Welcome to the BYGL Newsletter

May 1, 2008

From: Pam Bennett, Barb Bloetscher, Joe Boggs, Cindy Burskey, Jim Chatfield, Erik Draper, Dave Dyke, Gary Gao, David Goerig, Tim Malinich, Becky McCann, Amy Stone, and Curtis Young.

This is the 5th 2008 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.

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

BYGL is a service of OSU Extension and is aided by major support from the ONLA (Ohio Nursery and Landscape Association) [http://onla.org/] and [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 web site 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.

Following are the participants in the April 29th conference call: Brad Bergefurd (OSU Piketon Centers); Barb Bloetscher (Entomology/C. Wayne Ellett Plant and Pest Diagnostic Clinic (CWEPPDC)); Cindy Burskey (Clermont); Joe Boggs (Hamilton/Piketon); Erik Draper (Geauga); Dave Dyke (Hamilton); Gary Gao (Delaware); David Goerig (Mahoning); Kent Honl (Rainbow Tree Care, Minneapolis MN); John Lloyd (Rainbow Tree Care, Minneapolis MN); Tim Malinich (Lorain); Dave Shetlar (Entomology); Amy Stone (Lucas); Nancy Taylor (CWEPPDC) and Curtis Young (Allen).

WEATHERWATCH - May 1, 2008
Springtime temperatures came to a chilling halt Tuesday evening as frost and freeze warnings were issued across much of the state. The following weather information summarizes data collected at various OARDC Weather Stations spanning the dates: April 1-30, 2008, with the exception of the soil temperatures which are readings from Wednesday, April 30.

<table>
<thead>
<tr>
<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>
<th>Soil Temp F 2&quot;/3&quot;</th>
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<tbody>
<tr>
<td>Ashtabula</td>
<td>NE</td>
<td>61.0</td>
<td>39.2</td>
<td>2.08&quot;</td>
<td>3.20&quot;</td>
<td>52.07 / 48.31</td>
</tr>
<tr>
<td>Wooster</td>
<td>NE</td>
<td>64.7</td>
<td>39.9</td>
<td>1.39&quot;</td>
<td>3.30&quot;</td>
<td>54.19 / 51.89</td>
</tr>
<tr>
<td>Hoytville</td>
<td>NW</td>
<td>63.2</td>
<td>39.4</td>
<td>2.50&quot;</td>
<td>3.30&quot;</td>
<td>55.69 / 47.23</td>
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<tr>
<td>Columbus</td>
<td>Central</td>
<td>65.8</td>
<td>43.1</td>
<td>1.51&quot;</td>
<td>3.70&quot;</td>
<td>57.15 / 54.54</td>
</tr>
<tr>
<td>Piketon</td>
<td>South</td>
<td>67.8</td>
<td>43.1</td>
<td>2.83&quot;</td>
<td>3.20&quot;</td>
<td>61.81 / 55.09</td>
</tr>
</tbody>
</table>

For more information, see:

OARDC Weather Station

**GROWING DEGREE DAYS - May 1, 2008**

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 the site below.

The range of GDD accumulations in Ohio from north to south is 208 to 350. Following is a report of GDD for several locations around Ohio as of April 30, 2008: Painesville, 208; Cleveland, 212; Toledo, 206; Canfield, 216; Lima, 216; Wooster, 225; Coshocton, 243; Columbus, 271; Springfield, 248; Dayton, 254; Cincinnati, 314; Ironton, 331; Portsmouth, 333; and Piketon, 350.

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 near you from the above list, or visiting the above web site, you can see what could be taking place in the landscape around you.

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; 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; **illic borer, adult emergence**, 330; slender Deutsia, first bloom, 338; Japanese kerria, full bloom, 342; common horsechestnut, full bloom, 344; red chokeberry, full bloom, 351; doublefile viburnum, first bloom, 353; and Pagoda dogwood, first bloom, 363.

For more Information, see:

- Growing Degree Days and Phenology for Ohio
- Understanding and Using Degree-Days

**PLANTS OF THE WEEK - May 1, 2008**

Read all about perennials and landscape trees and shrubs in the ONLA publications "Perennial Plants for Ohio" and "Landscape Plants for Ohio." The descriptions and photographs of plants were provided for these publications by the OSU ENLT Team along with other industry plant lovers. These full-color publications are available online.
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Available at [http://Buckeyegardening.com](http://Buckeyegardening.com) for $5.00. Click on "garden store" and then "ONLA plant guides." ONLA members can purchase these in quantities at a reduced price at [http://onla.org](http://onla.org).

**WOODY PLANT OF THE WEEK:** COMMON LILAC (*Syringa vulgaris*). Common lilacs are in full bloom in Central Ohio. It is a flowering shrub that grows best in full sun. It can grow up to 10' tall and 15' wide. While common lilac flowers are often darker-colored when not fully expanded, the mature flowers may be white, lavender, violet, magenta, pink, purple or blue, and may also be single or double flowered. The old fashioned lilac is not as common in the landscape as it used to be due to its susceptibility to powdery mildew disease.

Since the flowers of common lilac are very fragrant, many gardeners still like these lilacs despite this disease problem.

**PERENNIAL OF THE WEEK:** BLEEDING HEART - (*Dicentra spectabilis*). This is the time of the year when the eye-catching flowers of this wonderful plant can light up your perennial garden. This hardy perennial grows best in a well drained soil in partially shaded areas. It prefers adequate moisture during the summer and grows to 2-3'. Plants produce feathery foliage and arching stems covered with heart-shaped flowers in the late spring. If rainfall is light or the soil dries out, the foliage yellows and disappears by mid-June and the plants go dormant for the summer. A filler plant should be used to cover the bare spot left behind.

**WEED OF THE WEEK:** HENBIT (*Lamium amplexicaule*) prefers moist fertile soils but can be found in many landscapes and thin turf areas. This winter annual is in the mint family so it has square stems. Leaves are green, scalloped with rounded ends and rounded teeth on the edges. Flowers are located in upper leaf axis and can be pink to purple. This plant can grow to 16" and stems root where they touch the ground.

Henbit can be confused with PURPLE DEADNETTLE (*Lamium pupureum*). Deadnettle, however, has a more pointed leaf, the lower leaves have long petioles and the upper leaves have short petioles. On henbit, the upper leaves have no petioles.

Both weeds can be controlled by pulling or cultivating. Post-emergent broadleaf herbicides applied in early spring will control the blooming plant, but pre-emergents applied late summer will be needed to control germinating seeds of this winter annual. A thick healthy turf will prevent the development of henbit and many other weeds.

For more information, see:

- Lilac Information
- Common Lilac Descriptions

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**PRUNING OVER-GROWN COMMON LILACS IN THE LANDSCAPE**

Several BYGLers received phone calls about when and how to prune over-grown common lilacs. Because common lilacs are susceptible to powdery mildew disease, this tall shrub tends to become quite bare at the base of the plant as it matures. The best time to prune a common lilac is right after it blooms. Gardeners can remove one third of the oldest stems at the base this year and repeat the process during the next two years. This kind of rejuvenation will encourage shoots forming and growing at the base of the plant, improve air movement to reduce disease pressure, and increase light penetration into the center of the plant for increased flower bud formation. By the fourth year, the lilac bush should be reduced in size, fuller at the base and look almost as good as new.

For more information, see:

- Pruning Common Lilac

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**FROST AND FREEZE**

[Guest writer John Lloyd (Rainbow Tree Care, Minneapolis MN) provided the following report]. Notes from the Northwoods (the Minneapolis branch of BYGL): Although spring is officially here we are still at risk for frost and freezing damage to trees. Peach, apple and blackberry producers in southern Ohio had some flower buds nipped over the last week or two. As buds swell they become less tolerant of cold temperatures and can be damaged at temperatures well above freezing. For fruit producers, significant flower death will reduce fruit production. For landscapes it can result in reduced bloom on ornamental flowering trees or with conifers it can cause terminal bud death. This injury to conifers is more significant than the common winter burn that occurs when young tissues desiccate. Needles impacted by winter burn will fall off, but the live buds will still produce living tissue during the growing season. With dead buds, this will not occur and conifers may lose their aesthetic appeal. For more information on identifying and managing frost injury on fruits and flowering trees look at the website at Michigan State University Extension [http://www.canr.msu.edu/vanburen/frost.htm](http://www.canr.msu.edu/vanburen/frost.htm)
WOODPECKER ACTIVITY POINTS TO INSECT ACTIVITY

One of the signs sited to indicate a potential emerald ash borer (EAB) infestation is a high level of woodpecker activity flaking the bark off of infested ash trees. Trees attacked by the woodpeckers stand out because the woodpecker exposes light colored bark under the grayish-black bark of the surface of the tree. Trees affected so by woodpeckers can be spotted from yards away. Ash trees infested by EAB are not the only trees that might draw someone's attention with high levels of woodpecker activity.

Curtis Young reported spotting several trees that appeared ghostly white from a distance. Fearing new EAB infestations in areas not known to be infested by EAB, Curtis stopped to investigate the trees. What was found were dead elm trees infested by huge populations of bark beetles that drew the attentions of the woodpeckers. Most of the limbs, branches and the main trunks of the trees had the surface bark stripped off to get to the insects hidden below. Thus, the take home message is that woodpecker activity is not an absolute identifier of EAB infestations.

RAINING MAGGOTS

Dave Dyke remarked that he had gotten reports of "white Mexican jumping beans" falling from a pin oak tree. These are the larvae of the OAK FLOWER MIDGE (<i>Contarinina</i> spp.).

The adults emerge and lay clusters of eggs in the flower bracts of the pin oaks. As the oval, 1/16" long white larvae develop, they feed on the flowers and may crawl onto the unfurling leaves. However, unlike other gall midges, these maggots do not damage the leaves, but flip off of the leaves and land on the ground to pupate. This action, which has been referred to as "raining maggots" or "raining Mexican jumping beans" is often disconcerting because they fall in great numbers. The following spring the midges emerge as adults, mate, and continue the cycle once again.

GYPSY MOTH CATERPILLARS BEGIN FEEDING

Of Ohio's 88 counties, 49 have established gypsy moth populations. The Ohio Department of Agriculture's (ODA) Gypsy Moth Program is scheduled to begin its 2008 Suppression and Slow-the-Spread treatments in southern Ohio over the weekend or early next week, weather permitting.

For more information, see:

- Treatment blocks can be found at ODA Website
- ODA News Release on Gypsy Moth

YOU COULD BE SEEING PURPLE

Beginning next week, the Ohio Department of Agriculture's (ODA) EMERALD ASH BORER Program will begin placing purple detection traps in or near ash trees across the buckeye state. A map of the trapping area can be found on their website at: [http://www.ohioagriculture.gov/eab/maps/eab-survey-2008.pdf].

Researchers have developed a purple trap and lure that is attractive to EAB adult beetles. State and federal officials are using these manufactured traps for the first time in Ohio and throughout the country, replacing the former detection tree
survey method. Department surveyors will be placing nearly 7,500 traps in or near ash trees in parts of Ohio where the insect has not yet been detected. Surveyors will place traps roughly every 1.5 miles, focusing primarily in the southeast and far northeastern areas of the state. The purple, triangular traps will be constructed with three corrugated plastic sides, roughly 1' wide by 2' tall. The outside of the traps will be coated with glue and will be hung in or near ash trees before EAB adults begin to emerge in the spring. A lure will be used to attract EAB adults. Department officials will monitor the traps throughout the summer and will remove and inspect the traps in the fall after the adult beetles are no longer flying. The traps pose no risk to humans, domestic pets or wildlife.

For more information, see:

- Emerald Ash Borer
- Purple Trap

**BEE KIND TO HONEY BEES**

Most people have heard of the decline of the HONEY BEES (*Apis mellifera*) due to pests, unfavorable weather patterns and manifold stresses. Fortunately the attention has encouraged interested persons to avoid pesticides where possible and conserve foraging habitats for the honey bees.

The question arose during the BYGL conference of what responsibilities the farmer/grower has if bee hives are on or near his property. The Ohio Revised Code mandates that if a half acre or more of a crop is to be sprayed with a product labeled toxic to honey bees, and bee hives are within 1/2 mile of the area to be treated, the beekeeper MUST be notified 24 hours before the treatment is applied, if the crop is in bloom.

Beekeepers will tell you that the further forewarned of the upcoming treatment the better, so that they can move the bees when it is most favorable to them and the bees. Moving bees during daylight hours results in loss of many foraging bees and may seriously weaken the hive. Also, bees are as cranky as people during cloudy, rainy weather.

The above law also refers to Ohio Revised Code that all persons who own a beehive in Ohio must register the hives with the Ohio Department of Agriculture (ODA) by June 1. Forms are available at the ODA website. These forms must state the number of hives and exact location of each hive. The beekeeper must pay $5.00 for each apiary. Registration of the apiaries allows county inspectors to check the hives during the growing season for evidence of pests and other problems. Failure to register may result in a fine. Also, growers do not have to alert beekeepers who did not register. A copy of the license should be prominently placed at each apiary location.

The advantage of the Apiary Inspection Program is that the Apiary Inspector can monitor each county's reports for impending problems, and provide information regarding Ohio apiary health. This position is intended to be eliminated. If you would like the position to be continued, please contact the ODA.

For more information, see:

- ODA Honey Bee Report
- Bee Polination of Crops in Ohio Fact Sheet

**TERMITE SWARMS**

Termite swarms have been reported in the southern half of Ohio. These masses of tiny black insects are often confused with carpenter ant swarms. However, a close look at the insect can differentiate the two. Winged termites (alates) are 0.4" long with two pairs of long wings almost 2 times longer than the body. The wings fall off easily, leaving wings scattered over the floor. Carpenter ants have the distinctive 3 body parts and wings are two different lengths. The wings do not fall off easily. Although the site of either can be disturbing, carpenter ants can be managed by determined homeowners who know that these ants only nest in water damaged wood. Once the damaged wood is treated or replaced, the ant problem will diminish.

Termites, however, can cause a great deal of damage to an entire structure, and although commercials may boast control for homeowner products, none have been proven to eliminate the colony. A knowledgeable, pest control professional should be contacted when termites or termite damage is discovered. See OSU HYG Fact Sheet 2091 to read how to hire a termite control company at: [http://ohioline.osu.edu/hyg-fact/2000/2091.html]
GROUND-NESTING BEES DO MORE GOOD THAN HARM

Two families of true bees, the Andrenidae (MINING BEES) and Anthophoridae (DIGGER BEES), are making the news in some areas of Ohio, unfortunately for the wrong reasons. These bees nest in burrows they construct in the soil. They are classified as "solitary" bees because unlike their honeybee relatives, they do not live in a single, well-defended hive. Instead, each mining or digger bee female usually digs her own individual burrow in which to rear her own young. However, large numbers of these solitary bees may congregate in a common area where a soil conditions are attractive for burrowing. This is where some problems arise; the soils to which they are attracted can sometimes be in high traffic areas. This is what made the news in one city, the mining bees had colonized a portion of a playground. The local's response was to police-tape the area and hire an exterminator to destroy the bees. There was additional talk of fanning out into surrounding neighborhoods to eliminate any additional collections of the bees.

As reported in BYGL last week, these bees typically are not a stinging threat, but the presence of numerous bees flying close to the ground causes people to react to them negatively. The destruction of these bees is more of a loss than people realize. These bees are pollinators. The female mining bees stock each cell they construct in their burrows with pollen and nectar collected from flowers, and then deposits an egg on the food mass. The larva hatches and consumes the stored pollen and nectar. When mature, it becomes a pupa, and finally becomes a new adult bee. Since the bees are visiting numerous flowers to collect pollen and nectar, they are performing an important service for gardeners and farmers. With the problems facing our primary pollinator, the European honey bee (Apis mellifera), it is important to conserve all other pollinators including the mining and digger bees when ever possible.

NOT ALL BIG BLACK ANTS ARE CARPENTERS

Several BYGLers reported receiving questions about black ants building mounds in landscape beds, along roadsides and in fields. Are they carpenter ants? The black ant responsible for the mounds are not carpenter ants nor are they Allegheny mound ants, they are BLACK FIELD ANTS (Formica spp.). Carpenter ants (Camponotus pennsylvanicus) do not build nests in the soil. They construct their colonies in tree trunks and structures made of wood. Allegheny mound ants (Formica exsectoides) are soil dwelling ants and also construct soil mounds, but are more destructive than black field ants. Although the black field ant can damage some landscape plants by burying them in the mound, most of the time very little damage is done to the surrounding plants. Allegheny mound ants will kill and clear vegetation from around their mounds. They kill the vegetation by injecting formic acid into plants and vegetation near the mound. Small trees and shrubs within 40-50" of large mounds can be killed.

Besides where they live, black field ants can be distinguished from carpenter ants by the shape of their thorax. One needs a magnifying glass or dissecting scope to see this characteristic. Looking at the ant's thorax on profile, the black carpenter ant's thorax is smoothly rounded from front to back. The black field ant's thorax has humps or an uneven profile from front to back. The carpenter ants tend to be larger than the field ant as well.

If control is necessary, the Allegheny mound ant and the black field ant can be controlled by direct application of a residual insecticide to the mound.

WINDSHIELD WIPES - May 1, 2008

BYGLers also ran into a few other insects and mites this week, including:

* Joe Boggs reported that the silk nests of EASTERN TENT CATERPILLAR (Malacosoma disstria) in branch forks of cherry, a favored host, are now becoming very evident in southwest Ohio. Nests are rapidly moving past golf ball-size and closing in on baseball-size. Colonies of early instar FOREST TENT CATERPILLAR (M. americanum) are producing noticeable damage to expanding leaves. The colonies may contain hundreds of hairy caterpillars and their collective image resembles patches of fur on twigs and branches. The caterpillars are primarily being found on maple and oak. Fortunately, high populations of both eastern and forest tent caterpillars are highly localized geographically.

* Joe also reported that overwintered PINE NEEDLE SCALE (Chionaspis pinifoliae) eggs are hatching in southwest Ohio, and crawlers are …

The accumulated GDD that predicts this event is 305; the area has reached 313. The tiny, mobile, rusty-red first instar nymphs (crawlers) are the life stage that is most susceptible to contact insecticides. Insecticidal soaps, horticulture oils, and a number of "standard"
contact insecticides are effective; however, thorough coverage is required. Also, conifers should be closely monitored since egg hatch can occur over an extended period of time requiring a second application. A soil drench application of the systemic neonicotinoid insecticide dinotefuran (e.g. Safari) in the fall will provide preemptive control of this armored scale.

**POWDERY MILDEW ON ANNUALS**

Dave Dyke reported that a greenhouse grower had reported a problem with a POWERY MILDEW infestation on some of his snapdragons during the cool, wet weather experienced recently in southeastern Ohio. This disease is quite common on snaps, but almost all landscapes have plants that become diseased with one of the powdery mildew fungi. Although the fungi that cause powdery mildew are usually different on different plants, all of the powdery mildew diseases are similar in appearance.

Moderate temperatures (between 60 and 80°F), high humidity and plant crowding are conditions conducive to the development of this disease. In most cases, prompt recognition and control actions can prevent severe damage to plants from powdery mildew diseases.

To minimize the incidence of powdery mildew plant resistant cultivars if they are available. Avoid overhead irrigation and water early in the day to avoid prolonged periods of moisture on the leaves. Avoid planting susceptible plants in shady locations or in areas that lack good air circulation. Sanitation is a key to reducing the incidence of powdery mildew the next season. Remove plant debris under infected plants that contain inoculum that can over winter on dead leaves. For further information on this disease please refer to OSU FactSheet HYG-3047-96 below.

For more information, see:

- Powdery Mildews on Ornamental Plants

**DOG VOMIT**

Dog vomit or dog barf fungus has once again been crawling its way across landscapes. This somewhat grotesque, slimy barf-colored growth is actually not the fungus that its name indicates. It is a slime mold (*Fuligo septica*) that actually crawls along the surface of the mulch digesting organic matter. It can be yellow, orange, or pink in color. As it reaches maturity, the colony stops moving and firms up forming a mound that looks just like its namesake. This pile-o-puke eventually dries down and releases brownish clouds of spores when disturbed.

The most effective time to control this problem is when the mulch is being put down. At that time, the fresh mulch is easily colonized by slime mold. Watering in new mulch increases the moisture level in the relatively dry organic matter. This allows bacteria and other competitors to get established prior to the arrival of slime molds. This fierce competition for organic matter reduces the successful development of the dog barf later in the season. If the slime mold is currently in the landscape, the gelatinous or dry stages of the slime mold can be lifted off of the mulch and disposed of. It is, however, an amazing organism that you can simply enjoy for what it is. On another note, Tim Malinich reported finding a similar mass on his living room carpet, but with eight cats, what else can one expect?

For more information, see:

- Dog Vomit Slime Mold
- Control of Nuisance and Detrimental Molds Fact Sheet

**HOLE-LY TURF!**

Cindy Burskey reported receiving a call about a mysterious critter wreaking havoc on a lawn. Upon further investigation it was clear that the culprit was not one but several different wildlife species causing a large area to be torn up within the yard.

The first culprit identified was the STRIPED SKUNK (*Mephitis mephitis*). The Striped Skunk, which is about the size of an ordinary house cat, becomes a nuisance when their burrowing and feeding habits come into contact with humans. Skunks will dig holes in lawns, golf courses and gardens searching for grubs, earthworms, etc. Digging normally appears as small, 3-4" cone-shaped holes or patches of up-turned earth.

The second culprit was identified as the TREE SQUIRREL (*Sciurus* spp.). Squirrels can become a nuisance to homeowners for a variety of different reasons. They can invade attics, short power lines and transformers, chew holes in pipeline, eat nut crops and damage lawns looking for cached nuts. Although they are fun to watch and feed, homeowners need to be aware of the potential damage that they can cause.

The third mysterious animal wreaking havoc on this lawn was identified as the RACCOON (*Procyon lotor*). This creature can also cause considerable damage, whether it is dumping over garbage, getting into attics and chimneys, disturbing garden crops or in this case, digging up turf in search of earthworms and grubs. Raccoons are amazing animals because they have a great memory of where they had their best meals and will come back time and time again to the same area.
Prevention or control of these animals is minimal at best. Trapping or hunting, eliminating food sources or using habitat modification are a few of the choices. Before dealing with any type of wildlife a person should check with Ohio Department of Natural Resources, Division of Wildlife [http://www.dnr.state.oh.us].

**DANDELIONS ARE DANDY NECTAR SOURCES**

Concern over killing honey bees when treating for DANDELIONS is a perennial question this time of year. Debate continues as to the toxicity of growth regulator type herbicides such as 2,4-D and dicamba on honey bees. The careful turf manager can avoid the potential problem by following some common sense guidelines. The most important step is to apply the product in early morning or evening, when temperatures are cooler and the bees are less likely to be flying. Since granules should be applied to wet leaves to maintain longer contact, they should be applied in the morning, while liquids should be applied in the evening, when the leaves are more likely to be dry for faster uptake. The label will also warn to apply either product when the air is still. Treat when the dandelions are in the "puffball" stage instead of flowering, as the product will be translocated down to the root. Since honey bees will not visit dandelions that have gone to seed, they will be protected from the application as well.

**BROADLEAF WEED CONTROL REVISITED**

Last week in BYGL (Issue 2008-04, April 24, 2008), an article about dandelion and broadleaf weed control raised some questions that sparked some additional discussion on the BYGL conference call this week. As a result, some clarification is in order for this week.

The obvious presence of dandelions in yards can be seen throughout Ohio at the current time. In some yards, along roadsides and agricultural fields, carpets of bright yellow dandelion blossoms beg for attention and it would appear that this could be the best time to manage these perennial weeds. In the past, spring and early summer were the typical times of the year that treatments were recommended. However, the currently accepted best time of year to get the greatest impact out of broadleaf weed control treatments is the fall when perennials are moving nutrients back into their roots and thus will move more herbicides into the roots as well. Yet in some cases, broadleaf weed control can’t wait till fall and requires treatment in the spring to reduce the number of potential seeds produced through the growing season. Large dandelion populations may require treatment in the spring to slow down their reproduction but will still be best controlled with a second treatment in the fall. As stated in last week’s BYGL, the greatest impact of the early season treatment will occur at the puff-ball stage.

Another point that was raised was whether liquid or granular herbicide applications were more effective. The answer was that either can be equally effective if applied correctly. Liquid applications have the advantage of ease of application but the disadvantage of potential off-site drift. Granular applications are also easy to apply and have little or no drift problems, but if they are not applied when the leaves of weeds are wet, then most granules roll off the surface of the weeds and fall to the ground where they have no affect. Only the granules that get trapped in a leaf axel dispense their herbicide to the target, potentially a sub-lethal dose. The labels of all pesticides need to be read carefully to be sure they are applied correctly to get the best performance possible out of the chosen product.

**GREENHOUSE INSECT PROBLEMS**

Dave Dyke reported a greenhouse grower was having difficulty with a persistent infestation of FUNGUS GNATS (*Lycoriella* spp. and *Brady sia* spp.) on his bedding plants in cell packs. Other BYGLers reported problems with SHORE FLIES (*Scatella stagnalis*) in greenhouses.

Adult fungus gnats are about 1/8” to 1/10” (2.5 mm) long, grayish to black, slender, mosquito-like, and delicate with long legs, antennae and one pair of wings. Identification can be made by the vein patterns in the wings. Darkwinged fungus gnat adults have eyes that meet above the base of the antennae. Eggs are hardly visible, oval, smooth, shiny white and semi-transparent. Larvae or maggots are legless, thread-like, white, shiny blackheaded, up to 1/4” (5.5 mm) long and transparent so food in the gut can be seen through the body wall. Pupae occur in silk-like cocoons in the soil.

The fungus gnat is sometimes confused with another small dark-bodied fly called the shore fly. Shore flies have more robust bodies than fungus gnats and their antennae are very short. Their most distinguishing characteristic is the presence of five light-colored spots on each of their dark wings. Shore flies are also stronger, faster fliers than fungus gnats. In the larval stage shore flies can be distinguished by the opaque, tannish-brown color of the body and the absence of a head capsule.

Several insecticides are available to the commercial growers that will provide good control of these pests. Chlorfenapyr (e.g. Pylon) is very effective in greenhouses. Pyriproxyfen (e.g. Distance) is good outdoors. Neonicotinoids also provide good chemical control. For further information on this insect, including chemical controls, please refer to NCSU: ENT/or-29, "Darkwinged Fungus Gnats" below.

For more information, see:

- Darkwinged Fungus Gnats
THRIPS

Thrips continued to create headaches in greenhouses this week as normal control efforts have fallen flat. Products such as spinosad (e.g. Conserve), abamectin (e.g. Avid) and methiocarb (e.g. Mesurol) have become the standard for thrips control. However, in some areas, growers report that thrips pressure continues to build. Without any new product in the immediate future, growers are reminded to continue to rotate the use of pesticides to prolong the effectiveness of any one product. Continued use of one class of pesticides increases the chance that thrips and other pests will become resistant. Inspect and monitor new material before bringing it into production areas. Also, keep greenhouses free of weeds as well as the exterior perimeter of the greenhouse, especially areas near vents and doorways.

For more information, see:

- Thrips Information
- Floriculture Newsletter

BYGLive! DIAGNOSTIC WALK-ABOUT AT TOLEDO BOTANICAL GARDEN

Mark your calendars for the season's first diagnostic walk-about at Toledo Botanical Garden on Monday, May 5th. The walk will begin at 1:00 p.m. and participants are asked to meet at the flag pole near the conference center. To RSVP or to find out additional information, please contact the OSU Extension office at Toledo Botanical Garden at 419-578-6783.

CINCINNATI BYGLIVE! DIAGNOSTIC WALK-ABOUT

The 2nd 2008 BYGLive! Diagnostic Walk-About will be held Monday, May 12th, from 12:00-3:00 p.m. at Cox Arboretum & Gardens Metropark, 6733 Springboro Pike, Dayton, 45449. This monthly hands-on training for green industry professionals focuses on diagnosing plant pest, disease and physiological problems. ISA Certified Arborist CEU's will be available.

Driving directions from Cincinnati to the meeting location are as follows: travel north on I-75 to exit 44 (Dayton Mall or Centerville/Miamisburg exit); turn right at the bottom of the exit onto SR725. Turn left onto SR741/Springboro Pike (first major intersection). The Park entrance is about 4 miles on the left (just past the park's employee entrance). We will meet in the "Overflow Parking Lot." For more information, contact Joe Boggs at 513-946-8993.

LANDSCAPE DIAGNOSTIC WORKSHOP IN CENTRAL OHIO

OSU Extension in Delaware County is proud to present the 2008 Landscape Diagnostic Workshop in Delaware, Ohio on June 9, 2008. This will be an all-day program which features Jim Chatfield, Dr. Dave Shetlar, Dr. Gary Gao, and Amy Stone. Topics include: Diagnosing Nutrient Disorders in the Landscape; The Most Damaging Insects of Herbaceous Perennials; 20 Infectious Diseases in the Landscape; Diagnosing Insects and Mites of Woody Plants in the Landscape; Emerald Ash Borer (EAB) Update; and EAB Hands-on Training. The registration fee is $40.00 per person. The fee includes the program, handouts, breaks and lunch, and a certificate of completion.

The registration deadline is June 5, 2008. Space is limited to 80 attendees. Registration will be accepted on a first come, first served basis. Late or on-site registration is subject to a $5.00 late fee. Please call OSU-Extension at 740-833-2030 to confirm space availability before registering onsite. Follow this link http://delaware.osu.edu/horticulture/upcoming-programs to download a program flyer or email Cindy Kaelber at kaelber.1@cfaes.osu.edu for a program flyer.

BYGLOSOPHY

"A table, a chair, a bowl of fruit and a violin; what else does a man need to be happy."

-- Albert Einstein
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.

OSU Extension embraces human diversity and is committed to ensuring that all educational programs conducted by Ohio State University Extension are available to clientele on a nondiscriminatory basis without regard to race, color, age, gender identity, or expression, disability, religion, sexual orientation, national origin, or veterans status. Keith L. Smith, Associate Vice President for Ag. Adm. and Director, OSU Extension, TDD No. 800-589-8292 (Ohio only) or 614-292-1868.

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