RAGWEED (*Ambrosia artemisiifolia*). Although this summer annual plant is native to North America, it was first described and given its scientific name by the noted Swedish botanist, Carl Linnaeus. No doubt hay fever sufferers have long pondered why he chose *Ambrosia* for the genus which is Greek for "food and drink of the gods" ... what was he thinking? Did Linnaeus also describe *Cannabis sativa*? Well, yes; but that's another weed story.

The abundant, windblown pollen produced by the muted flowers of common ragweed is considered by the medical community to be a primary contributor to late-season hay fever. Unfortunately, another member of the Asteraceae family, CANADA GOLDENROD (*Solidago canadensis*), with its flashy, golden-yellow flowers often gets the blame. Goldenrod produces large, sticky pollen granules that are designed to be moved around by pollinators; the pollen is not blown about in the wind. However, the consequence of misplaced blame is nothing to sneeze at! Pollinator-friendly goldenrod is often mowed, yanked, sprayed and otherwise assaulted in misguided efforts to reduce hay fever symptoms.

Common ragweed grows in a wide range of locations including landscape and nurseries. It will do well in soils with low fertility as well as highly fertile soils. Plants are multi-stemmed and reach a height of around 2 - 3" at maturity, although they can grow much taller under the right growing conditions. The stems are deep reddish purple and covered in fine hairs. Ragweed leaves are deeply lobed with arrow-like points. Indeed, it is generally believed that the "artemis" in *artemisiifolia* refers to Artemis, the Greek goddess of the hunt, the moon, the forests and the hills, and ... archery. She is generally depicted with a bow and arrows, and the lobes of ragweed leaves are arrow-shaped. Mature ragweed plants are easily identified by the multiple dark green finger-like racemes at the top of the plant stems; these are the male flowers. The female flowers are also green, inconspicuous, and located in the axils of the leaves.

Author: Joe Boggs

2. HORT SHORTS: No Report.

3. BUGBYTES.

A. FALL WEBWORM WRAP-UP. Participants at two recent diagnostic training programs; the Ohio Diagnostic Clinic held last Friday in Secrest Arboretum in Wooster and the S.W. Ohio Diagnostic Walk-About held in Boone County Arboretum in Burlington, KY, observed numerous second generation fall webworm (*Hyphantria cunea*) nests. Indeed, although significant populations of this native moth seem to be widely scattered and highly localized this season, BYGLers noted that the overall numbers may be a portent of what’s to come next season.

Fall webworm moths typically have two generations per year in Ohio and despite their common name, first generation nests usually appear in late spring. Fall webworm caterpillars only feed
on the leaves that are enveloped by their silk nest. As caterpillars grow in size, they expand their nest by casting silk over more leaves to accommodate their expanding appetites.

First generation nests are seldom as numerous or as large in size as those produced by the second generation; the first generation nests normally involve only a few leaves. However, female moths often lay their eggs on or near the nests from which they developed, thus second generation caterpillars expand the nests once occupied by first generation caterpillars. The second generation nests typically reach their maximum size at this time of the year which accounts for the common name.

There are two types of fall webworms, known as "races," found in Ohio: the black-headed race and red-headed race. The two differ in coloration and to some extent; the races also differ in host preferences, nesting, behavior, and the timing for spring adult emergence. Caterpillars of the black-headed race have black head capsules and two rows of black bumps (tubercles) running the length of their yellowish-white bodies. Black-headed caterpillars typically feed in a common web until they are half-grown, then they may separate to produce small, elongated, wispy nets along tree branches that envelope only a dozen or so leaves. Black-headed race moths usually emerge from overwintering cocoons prior to the adult emergence for the red-headed race.

Caterpillars of the red-headed race have red to reddish-orange head capsules and two rows of reddish-orange tubercles running the length of their light to dark tan bodies. Adult moths usually emerge from overwintering cocoons 2 - 3 weeks after the black-headed race adults have emerged. Red-headed webworms remain together throughout their development to produce truly spectacular multilayered nests enveloping dozens of leaves at the ends of branches. Although first generation female moths of both races often lay their eggs on or near the nests from which they developed, this behavior is most commonly practiced by the red-headed race which explains their often truly spectacular sized nests. This also explains why the red-headed fall webworms are more destructive than the black-headed race.

The caterpillars of both races may be found on a wide variety of shade, ornamental, and fruit trees and shrubs. Indeed, Gary observed a nest on cultivated blueberries. If first generation nests are few in number and easily accessible, the best control approach is to physically remove and destroy the nests and caterpillars. Insecticide applications should be used sparingly since insecticides may limit the impact of bio-allies. There are over 50 species of parasitoids, and 36 species of predators known to make a living off of fall webworms. In past seasons, parasitoids have proven to be very effective in reducing year-to-year populations of this defoliator. In fact, thanks to the sharp eyes of Erik Draper (Geauga County) who spotted numerous rice-sized pupae of a parasitoid wasp hanging in the webbing of a fall webworm nest while he was teaching at the Diagnostic Clinic in Wooster, participants were able to see firsthand something that may provide a different portent of what’s to come for the webworms next season!

Author: Joe Boggs

B. BALDFACED HORNET BLITZ. We reported in BYGL 2014-17 (07/24/14) that baldfaced hornet (Dolichovespula maculata) nests are becoming large enough in Ohio to be noticeable. As participants in this week’s S.W. Ohio Diagnostic Walk-About held at the Boone County (KY) Arboretum discovered, bald faced hornet nests are now very large and some are filled with nasty-tempered occupants! That’s because this is the time of the season when baldfaced hornets and YELLOWJACKETS (genera Vespula and Dolichovespula) begin to switch from a
high-protein diet - they feed ground-up insects to their young - to a high carbohydrate diet which supports workers and newly developing queens and drones. It's also when we see a definite uptick in aggressive behavior.

Taxonomically, baldfaced hornets aren't true hornets (genus *Vespa*); they're lumped in with yellowjackets (genera *Vespula* and *Dolichovespula*). However, baldfaced hornets practice an unusually devastating stinging behavior that is not shared with yellowjackets. Rather than landing and stinging, the hornets fly full speed at the source of their irritation and just before they reach their target, they tuck their abdomen under their body so their stinger is pointing forward. They literally drive their stinger into their hapless victim. People often describe a hornet's sting as feeling like being hit by a bullet!

Baldfaced hornets share their nesting behavior with other yellowjackets, as well as with paper wasps. They construct their paper nests by using their powerful mandibles to first scrape fibers from exposed wood and then mixing the fibers with their saliva. The resulting paper extruded from their mouths is lightweight but strong and water repellent. The paper may also be multicolored reflecting multiple sources of the wood fibers. Baldfaced hornet colonies only last one season in Ohio. The workers and old queens in the current season's nests will freeze to death during the winter and the current season's nests will never be reused. Only the new queens formed later this season will leave the nests to spend the winter alone in a protected location; these are the queens that will initiate new nests next season.

Baldfaced hornets are considered beneficial insects despite their painful stinging behavior. Like other yellowjackets and many wasps found in Ohio, hornets are highly accomplished predators. They seek out soft-bodied insects including caterpillars and sawfly larvae and use their powerful mandibles grind-up their victims into insect puree. The insect-mush is feed to the grub-like hornet larvae housed in paper cells within the hornet's nest. A hornet's nest can have a considerable impact on the local caterpillar pest population including bagworms; the flimsy silk bags offer little protection from the hornet's gnashing mandibles. Thus, efforts to control hornets should be limited to nests that present a clear and present danger to homeowners.

**Author: Joe Boggs**

C. WINDSHIELD WIPES. BYGLers also ran into a couple of insect gall curiosities this week including:

* One of the diagnostic samples for identification at the Ohio Diagnostic Clinic last Friday was a nice, plump OAK PLUM GALL which is produced by the gall wasp, *Amphibolips quercusjuglans* (family Cynipidae). This is one of the most dramatic galls found on oaks. The round galls arise from acorn caps and may grow to 1" in diameter. Their location gives them the alternate common name of "oak acorn galls." Their unique coloration of yellowish-brown shot through with purplish-brown "veins" makes the galls look like blood-shot eyeballs; a disconcerting sight once the galls detach and drop to the ground at this time of the year! It is unclear what happens to the gall-maker once the galls hit the ground. Some sources report the galls break open to release the wasp larvae so they can pupate in the soil. However, Joe Boggs noted he has found intact, shriveled galls on the ground late in the fall which indicates the wasp may continue to utilize the gall structure to protect the larvae throughout the winter.

**Author: Joe Boggs**
As noted above, BALDFACED HORNETS (*Dolichovespula maculata*) and YELLOWJACKETS (genera *Vespuila* and *Dolichovespula*) are now switching to high carbohydrate diets and OAK BULLET GALLS appear to be a much appreciated source for a sugary snack. Oak bullet galls are produced by a number of cynipid wasps in the genus *Disholcaspis*, thus there are several types of bullet galls. They measure around 1/2” in diameter and vary in color from light green, to reddish-green, to light brown. Some bullet galls are covered in very fine, short hairs, while others are completely smooth. Many types of bullet galls have secretory cells on their surface. The cells ooze sugary substances that are highly attractive to wasps; it could be described as "wasp candy." It is not unusual for oaks with bullet galls to be literally buzzing with wasps! Presumably, the close attention of stinging insects prevents the helpless immature gall-making wasp larvae located within the galls from receiving the unwanted attention of predators and parasitoids.

*Author: Joe Boggs*

4. DISEASE DIGEST.

A. BOTRYOSPHAERIA CANKER ON REDBUD. Participants at the S.W. Ohio Diagnostic Walk-About spotted several redbuds with branches showing symptoms of Botryosphaeria canker caused by the fungus, *Botryosphaeria dothidea*. The fungus is considered both "cosmopolitan" meaning that it can infect woody plants in over 100 genera, and "opportunistic" meaning that it readily infects trees and shrubs that are suffering from environmental stress, particularly drought stress. Hosts include ash, birch, cotoneaster, crabapple, dogwood, elm, magnolia, and of course, redbuds. Cankers may become abundant on older, stressed redbuds.

The fungus kills bark and phloem tissue and infections may occur randomly throughout the tree. The cankers appear as sunken areas of bark that may be surrounded by swollen edges (callus tissue) and covered with roughened bark that occasionally splits to expose the xylem. The cankers range in size from small, almost unnoticeable elliptical lesions, to large areas of blighted tissue. Branches with multiple cankers are girdled and killed causing leaves on the affected branch to turn reddish-brown; a symptom known as "flagging." Entire trees may be killed if the cankers move from branches into the main stem.

Maintaining healthy trees is the best defense against Botryosphaeria canker since vigorous trees can resist infection. Proper site selection, planting, and aftercare are all essential to avoid loss of branches or entire trees to this fungus. It is particularly important to provide water throughout periods of extended drought. Should trees become infected, it is essential to remove cankered branches promptly upon detection to reduce spread of the disease within the tree or to nearby trees. Pruning should be done during dry weather and cuts made at least 6-8” below infected tissue. Pruning tools should be sterilized between cuts using denatured alcohol to prevent the tools from becoming vectors of the disease. Fungicidal applications have not proven to be effective in controlling this cankering disease.

*Author: Joe Boggs*

B. TUBAKIA OR NOT TUBAKIA...THAT IS THE QUESTION. Nancy Taylor reported receiving samples of blighted Oak leaves that were infected with TUBAKIA LEAF SPOT, *Tubakia dryina* (formerly *Actinopelte dryina*). Tubakia is a common late-season fungal disease that can affect all Oak species, but red oaks (including pin oaks) tend to be most susceptible. The signature symptoms of the disease are round, brown to reddish-brown spots at points of fungal infection.
However, in this case, the sampled leaves did not have these traditional spots on the foliage but instead, displayed blotches that spread down the leaf veins creating what at first appeared to be "Anthracnose-like" necrosis along the vein. However, because anthracnose is an early season disease, further investigation was needed to verify the true causal organism as Tubakia.

Tubakia is usually limited in its occurrence, but, as is the case for many fungal pathogens, infection is more likely with high moisture and rainy weather, which create conditions favorable to disease development. While it may look similar to other fungal diseases of oak, the symptoms do not appear until mid- to late-summer. Due to its appearance late in the season when leaves are starting to senesce, Tubakia is considered only a cosmetic problem occurring only on the foliage and treatment is not usually necessary. Once the tissue is infected, there is nothing we can spray to get it out. Treatment for this and most other fungal diseases would require pre-treatment as a preventative measure and little research has been done on the effectiveness of fungicides on this particular pathogen.

Tubakia may cause premature leaf drop, which can be alarming to those concerned about oak wilt or other diseases. Consult a certified arborist or send a sample to the C. Wayne Ellett Plant and Pest Diagnostic Clinic before assuming the worst. Joe Boggs also noted that he often finds Tubakia associated with chlorosis on pin oaks, though chlorosis is not a pre-requisite to the disease.

Author: Nancy Taylor and Ashley Kulhanek

5. TURF TIPS.

A. GRAY LEAF SPOT IN OHIO. Joe Rimelspach reported that over the Labor Day weekend, gray leaf spot was active and confirmed in several locations in central and southern Ohio. This can be a very destructive disease to perennial ryegrass. If this disease is suspected and you would like confirmation send samples to the OSU Plant and Pest Diagnostic Clinic: [http://ppdc.osu.edu](http://ppdc.osu.edu).

Gray leaf spot is caused by the fungus *Pyricularia oryzae* (teleomorph *Magnaporthe grisea*) and can be a severe problem in the Midwest on perennial ryegrass. It is also a serious disease on rice called blast. Gray leaf spot can occur on ryegrass athletic fields, golf courses, home lawns and parks. Weather patterns that favor gray leaf spot are warm to hot temperatures, excessive moisture, and high relative humidity especially at night, and periodic rainfall.

Gray leaf spot or Blast gets its name from the devastating scorched appearance it causes on the foliage of turfgrass. Quite literally, severe outbreaks look as if the turfgrass leaves have been scorched with a flamethrower! Initially symptoms of gray leaf spot may appear as drought-like symptoms. Check the soil to see if there is adequate soil moisture. The pathogen kills the plant by causing severe leaf blight. Part of the blighting process involves the production of phytotoxic chemicals, which disrupt the normal biochemical and physiological balance within the plant. Initial symptoms often appear as small pinprick lesions, which often go unnoticed or mistaken as a less aggressive leaf spot disease. Under optimal environmental and host conditions, these small spots quickly turn into water soaked spots, which then coalesce into water-soaked leaf tips which then progress rapidly to twisted necrotic leaf tips.

Kentucky bluegrass, fine fescues, bentgrasses, and many perennial weedy grasses and annual grass will not be affected. In later stages of disease development, the sward may take on a
gray color as a result of the mass production of spores/conidia by the pathogen – hence its name, gray leaf spot. In most cases the ryegrass will quickly die and appears as drought stress however the soil is wet. In years when there are gray leaf spot outbreaks there is a strong correlation to weather patterns of warm days and nights combined with high humidity and rain fall from the remains of hurricanes that trace through the Ohio valley.

Cultural management practices:
- Reduce or limit nitrogen fertilizer in the summer. Avoid quick-release sources of nitrogen.
- Irrigate early morning and avoid evening irrigation. Check the soil moisture level because the disease mimics drought stress. Over-watering greatly increases the severity of this disease.
- On athletic fields be wary of using rain tarps during gray leaf spot-susceptible times (mid-August through September in the Midwest).
- Replace damaged areas with a resistant type of turfgrass such as Kentucky bluegrass.
- If ryegrass is planted use new perennial ryegrass cultivars that are developed to be less susceptibility to the disease. Check the National Turfgrass Evaluation Program (NTEP) web site for results of field testing; ntep.org

Here are some improved perennial ryegrass cultivars: All Star 3, Dasher 3, Defender, Derby Extreme, Fiesta 4, SR 4600, Harrier, Derby Extreme, Manhattan 5 GLR, Charismatic II GLSR, Palmer IV, Palmer GLS, Paragon GLR, Panther GLS, Protégé, Regal 5, Repel GLS, Revenge GLX, Fusion, and Buena Vista.

When selecting seed make sure ALL CULTIVARS of ryegrass HAVE IMPROVED GLS RESISTANCE. If a cultivar is stated to have GLS resistance this does not mean it is immune and over time susceptibility to GLS can change.

Chemical management options:
Chemical management must be timed to prevent damage. Stopping this disease once established in a sword can be extremely difficult and may result in loss of turfgrass. Some of the most effective products are: thiophanate-methyl, azoxystrobin, trifloxystrobin, pyraclostrobin, and DMI's + chlorothalonil. Resistance to fungicides has been reported. No more than two applications of the chemical family's benzimidazole (thiophanate-methyl) or strobilurins (azoxystrobin/pyraclostrobin), for the season, is recommended to avoid the development of fungicide resistance. Read labels carefully for more information. Fungicide programs in most years should be started in mid-July to early August depending on historic patterns of disease development in the area.

Remember disease prevention applications, PRE-DISEASE, are much better and successful than POST disease infection applications.

Author: Joe Rimelspach

B. GRUB-A-DUB-DUB. It's that time of year again, late season grub management. Pam Bennett reported finding evidence of skunks or raccoons digging up grubs in turf. A quick check confirmed that there were many WHITE GRUBS just under the soil at the site. This week's Turf Tip Video also confirms that now is the time of year to be checking for and treating late season white grubs.

White grubs are the larvae of the JAPANESE BEETLE (Popillia japonica) and the MASKED CHAFER (Cyclocephala borealis) in Ohio. These larvae develop just under the soil where their feeding can damage grass roots. Key symptoms to look for are dry brown spots, but symptoms
may not always be apparent. Looking for signs of skunk, raccoon, or bird foraging in lawns may also give signs of grub presence. Using a spade, you can cut in and pull back a 1 x 1 square foot space of grass to reveal the small, white, "C"-shaped grubs that are the cause of that local browning-up of grass.

If you have grubs, now is the time for a rescue grub treatment. The key to effective treatment will be selecting the proper insecticide labeled for white grubs in lawns and watering in (unless otherwise noted on your label, the label is the law) to ensure the active ingredient penetrates the grass and gets down to where the grubs are active. You should irrigate up to 0.5" of water or apply before an expected heavy rain. Learn more from this week’s Turf Tip on You Tube [http://youtu.be/KKbhSNDkTv0].

Author: Ashley Kulhanek

6. INDUSTRY INSIGHTS.

A. LATE-SEASON PINE SAWFLIES. We reported in BYGL 2014-21 (08/21/2014) that REDHEADED PINE SAWFLY (Neodiprion lecontei) was a frequent topic of conversation at the 2014 Ohio Christmas Tree Association Summer Meeting. This week, redheaded pine sawfly is joined by two other "late-season" pine sawflies; WHITE PINE SAWFLY (N. pinetum) and INTRODUCED PINE SAWFLY (Diprion similis), as being commonly found in Ohio landscapes, tree farms, and nurseries. All three sawflies have two generations per season with the second generations appearing late in the season. White pine sawfly is usually found on its namesake host but will occasionally feed on red pine. Introduced pine sawfly will also feed on white pine as well as Scotch, mugho, Jack, and red pine. Redheaded pine sawfly has the most indiscriminate palate and may be found feeding on Scotch, jack, shortleaf, loblolly, slash, red, and mugho pines, with white and Austrian pines serving as occasional hosts.

The caterpillar-like larvae of these sawflies are very different in appearance, and introduced pine sawfly has a markedly different feeding behavior compared to white and redheaded pine sawflies. White pine sawflies are pale yellow to white with shiny black head capsules and four rows of spots along the body. The larvae feed in groups (colonies) that produce rapid defoliation of individual branches. Winter is spent as pre-pupae, a stage between larva and pupa, in cocoons that are generally located out-of-sight on the ground underneath host trees.

Redheaded pine sawfly larvae range in color from light yellow to greenish-yellow and they have longitudinal rows of black markings running the length of their bodies. Their shiny, bulbous head capsules are reddish-orange with two black eye spots; however, the head capsules of newly molted larvae may be tawny brown. The larvae also feed in colonies producing rapid defoliation. Worse, if the larvae run out of needle-food, they will stripe bark to consume the sugary-rich phloem causing serious stem damage often producing stem dieback. Redheaded pine sawfly spends the winter as pre-pupae inside cocoons in the soil or duff beneath host trees. Pupation and adult emergence occurs in the spring.

Introduced pine sawfly larvae also have shiny black head capsules like white pine sawfly; however, their bodies have a double black stripe bordered by yellow along the dorsal midline, and their sides are dark with numerous yellow and white spots. Early instars feed in colonies, but later instars feed singly. Their late instar solitary feeding behavior often allows low-level populations to go unnoticed with severe damage occurring when undetected populations explode. Unlike white and redheaded pine sawflies, introduced pine sawflies spend the winter
as larvae in brown cocoons that are very evident attached to the bark of twigs, branches, and main stems of their host tree. The sawfly frequently target white pine, but will also feed Scotch, jack, red, and Swiss mountain pines.

Prevention of damage by these late season sawflies centers on early detection and action prior to the appearance of the highly damaging second generation late in the season. However, action taken to eliminate the current crop of sawfly larvae will reduce populations for next season. Knocking them off into a bucket of soapy water or onto the ground to be dispatched using the "sawfly two-step dance" is highly effective, particularly for the group-feeding white and redheaded sawflies. So far, not populations have become resistant to these control techniques!

A topical application of an insecticide labeled for use on the conifer host will also suppress sawfly populations. Although sawfly larvae look like caterpillars (order Lepidoptera), sawflies belong to the same order as bees and wasps (Hymenoptera). Thus, caterpillar-control products based on the naturally occurring bacterium Bacillus thuringiensis (Bt) will not be effective for controlling these or any other sawfly.

Author: Joe Boggs

7. WEATHERWATCH. The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from September 1 - 10, 2014, with the exception of the soil temperatures which are readings from Wednesday, September 10, 2014 at 11:05 p.m.

After a warm week to last week, the weekend cooled right down. This week's highlight includes each of the 5 stations reporting below average precipitation totals.

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

Author: Amy Stone

8. COMING ATTRACTIONS.

A. SPECIAL TRAINING FOR GREEN INDUSTRY PROFESSIONALS: ASIAN LONGHORNED BEETLES (ALB). ALB continues to be a major concern in Ohio as well as elsewhere in North America. This program will use ALB training modules for Green Industry Professionals that were developed through funding provided by the USDA APHIS. The training will inform participants on what to look for with ALB, what happens when ALB is found, and the status of ALB eradication efforts in Ohio. This 2 hour program is free of charge and will be held from 1 -
3 pm., September 17, 2014, at the Civic Garden Center of Greater Cincinnati, 2715 Reading Rd, Cincinnati, OH 45206.

B. SPECIAL TRAINING FOR MASTER GARDENER VOLUNTEERS: ASIAN LONGHORNED BEETLE. Early detection is critical to eradicating ALB in North America. This program will use ALB training modules for Master Gardener Volunteers that were developed through funding provided by the USDA APHIS. The training will inform participants on what to look for with ALB, how to report a suspected ALB find, and what happens when ALB is found. This 2 hour program is free of charge and will be held from 5 - 7 pm., September 17, 2014, at the Civic Garden Center of Greater Cincinnati, 2715 Reading Rd, Cincinnati, OH 45206.

C. FARM SCIENCE REVIEW. This year's Farm Science Review takes place September 16 - 18, 2014 at The Ohio State University's Molly Caren Agricultural Center outside London, OH. Participants can peruse 4,000 product lines from 600 commercial exhibitors, and capitalize on educational opportunities from Ohio State and Purdue University specialists. For in-depth information on natural resources, visit the Gwynne Conservation Area during the review or visit [http://www.gwynne.osu.edu] for more information now. Farm Science Review pre-show tickets are $7.00 at all OSU Extension county offices, many local agribusinesses, and also online at [http://fsr.osu.edu/visitors/tickets]. Tickets are $10.00 at the gate. Children 5 and younger are admitted free. Hours are 8:00 a.m. - 5:00 p.m., September 16 - 17 and 8:00 a.m. - 4:00 p.m. September 18, 2014.

D. PESTICIDE SAFETY TRAINING - New Commercial Applicators and Training Servicepersons, September 24, 2014. Core and Trained Serviceperson trainings are held in the morning, and Categories 8, 5, 2c, and 6c in the afternoon. The session will be held at the ODA in Reynoldsburg, Ohio. For more information about the event, check out the PestED website at [http://pested.osu.edu].

E. ARBOREATUM FEAST, PART DEUX: MAPLE SYRUP TASTING IS ADDED TO THE MIX! The 2nd annual ArborEatum edible landscape feast and sharing will be held on Wednesday, October 8, 2014 at the OSU Secrest Arboretum at the Ohio Agricultural Research and Development Center in Wooster. More details to come, but start planning your menu items. Last year's hits were legion, from over 30 entries from Cleveland's Lois Rose (from bitter orange marmalade to medlar jelly) to ramps soup to controlling invasives one-bite-at-a-time Autumn olive pate de fruits. Lambsquarter omelettes anyone?

F. WOOD-DESTROYING INSECT INSPECTION TRAINING, October 8, 2014. Mandatory training is required for applicators becoming licensed in commercial Category 12. Recertification credit is available. The session will be held at the ODA in Reynoldsburg, Ohio. For more information about this event, check out the PestED website at [http://pested.osu.edu].

G. THE 87th OHIO STATE UNIVERSITY GREEN INDUSTRY SHORT COURSE. Mark your calendars! The 87th OSU Green Industry Short Course, formerly the OSU Nursery Short Course, will be held in conjunction with the 48th Annual Ohio Turfgrass Foundation Conference and Show on December 9 - 11, 2014 at the Kalahari Resort and Convention Center in Sandusky, Ohio. For more information, visit the Short Course website at: [http://www.osushortcourse.com].

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

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

8. BYGYLOSOPHY. "The foliage has been losing its freshness through the month of August, and here and there a yellow leaf shows itself like the first gray hair amidst the locks of a beauty who has seen one season too many." - Oliver Wendell Holmes

APPENDIX
ADDITIONAL WEBSITE RESOURCES:

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

Buckeye Turf
http://buckeyeturf.osu.edu

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

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

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

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

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

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

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

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

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

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

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

Following are the participants in the September 9th conference call: Pam Bennett (Clark); Joe Boggs (Hamilton); Julie Crook (Hamilton); Ashley Kulhanek (Medina); Joe Rimelspach (Turfgrass Pathology); and Nancy Taylor (C. Wayne Ellett Plant and Pest Diagnostic Clinic (CWEPPDC).

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

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

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

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