Buckeye Yard and Garden onLine provides timely information about Ohio growing conditions, pest, disease, and cultural problems. Updated weekly between April and October, this information is useful for those who are managing a commercial nursery, garden center, or landscape business or someone who just wants to keep their yard looking good all summer.

BYGL July 21, 2011

Thursday, 21 July 2011 16:40

This is the 16th 2011 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 - PETUNIAS (Petunia X hybrida).

Today’s petunias are nothing like the one’s grandma used to grow! Extensive breeding for flower color, size, and amount has resulted in numerous different cultivars of petunias with great features. The petunias on the market today don’t require deadheading and continue on blooming all season, up until a hard frost. The plants vary in size and shape, depending upon the cultivar. The upright or multiflora varieties grow to around 12-15’ tall and about as wide. The spreading varieties grow anywhere from 2-6’ wide to around 4’-1 1/2’ tall.
Colors range from white to purple, pink to fuchsia, and red to burgundy. There are also picotee and striped flowers as well.

Petunias grow best in full sun but will take light shade. They are excellent in bedding displays as well as hanging baskets and containers. Select the right variety for containers as some can get quite large and take over. No deadheading is necessary as these plants keep blooming without it, right up until a hard freeze. Cultivars that tend to do well in the Gateway Learning Garden field trial plots in Springfield, Ohio include Surfinia, Wave, and Supertunia.

For more information, see:
- Missouri Botanic Garden Kemper Center for Home Gardening information on Petunias

**PlantFacts**

*PERENNIAL - TICKSEED (Coreopsis spp.).*

Often considered the work horse of the garden, Coreopsis is well-adapted to Ohio’s summer weather and blooms from early summer until late in the growing season. If it gets a little straggly, a simple haircut brings it back in shape!

The daisy-like flowers are usually yellow and about 2” in diameter. Numerous cultivars have been introduced with variations of yellow as well as pink, white, and shades of orange and red. Make sure the cultivar selected is hardy for the garden. Some of the introductions have not been reliably hardy. The foliage is also quite attractive, depending upon the cultivar. For instance, ‘Threadleaf’ has very fine, leafy foliage that adds nice contrast to the garden.

Provide full sun and well-drained soil. They are drought tolerant and don’t appear to be a favorite of deer! Once they finish blooming, simply shear the flowers and the foliage takes over. However, goldfinches also like to feed on the seed so the seedheads can be left on the plant.

For more information, see:
- Missouri Botanic Garden Kemper Center for Home Gardening search results for Coreopsis

*WOODY - HARDY RUBBER TREE (Eucommia ulmoides).*

Hardy rubber tree is a shade tree with no major pest and disease problems. Hardy rubber tree foliage is reminiscent of elm and turns yellow in the fall. With no standout ornamental trait, this tree is typically chosen for its reliability. Hardy rubber tree contains a small amount of natural rubber that can be seen by folding a leaf in half width-wise until it cracks, then slowly pulling the leaf apart to expose strands of latex that extend between the broken ends of the leaf veins. This tree can reach 50-60’ and has a similar spread. To ensure that hardy rubber tree does well, choose a site that is well drained and free of compaction.

For more information, see:
- University of Florida Extension
- University of Connecticut

*PlantFacts*

*VEGETABLE - GARLIC (Allium sativum).*

Garlic is a member of the onion family that is usually planted in the fall. After getting a head start over the winter and putting on most of its growth in the spring, the plant begins to send up flower heads in early summer. Some gardeners remove these heads to encourage larger cloves. Shortly after flowering, the entire plant will begin to dry, signaling that bulb development is nearing completion.

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

Birdsfoot trefoil is a perennial weed seen in many landscapes where it tolerates drought and poor soil. It is a low growing plant that is often confused with white clover (*Trifolium repens*) or black medic (*Medicago lupulina*). However, unlike white clover, birdsfoot trefoil has yellow flowers. And, whereas black medic has 3 leaflets per compound leaf, birdsfoot trefoil has 3 leaflets at the tip of the leaf and 2 stipules near the base of the petiole making it look like it has 5 leaflets. Also, the plant gets its name from the very distinctive arrangement of seed pods; they resemble the foot of a bird.

This weed spreads via rhizomes and stolons to form large, low mats in lawns and gardens. Seeds produced during summer months germinate the following spring. Birdsfoot trefoil can be controlled with broadleaf herbicides, but applications may have to be repeated to catch any regrowth from rhizomes or stolons. Thick, tall, healthy turf should keep birdsfoot trefoil from becoming established.

2. HORT SHORTS.

A. FALL COLOR IN JULY.

With an extended dry period and high temperatures, some trees are beginning to show fall coloration on some of the older leaves. This is a response to the lack of water and high temperatures that some are experiencing across the area. In short, this is the way the tree is cutting its losses by dropping a few older leaves. Do not confuse this, however, with disease events, such as apple scab (*Venturia inaequalis*), in which defoliation is due to a fungal leaf disease.

To get through the drought, the most practical action is to let nature take its course. A healthy tree in good condition will likely hold up to a few weeks of drought. It is impractical to water large trees, as the amount of water to be applied is staggering and most heavy soils will not take in water fast enough to use a sprinkler or hose. The usual recommendation for watering is 1” per week for landscape plants. Young, small trees and landscape beds can be watered with the 1” goal in mind. Take care not to overwater, which will flood soils and kill roots. Use small containers to measure the amount of water applied by sprinklers or other irrigation.

B. ALONG CAME A SPIDER.

There are over 600 species of spiders found in Ohio and most feed on insects. Ohioans may be surprised at the large number of spiders living in their landscaping when heavy morning dews reveal the gossamer creations of these important predators. A few of the more obvious webs currently being seen in landscapes in southwest Ohio are those created by FUNNEL WEAVERS (Family: Agelenidae); SHEETWEB WEavers (Family: Linyphiidae); and ORBWEAVERS (Family: Araneidae).

Funnel weavers produce large, flat, sheet-like webs spun across grass, under rocks or boards, or over the branches of shrubs such as yews and junipers. The webs slope gently towards a narrow funnel or tube where the spider resides, awaiting its next victim. The spiders are medium-sized and resemble small wolf spiders. Funnel webs may measure more than 1’ across and can become very evident when covered by dew, or when they snare dust during droughty conditions.

Sheetweb weavers construct several types of webs depending upon the spider species. Some species spin flat or slightly curved webs that overlay vegetation and rival the sizes of webs spun by funnel weavers. However, there is no funnel in the web. The spiders hide beneath one edge of the web, or in plant foliage along the edge of the web, to await their prey.

One of the more interesting sheetweb weavers appearing on plants in the southwest part of the state is known as the BOWL AND DOILY WEAVER (*Frontinella communis*). This spider constructs a distinctly bowl-shaped web suspended from plant stems by a crisscrossing array of silk threads and anchored below by interweaving threads. Flying insects drop into the web-bowl after bouncing in pin-ball fashion off the interfacingsilk threads used to suspend the web. Of course, when they drop into the web-bowl, they fall into the “arms” (and fangs!) of the awaiting spider!
Orb weavers create circular webs, as their common name describes. Web construction involves sticky and non-sticky silk. Non-sticky silk is used for "radial threads" which radiate from a central point in a bicycle spoke-like pattern. The non-sticky silk is also used for "frame threads" which circumscribe the web like a bicycle wheel to hold the radial threads in place and to attach the web to support structures such as plant stems or grass blades. "Spiral threads" are composed of sticky silk arranged in a spiral pattern emanating from the center of the web; it's sticky silk that captures the spider's prey. Orb webs range in size from more than 1' to only a few inches in diameter, depending upon the spider species. Joe Boggs noted that his lawn was covered by orb webs measuring 2-3' in diameter.

Although there are several insecticides labeled for spider control, this is not a recommended practice. Homeowners are urged to practice restraint, appreciation, and understanding. Spiders are very important in reducing insect pest populations; they provide a great service free-of-charge by reducing the need for controlling more significant pests.

For more information, see:
- OSU Extension FactSheet
- University of Kentucky EntFact

3. BUG BYTES.

A. FESTERING BLISTER BEETLES.

Joe Boggs reported observing MARGINED BLISTER BEETLES (Epicauta pestifera) and BLACK BLISTER BEETLES (E. pennsylvanica) feeding on various flowers of annuals and perennials in southwest Ohio. These beetles may be found consuming the flowers and leaves of a number of different herbaceous perennials. Aside from occasionally producing noticeable defoliation, these beetles also pack a serious defensive punch! The beetle's blood contains cantharidin, a chemical that can cause severe blistering of the skin if the beetles are mishandled, hence the common name. This chemical can also be toxic to people and animals if ingested. Oddly, cantharidin is extracted from a European blister beetle to produce "Spanish Fly."

Several species of blister beetles may be found in Ohio. They range in size from 3/4-11/4" long. The beetles have long legs and narrow, elongated soft bodies. Their heads appear almost bulbous because they are much wider than the pronotum ("neck"). The beetle's flexible front wings often fail to extend to the tip of the abdomen. Margined blister beetles are so named because the margins of their black wings are bounded by gray edges. Black blister beetles lack markings, they are just totally black.

The adults of most species are plant feeders and may be found consuming leaves or flowers on plants in the Families Amaranthaceae, Asteraceae (= Compositae), Fabaceae (= Leguminosae), and Solanaceae. The larvae are specialized predators. Some feed on grasshopper eggs while others feed in the nests of solitary bees where they consume bee eggs, larvae, and food stored in the nest. Blister beetle adults may emerge en mass and produce rapid plant damage. Fortunately, their visits are usually very short lived, lasting only a week or two. They can be easily controlled if necessary by using a gloved hand to knock them into a bucket of soapy water (to be carefully disposed!), or by using an insecticide labeled for the host plant.

For more information, see:
- University of Illinois IPM Fact Sheet
- University of Kentucky EntFact

B. A BEAUTIFUL BEETLE.

BYGL reports are usually focused on plant nasties. However, this week Joe Boggs reported observing one of the most beautiful beetles found in Ohio. The beetle lacks a common name, but is generally referred to as the "DOGBANE BEETLE" because it primarily feeds on dogbane. The beetle's scientific name is Chrysochus auratus, which loosely translates to mean "made of gold."

Indeed, these beautiful iridescent beetles may look like shimmering spots of gold on the leaves of dogbane, or they may blaze with an array of other colors depending on the viewer's angle to the beetle. A slight change in viewing angle will cause the beetles to glister with multiple shades of green, copper, blue, and red. The secret to this kaleidoscope of colors can be found just beneath the surface of the exoskeleton. Beneath an outer translucent layer rests stacks of tiny slanting plates that
cover color pigments. Light rays that strike the surface of the plates are reflected as a shimmering sheen, while light rays that bounce off the pigments produce an array of colors. The result is a mix of changing lustrous colors that are almost unmatched in the insect world.

The beetles are found during the day feeding and resting on dogbane leaves. Other insects practicing this behavior would be easy pickings for predators. However, dogbane beetles have a nasty chemical defense. Dogbane has milky sap that contains poisonous alkaloids (cardiac glycosides), as with the closely related “milkweeds.” The beetle ingests the cardiac glycosides, stores them in glands, and then secretes them when threatened by predators. It is believed that the bright colors of the beetles advertise their ability to practice chemical warfare. Pay close attention to areas with dogbane to see these iridescent spots of gold.

For more information, see:
- Iowa State University Fact Sheet

C. SQUISHED SQUASH.

Several BYGLers reported that gardeners in Ohio are starting to experience the handiwork of SQUASH VINE BORERS (\textit{Melittia cucurbitae}). Caterpillars of this moth bore into the stalks of squash, pumpkins, and gourds to feed on the inner tissues causing vines to weaken, and collapse. Heavy infestations can cause lush, full, healthy-looking plants to rapidly wilt, and die.

The moth belongs to the family Sesiidae which is the clearwinged moths. Clearwinged moths are so named because many species lack scales on their wings. They mimic wasps both in the membranous appearance of their wings and the shape of their bodies. However, squash vine borer moths only slightly resemble wasps. Their front wings are covered in dark metallic-green scales, and only their hind wings are clear. The moth’s thorax is greenish-black, and their abdomen is a flamboyant reddish-orange topped with a dorsal row of black dots. There is typically only one generation of this moth per season in Ohio; however, occasionally a partial second generation may occur in the southern part of the state. Adults fly during the day, and they may be observed from early-June through early-August.

Management strategies to minimize the overall impact of this insect include: catching and killing moths that are resting on leaves in the afternoon before they lay eggs; hand-picking the dull red eggs from main stems before they hatch; wrapping stems in strips of old nylon to prevent egg laying; and excavating larvae from infested stems then burying the stem nodes to produce new plants. Plants may also be protected by covering them with cloth “row covers” that are available at many garden centers. Of course, covering the plants will also exclude pollinators which means gardeners must hand pollinate flowers.

Standard insecticide applications may also be used, but multiple applications are required and insecticides applied near the flowers will kill bees and other pollinators. OSU Extension Bulletin 672-10, "The Ohio Vegetable Production Guide" lists a number of insecticides labeled for use against the squash vine borer. The bulletin can be accessed online at \url{http://ohioline.osu.edu/b672/}.

For more information, see:
- University of Kentucky EntFacts
- University of Minnesota Home Gardening Fact Sheet

D. BASSWOOD LEAFMINERS ‘FLAMING' LINDENS.

Amy Stone reported that the basswood leafminer (\textit{Baliosus ruber}) is feeding heavily on AMERICAN BASSWOOD or LINDEN (\textit{Tilia americana}) in the Toledo area. This feeding is causing lindens to turn brown and in a number of cases, to pre-maturely drop their leaves. The basswood leaffminer occurs throughout the eastern US and Canada, wherever lindens grow. And since lindens grow throughout Ohio, the basswood leafminer can be found in most areas of Ohio. However, the most severe defoliation by the basswood leafminer is concentrated in northwest and north central Ohio. In these areas of Ohio, linden trees can be spotted in woodlots from great distances, because they are brown in color against a background of green of all the other tree species that are unaffected by the basswood leafminer.

Curtis Young has also followed this insect fairly closely and reported that as one travels north to south from the Michigan border, the impact of the basswood leafminer feeding almost disappears once one drops below SR 30 (this highway cuts across Ohio from Indiana to Pennsylvania passing just north of Van Wert, Lima, Ada, Upper Sandusky, Mansfield and through Wooster). Below SR 30, the insect can be found, but in much smaller numbers and producing much lesser defoliation than what can be observed in northwest and north central Ohio.

In these areas, the extent of basswood leafminers’ feeding impact on many times, large trees is surprising considering the size of the insect. The basswood leafminer is currently in the adult stage of its life cycle. The adult is a small (about 1/4" in length), wedge-shaped, reddish-yellow beetle with dark markings on its wings. It will spend...
the winter as an adult in leaf litter under the host trees. The beetles will emerge from the leaf litter in the spring about the time new leaves begin to unfold and skeletonize the new foliage. In early to mid-June, eggs are laid singly at the edges of skeletonized areas. Newly hatched larvae mine leaves until about mid-July. Their feeding produces blotch mines. When large populations of larvae are present, individual mines run together, producing extensive blister-like mines. After pupation in late July to early August, new adults begin to appear and continue to skeletonize the foliage. It is the late season adult feeding that does the most damage to the leaves. When the adults are abundant and feeding is intense, the entire canopy of a tree may be completely skeletonized, causing the foliage to turn brown, wither, and fall off. In some Ohio woodlots, this is occurring now. Trees that are heavily attacked for two to three years may show thin crowns and dead branches.

Although basswood is its preferred host, it has been reported feeding on oak, maple, willow, birch, hophornbeam, apple, and cherry.

E. MONSTROUS HORSEFLIES ON THE MOVE.

Curtis Young reported that the monstrous HORSE FLIES (Tabanus spp.) are flying in great numbers. One does not have to be around horses to know that the large horse flies are out, being in a car can be enough. These ferocious, but seemingly silly flies will attack cars driving down the highway. The flies will target cars, chase them down the road then ram into to them when the car stops at a traffic signal or stop sign. Joe Boggs reported that he was forced to abandon his car when one of the silly flies got into to his car through an open window. The fly's banging around the interior of the car was unsettling enough to Joe to cause him to abandon ship, open all the door until the errant fly found its way out.

These flies range in size from 3/8-1 1/8" in length. Female horse flies require blood meals to be able to produce eggs to initiate the next generation, thus they search for large mammals from which to obtain their blood. When the female finds a host, she uses her sharp mandibles to slash a wound in the skin into which she injects saliva that prevents the blood from coagulating, then she laps up the free-flowing blood. The bite is extremely painful. After the fly finishes or is interrupted while feeding, the blood will continue to flow from the wound.

Horse flies are adept at locating warm-blooded animals, including people near swimming pools, streams, ponds, marshy areas and in the woods. According to Missouri University entomologists, the flies apparently are sensitive to parts of the electromagnetic spectrum--their sight may be like "thermal vision" cameras used to detect heat leaks in houses. They are also attracted to large moving objects which give off heat, like cars and trucks and more savory targets such as cows, horses, deer and humans.

There isn't much that can be done to prevent the horse flies from biting. Suggestions include: avoid areas where horse flies are most active; since the horse flies are active during the day, stay inside during daylight hours (this is not very practical when we have so many activities outside during the day to attend); stay alert while outside because unlike most other flies, the some horse flies' flight is nearly silent, and they are known for landing stealthily on exposed skin then delivering a painful bite; wear light colored clothing that is presumably less attractive than dark colors (although the one horse that was being bitten the most was a light colored horse) when outside because unlike most other flies, the some horse flies' flight is nearly silent, and they are known for landing stealthily on exposed skin then delivering a painful bite; wear light colored clothing that is presumably less attractive than dark colors (although the one horse that was being bitten the most was a light colored horse) when outdoors to help reduce the annoyance from biting flies; in extreme cases, hats with mesh face and neck veils and neckerchiefs may add some protection; and use an insect repellent containing DEET or picaridin. Traps may help reduce horse fly populations. One such trap is the Manning trap. The Manning Trap is a large stationary outdoor trap. For more information on the Manning trap, see the University of Wisconsin Garden Facts on deer flies and horse flies at: [http://wihort.uwex.edu/gardenfacts/XHT1049.pdf](http://wihort.uwex.edu/gardenfacts/XHT1049.pdf).

For More Information, see:
- OSU FactSheet on Biting Flies
- University of Kentucky FactSheet on Biting Flies
- University of Kentucky FactSheet on Horse Flies

4. DISEASE DIGEST.

A. OAK LEAF BLISTER.

This disease, caused by the fungus Taphrina caerulescens (a relative of the peach leaf curl fungus) is quite noticeable this late spring and into summer on a range of oak species. The fungus overwinters in infested buds and twigs and causes infection during moist periods in the spring as leaves emerge. On upper leaf surfaces the "blister-like" somewhat raised spots are greenish to yellow-green, eventually turning brown. On lower leaf surfaces these blistered areas appear as depressions in the leaves. Damage is typically not severe and controls (which to be effective would have to be applied in spring as leaves emerge) are generally not recommended. Some leaf drop may occur and releafing is common in such situations.

B. MAPLE TAR SPOT.

The maple tar spot fungi (Rhytisma acerinum and R. punctatum) cause black spots on leaves of their silver maple and Norway maple hosts. The spots start out as greenish-yellow spots and that is what we are seeing now. Eventually the black "tar-like" stroma of the fungus become prominent as we move into late summer and fall. With R. acerinum the tar-like spots may be as much as 1/2" across, but with R. punctatum there are clusters of much smaller "punctuated" tarry spots.

Considerable spotting, leaf yellowing, and leaf drop can occur, especially in wet years and in areas with poor air movement. Fortunately, much of the leaf drop tends to occur in August and September after much of the critical photosynthetic food...
production in the plant leaves has already occurred for the season. Thus, as Wayne Sinclair of Cornell University wrote, "Tar spot of maple is one of the most spectacular - and least damaging - diseases of maple." The fungus overwinters on fallen leaves, producing fruiting bodies which release spores to new foliage the next spring, so raking up affected leaves can help break the disease cycle from year to year.

C. CHERRY LEAF SPOT.

This fungal leaf spot disease (*Blumariella jaapii*), formerly known as Coccomyces leaf spot of cherry, was quite common on wild cherries this spring and summer and is a major problem for edible cherry growers who have regular fungicide spray programs for this disease. Symptoms involve development of purplish leaf spots with necrotic brown centers, leaf shot holing weeks later where leaf tissue in the affected lesions drops out, and leaf drop associated with yellow, orange, pink-red and brown leaves. Signs of the pathogen can often be seen as masses of spores oozing from the lower leaf surfaces.

For a few backyard or naturalized wild cherry trees, cleaning up fallen leaves in fall and planting in areas with good air movement are helpful. For those controlling fruiting or ornamental cherries with fungicides, sprays must be targeted for primary infections in spring during leaf emergence and for secondary infections occurring throughout the season. Labeled products that include fungicides such as propiconazole, myclobutanil or mancozeb + thiophanate methyl are used in spray programs, but again this is a control program that needs to start early.

D. DOWNY GO THE CUKE.

Erik Draper reported DOWNY MILDEW has begun its annual foliar rampage against cucumbers in Geauga County. This extremely virulent fungus (*Pseudoperonospora cubensis*) rapidly infects and kills just the leaves of plants in the Family: Cucurbitaceae. For most gardeners, this disease affects cucumbers, squash, and pumpkins, in addition to delightfully succulent cantaloupes and watermelons. Of all of the cucurbit crops, cucumbers and pickles are the most susceptible to this disease. The next most susceptible vine crop after cucumber is cantaloupe, followed by pumpkin and other squashes and least susceptible is watermelon. The rapid death of the protective foliage exposes all fruit to direct sunlight, resulting in sunscald and severely reducing the quality of the remaining fruit.

On cucumbers, downy mildew is easily identified by its unique checkerboard-like appearance of yellow and green on older leaves. The leaf infections cause a rapid chlorosis of areas seemingly restricted by small leaf veins, resulting in angular lesions that are sharply delineated. At first, just the leaf blade yellows, turns brown and then rolls upward as the leaf dries out. The leaf petiole and the vine remain untouched and green, but eventually, the entire plant collapses due to the rapid loss of the leaves. In moist, humid conditions, on the underside of yellow leaf lesions, there may appear a fungal layer of white to purplish to almost black color.

This foliar disease can be managed, but it requires a strict adherence to a fungicide application program. Unfortunately for homeowners, when downy mildew symptoms are easily recognized on the plants, it is usually too late to do anything about this disease. However, for commercial growers, if symptoms are detected early, using specific fungicides makes it possible to delay the plant’s demise long enough to get the crop picked. Commercial fungicide recommendations for Ohio can be found at [http://vegnet.osu.edu/news/currentvn1809.htm](http://vegnet.osu.edu/news/currentvn1809.htm).

For more information, see:

- University of Connecticut IPM Information on Mildews on Cucumbers
- University of Vermont Plant Disease Fact Sheet

### PlantFacts

5. TURF TIPS.

A. FUNGICIDES FOR RESIDENTIAL TURFGRASS.

Joe Rimelspach provided BYGLers with a chart listing a number of fungicide products available for use on residential turfgrass to manage a number of common diseases of turfgrass. The chart included a list of the diseases, fungicides registered to manage the diseases and intervals between treatments. To conserve space in BYGL, portions of the chart will be published over the next couple of weeks.

The chart is not an all-inclusive listing of every product that is on the market, but more of a sampling of the products that are available. As with any pesticide, thoroughly read all label instructions carefully before using a given product. Even though two products contain the same active ingredient, there may be differences in formulations.
6. INDUSTRY INSIGHTS.

A. ASIAN LONGHORNED BEETLE (ALB) UPDATE.

The most recent Asian longhorned beetle (ALB) cooperative response update was distributed on Wednesday, July 20, 2011, and was used as the single source for this article.

The delimiting surveys are being performed in the village of Bethel and throughout Tate Township in Clermont County in southwest Ohio. This survey work consists of visual surveys of all host trees within a given radius of the initial find. As of July 20, 2011, the following numbers pertain to the delimiting survey activities: the number of ALB infested trees confirmed - 363; the number of trees surveyed on July 19, 2011 - 381; total number of trees surveyed since July 5, 2011 - 10,150; 3.58% of trees surveyed are infested; and the number of square-miles under regulation remains the same - 56.

Key messages being communicated by USDA Animal Plant Health Inspection Service (APHIS) include: residents in the ALB regulated area established for Tate Township within Clermont County cannot move firewood or wood debris outside of the regulated area and outside of East Fork State Park; residents are discouraged from moving firewood and wood debris inside the regulated area; residents can report suspected ALB by calling 1-855-252-6450 or by going online to http://www.BeetleBusters.info; and residents can also call to report any movement of firewood or wood debris within or outside of the regulated area over the past 5 years.

Regardless of the approach that will be taken to address the ALB infestation in Tate Township, USDA/APHIS wants to assure area homeowners that they will not incur costs for the removals of infested trees by the state or federal government.

For more information, see:
- USDA/APHIS Official Website
- ODA ALB Webpage

B. OHIO ARBORIST COMPETING IN INTERNATIONAL TREE CLIMBING CHAMPIONSHIP!

Jay Butcher of Madison Tree Care and Landscaping, Milford, Ohio, will be representing the Ohio Chapter of the International Society of Arboriculture (ISA) in the 2011 ISA International Tree Climbing Championship (ITCC) this coming Saturday, July 23, in Parramatta Park & Prince Alfred Park, Parramatta (Sydney), Australia. Jay will be competing against the world’s best climbers. The ITCC was first held in 1976 and as noted on the ISA website http://itcc.isa-arbor.com, the event “promotes safe working practices, demonstrated improvements through equipment and techniques, and provides industry recognition to the public.” Please join the BYGL writers in wishing Jay the best of success in this competition!

7. WEATHERWATCH.
The following weather information summarizes data collected at various Ohio Agricultural Research Development Center (OARDC) Weather Stations spanning the dates from July 1-20, 2011, with the exception of the soil temperatures which are readings from Wednesday, July 20, 2011 at 6:05 p.m.

The mercury is moving up, temperatures are expected to be in the high 90s and potentially make it to the triple digits the rest of the week. Thursday’s prediction across much of the Buckeye State is that temperatures will exceed 100F and heat advisories issued are expected between 110-115F. Thankfully most BYGLers received some rain (0.08-1”), although they all indicated that the precipitation was spotty as the storms moved through.

<table>
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<th>Weather Station</th>
<th>Region of Ohio</th>
<th>Ave. High Temp F</th>
<th>Ave. Low Temp F</th>
<th>Total Precip.*</th>
<th>Normal Precip.*</th>
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<td>62.2</td>
<td>1.87</td>
<td>2.6</td>
<td>75.05/75.00</td>
</tr>
<tr>
<td>Hoytville</td>
<td>NW</td>
<td>90.0</td>
<td>65.5</td>
<td>3.48</td>
<td>2.5</td>
<td>75.97/76.72</td>
</tr>
<tr>
<td>Columbus</td>
<td>Central</td>
<td>89.8</td>
<td>67.2</td>
<td>2.47</td>
<td>3.1</td>
<td>86.86/84.30</td>
</tr>
<tr>
<td>Piketon</td>
<td>South</td>
<td>86.7</td>
<td>66.5</td>
<td>2.59</td>
<td>1.9</td>
<td>95.51/90.07</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. DIAGNOSTIC WORKSHOPS FOR MASTER GARDENER VOLUNTEERS.

OSU Extension Master Gardener Volunteers wanting to sharpen their diagnostic skills should register for one of three upcoming workshops held in NW, Central, and NE Ohio. The programs are designed for volunteers and will include first detector training, as well as hands-on samples. Registration for each session is being handled through the local Extension office. Here are the dates and locations: July 27, 2011, in Hancock County; August 30, 2011, in Franklin County; and September 12, 2011 in Cuyahoga County.

B. SCHOOL INTEGRATED PEST MANAGEMENT SEMINAR SCHEDULED. When it comes to pesticide use in schools, Ohio has new school rules. Is your school in compliance? Ohio State University (OSU) Extension is available to assist Ohio schools with Ohio laws on pesticide use in schools and integrated pest management. In addition to website resources and free consultation, there one more scheduled seminar.

- Mt. Orab Seminar (Brown County) - August 2, 2011

Registration information is available on the website: [http://bugs.osu.edu/schoolipm/](http://bugs.osu.edu/schoolipm/)

For more information, see:

- IPM Website

C. NORTHWEST OHIO GREEN INDUSTRY SUMMER SESSION.

This year’s Northwest Ohio Green Industry Summer Session will be held on Wednesday, August 3, 2011 at the Audio Visual Center at Owens Community College, just south of Toledo, Ohio. Registration will begin at 11:00 a.m. The program will conclude at 4:30 p.m. The early registration fee is $15.00 and must be postmarked by July 29th. On-site registration, or registration postmarked after the early deadline, the cost will be $25.00. Registration materials are available at [http://abe.osu.edu](http://abe.osu.edu). Readers may also request a packet by mail by calling 419-354-6916.

This year’s topics include: How Herbicides Work; Top 10 Sustainable Landscape Ideas; Bio-based Insecticides; Industry Safety; What’s Your Label IQ; The Seductive Life of Plants and the Gardeners that Love Them; Difficult Clients & Difficult Diagnostics; Mode of Action (Pests); Shake Hands with Quercus; The Best of the Worst of 2010; and PUCO Regulation Updates. The keynote address will be presented by Matt Ross of Owens Community College on Urban Agriculture.

For more information, see:

- ABE Center Web Site

D. COME TO THE ANNUAL GATEWAY GARDEN JUBILEE IN CLARK COUNTY!

Everyone is welcome to attend this FREE event on Saturday, August 6, 2011 from 8:30 a.m.-1:30 p.m. The Gateway Learning Gardens, located at the OSU Extension office (4400 Gateway Blvd.) in Springfield, Ohio, is a 5 acre learning garden with over 800 different types of plants on display. Themed gardens include herb, annual, perennial, potager, butterfly, bee and hummingbird gardens, a Victory vegetable garden, a new water feature and an addition to the arbor and shade garden, over 35 different container plantings, and an OSU Regional turf research plot. Master Gardener volunteers will be on hand to answer questions as well as provide garden demonstrations.

Other activities include free hot dogs, drinks and popcorn, garden-related vendors, music by the Loosely Strung band, and children’s activities. This will be the 3rd year that the Garden Jubilee is a "Zero-Waste Event.” Most trash of the 1,500 attendees is either recycled or composted. In the past, about 86% of the waste has been diverted from the landfill.

For more information, go to: [http://clark.osu.edu/news/gateway-garden-jubilee-2011](http://clark.osu.edu/news/gateway-garden-jubilee-2011) The event is free and for the whole family!
E. 71st OHIO PLANT DIAGNOSTIC WORKSHOP AT SECREST ARBORETUM.

September 10, 2010 (a Friday), the 70th Diagnostic Workshop was held at the Secrest Arboretum of OSU’s Ohio Agricultural Research and Development Center in Wooster. As one looks at the reports from that Friday in the 2010 BYGLs, one finds this:

“…The afternoon diagnostic walk had perfect temperatures in the 60s-70s and the indoor venue was magnificent. This was the first diagnostic workshop held in the new Secrest outreach building, the Jack and Deb Miller Garden Room. Windows surround the room and attendees could look out and almost feel enveloped by the arboretum throughout the day. When it was time to head out to look at more samples, we were right there. This is as it should be; it changes everything relative to programming in the Arboretum…”

Well of course, as many know, six days later, on Thursday, September 16, 2010, an EF-2 tornado swept through Wooster, OARDC, and Secrest. Miraculously, unlike this year’s tragic tornadoes throughout the U.S., no one was injured. Wooster, OARDC and Secrest did, however lose over 1000 trees greater than 6” in diameter, with a landscape value well over $1.5 million dollars. And that building…here one day, gone six days later. However, thanks to the green industry and other plant lovers, over 700 new replacement trees have been planted, and the building is back! And so are plans for the next Ohio Plant Diagnostic Workshop. It will be held on Friday, September 9, 2011. More details to come in future BYGLs.

F. 2012 OHIO COMMERCIAL PESTICIDE APPLICATOR RECERTIFICATION CONFERENCES SET.

Next year’s conference dates have been set. While the events are 6 months out, take the opportunity to get them in your calendar today. Here are the dates: January 31, 2012, Kalahari Conference Center, Sandusky; February 8, 2012, John S. Knight Center, Akron; February 15, 2012, Dayton Convention Center; and March 8, 2012, Columbus Convention Center.

9. BYGLOSOPHY

“If you are a garden plant you are regarded; well regarded, just as long as you stay in the garden.” - Davies Gilbert

APPENDIX - ADDITIONAL WEBSITE RESOURCES:

- Buckeye Turf
- Emerald Ash Borer Information
- Ohio State University Department of Horticulture and Crop Science Plantfacts
- Ohio State University Extension Master Gardener Volunteer Program
- The C. Wayne Ellett Plant and Pest Diagnostic Clinic (CWEPPDC)
- USDA APHIS Beetle Buster Website (Asian Longhorned Beetle)
- USDA APHIS Beetle Detective Website (Asian Longhorned Beetle and Emerald Ash Borer)

Following were the participants in the July 19th conference call: Barb Bloetscher (Ohio Department of Agriculture); Joe Boggs (Hamilton); Jim Chatfield (Horticulture and Crop Science); Julie Crook (Hamilton); Erik Draper (Geauga); Tim Malanich (Lorain); Cindy Meyer (Butler); Joe Rimelspach (Plant Pathology); Dave Shetlar (Entomology); Amy Stone (Lucas); Nancy Taylor (C. Wayne Ellett Plant and Pest Diagnostic Clinic (CWEPPDC)); Curtis Young (Van Wert); and Randy Zondag (Lake).

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.

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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Website designed by Dr. Tim Rhodus. Direct comments or questions to Webmaster