UNIVERSITY OF MARYLAND EXTENSION

TPM/IPM Weekly Report
for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture **April 4, 2025**

In This Issue...

Integrated Pest Management for Commercial Horticulture
extension.umd.edu/ipm

If you work for a commercial horticultural business in the area, you can report insect, disease, weed or cultural plant problems **(include location and insect stage)** found in the landscape or nursery to sklick@umd.edu

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Disease Information: David Clement (Extension Specialist) and Ana Fulladolsa (Plant Pathologist and Director, UMD Diagnostic Lab)
Weed of the Week: Kelly Nichols, Nathan Glenn, (UME Extension Educators), and Chuck Schuster (Retired Extension Educator)
Cultural Information: Ginny Rosenkranz (Extension Educator, Wicomico/Worcester/Somerset Counties)
Fertility Management: Andrew Ristvey (Extension Specialist, Wye Research & Education Center)
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Ambrosia Beetle Update

By: Paula Shrewsbury

Ethyl alcohol baited traps were put out this past week to monitor for ambrosia beetle activity at the Central MD Research and Education Center (CMREC) in Ellicott City, Marie Rojas (IPM scout) put traps in Beallsville and Gaithersburg, and Ginny Rosenkranz (UME) put up a trap in Salisbury, MD. We are monitoring closely for the following ambrosia beetles: *Xylosandrus germanus* (black twig borer), *X. crassiusculus* (granulate ambrosia beetle), and *Cnestus mutilatus* (camphor shot borer), and keeping an eye out for other potential troublemakers.

We trapped a total of 30 ambrosia beetles. At the Gaithersburg and Bealsville locations we caught 2 *X. germanus* (black stem borer), and no *X. crassiusculus* (granulate ambrosia beetle) or *C. mutilatus* (camphor shot borer) were trapped at any of the sites. Another ambrosia beetle, *Xyleborinus saxesenii* (fruit tree pinhole borer), was the most abundant with 13 in Gaithersburg and Bealsville and 2 beetles at CMREC. *Xyleborinus saxesenii* is reported to have a wide host range including ornamental trees, tree fruits, timber, and almost all conifers and hardwoods. It usually attacks diseased, unhealthy, or stressed trees. I am currently following up on this beetle to see if it is something to worry about or not. Stay tuned…

Recommendation: Since only two black twig beetles were trapped, and with upcoming cooler weather this week, I would predict that ambrosia beetles will likely not be active. The optimal conditions for ambrosia beetle flight are

heavy rain followed by warm temperatures of >70 °F for 2-3 consecutive days. I suggest monitoring of known susceptible trees of *Xylosandrus* species such as styrax, yellowwood, birch, zelkova, and redbud. Other hosts reported in past years include the hybrid series of *Cornus florida* and *C. kousa*, Kwanzan cherries, *Ilex opaca* 'Satyr Hill' and 'Miss Helen', and paperback maples. We will continue to monitor our ambrosia beetle traps and keep you informed on what we find.

Symptoms and signs of ambrosia beetles are poor plant growth, wet areas on tree trunks, frass tubes (toothpicks) produced by the beetles, and the beetles in or around their small entry holes. Photos: Suzanne Klick, UME

Boxwood Leafminer

Marie Rojas, IPM Scout, is finding boxwood leafminers that are coloring up and getting close to pupating in Beallsville. As larvae get close to pupating they go from yellow to more orange in color. Leafminer larvae at the research center in Ellicott City are mostly yellow with only a few turning orange so far. The pupae are orange. When the adults emerge later in the month, they are small insects with bright orange bodies. You will see them flying around the boxwood shrubs. Here at the research center, we often see many caught in spider webs.

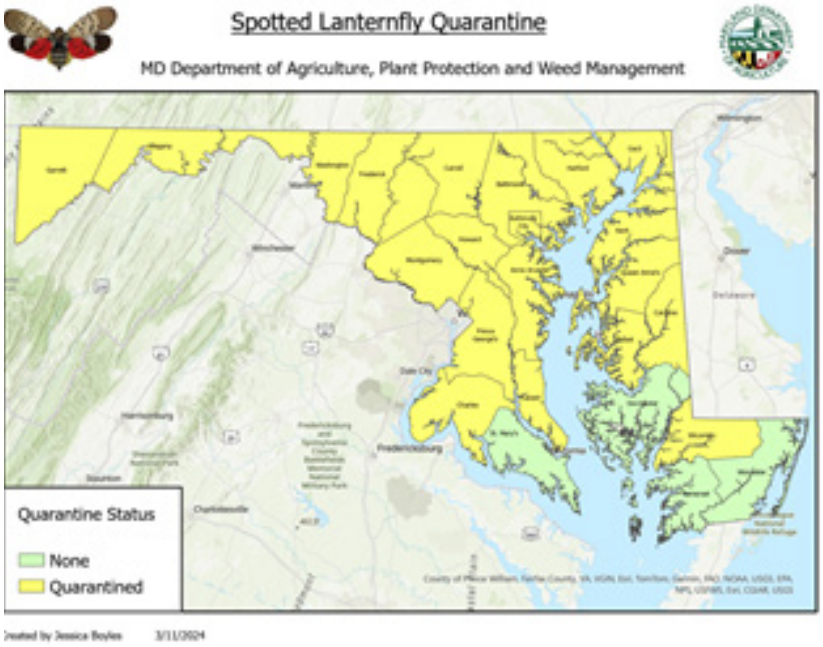
Boxwood leafminer larvae starting to turn orange indicating they are getting close to pupating.
Photo: Marie Rojas, IPM Scout

Control Options: The larval damage has already been done, and they will be molting to adulthood too soon to apply anything that targets larvae at this time of year. The most efficient course of action at this point in time would be to wait for adult emergence. At peak adult emergence, you can apply a contact treatment before they lay eggs, but this timing window is relatively small (only a week or two). Alternatively, apply a systemic when the newly hatched eggs enter their first larval stage, but before summer diapause, to attack larvae while they are feeding.

What You Need to Know About the Spotted Lanternfly Quarantine

By: Jessica Boyles, MDA

The Maryland Department of Agriculture has a quarantine set up for spotted lanternfly. The quarantine was first put in place in 2019, including just Harford and Cecil counties. Since then, we have expanded the quarantine to include 20 out of 23 counties including Baltimore city. It is important to note that even if a county is in quarantine, it does not directly correlate to infestation throughout the entirety of that county. Counties are not placed under quarantine because of a county wide infestation. They are placed under quarantine because the spotted lanternfly there pose a risk of spreading farther due to human assistance through unintentional hitchhiking. Which is why following the quarantine order is so important. We want to slow the spread of spotted lanternfly not just outside of our state but within our state and our agricultural communities.



Spotted lanternfly quaratine map. Photo: Courtesy of MDA

The full quarantine order is on our website (MDA Spotted Lanternfly Page). To break it down in simpler terms. We are asking all business and citizens within the quarantine zone to check their vehicles, equipment and any products or other commodities being shipped, for life stages of spotted lanternfly. This includes movement within Maryland as well as outside of Maryland. All inspections should be done prior to beginning travel. If a life stage is found those individuals must remove or destroy the life stage, so that it does not go with the vehicle, or commodity to its destination. Businesses (distribution centers, transportation, nurseries, farms, and anyone else moving commodities) must have a spotted lanternfly permit. The process of getting a permit is very easy, you watch the permit video and then take the corresponding quiz. Penn state first created the permit system which has developed into the current permit system. Permits are valid in any state quarantined for spotted lanternfly, you can find the quiz here: Spotted Lanternfly Permit Class. Once the quiz has been passed a physical permit will be sent to the business to be displayed. Every three months our list of permitted individuals is updated so that we can also check it. Only one individual within the business needs to get a permit and they can teach everyone else who needs to know the information. However, the permit is free to get, therefore I recommend that everyone takes the class.

Naturally, the next questions follow. What happens if the quarantine is violated or if a business doesn't get the spotted lanternfly permit. Under the quarantine order the Maryland Department of Agriculture can pursue enacting a fine. Violators of the quarantine are also subject to fines or actions taken by other states who have a quarantine. Spotted lanternfly populations have been established in previously negative areas by hitchhiking. We understand there can be a learning curve when it comes to finding spotted lanternfly on nursery stock or other commodities. Which is why we are here to answer questions, give management advice and teach businesses and organizations what they need to look for.

Look for Spotted Lanternfly Egg Masses

Marie Rojas, IPM Scout, found spotted lanternfly eggs on *Acer* x 'Armstrong', *A.rubrum* 'Franksred', *Platanus* x *acerifolia* and *Ulmus parvifolia* (pics) in Laytonsville. She also found eggs on *Cladrastis* 'White Rain' (pic) and *A.rubrum* 'Franksred' in Beallsville.

Look closely for spotted lanternfly eggs on tree trunks and branches (left). See the what the eggs look like close-up after being scraped off the tree (right).
Photos: Marie Rojas, IPM Scout

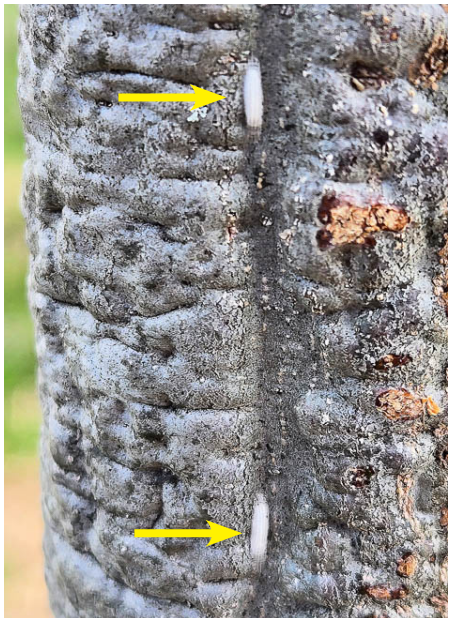
Early Season Powdery Mildew Infection

Miri Talabac, UME-HGIC, found powdery mildew on crabapple in Washington D.C. on March 30. Powdery mildew infections occurs when humidity levels are high. Control begins with the selection of plants resistant to powdery mildew. Place susceptible plants where there is adequate sunlight and good air circulation to reduce humidity levels. Allow proper plant spacing for the same reasons. Pruning (thinning out plants) for better air circulation also may help. Registered fungicides may be needed if disease is severe. Check the label registration for organic products such as horticultural oil formulations for powdery mildew control listing.

Powdery mildew infections are already showing up on trees, like this crabapple.
Photos: Miri Talabac, UME-HGIC

Scale Insect Look-a-like

Marie Rojas, IPM Scout, found ribbed cocoon maker moth (*Bucculatrix* spp) pupal cases on the trunks of oak species in Laytonsville. She noted that she wanted to report these "because they resemble scale insects and get people nervous!" Control is not necessary.



The pupal stage of ribbed cocoon maker moths can be confused with scale insects on tree trunks. Note the longitudinal ridges running along the length of the pupal case.
Photo: Marie Rojas, IPM Scout

Overwintering Tuliptree Scale, White Prunicola Scale, and Japanse Maple Scale

Marie Rojas, IPM Scout, found overwintering black immature tuliptree scale on *Magnolia* 'Ann' and 'Leonard Messel' and white prunicola scale on *Prunus* 'Okame', 'Kwanzan', 'Autumnalis' and *P.* x *yedoensis* in Laytonsville this week. Tuliptree scale crawlers won't be active until mid to late summer. Look for the first generation of white prunicola scale crawlers in May (~513 DD). Joni Desherow, Fine Landscapes Limited, found Japanese maple scale on dogwood. Look for their first generation crawlers in late May into June (829 DD). When crawlers are active, use pyriproxyfen (Distance) or buprofezin (Talus).

Tuliptree scale overwinters as second instars.
Photo: Marie Rojas, IPM Scout

Look for crawlers of white prunicola scale in May.
Photo: Marie Rojas, IPM Scout

Look for crawlers of Japanese maple scale in late May into June.
Photo: Joni Desherow, Fine Landscapes Limited

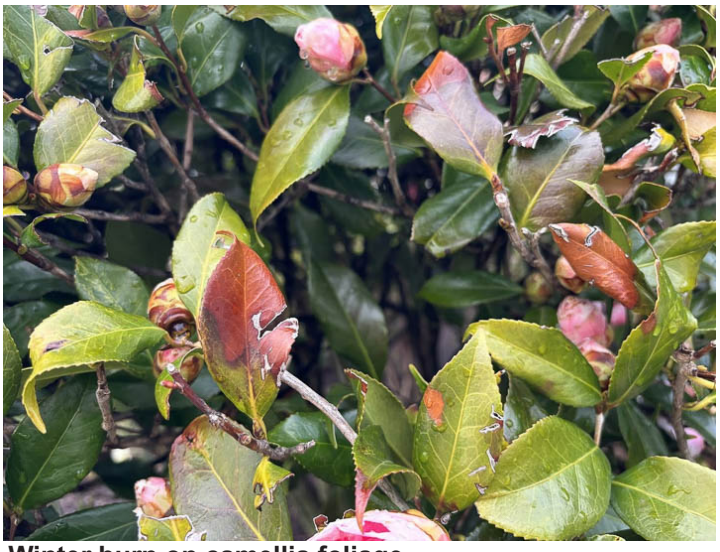
Tea Scale

Sam Fisher, Bartlett Tree Experts, found tea scale on a client's camellia in D.C. on March 31. Look on the undersides of foliage for this armored scale. Hollies and camellias are the primary hosts for this scale. Look for the first generation of this scale starting in early May. The second generation occurs in mid July to early August in Maryland. When crawlers are active, use pyriproxyfen (Distance) or buprofezin (Talus). This is a difficult scale to manage because there is overlap of the generations which results in crawlers being active over a long period of time. It will require close monitoring of the populations, their life stage, and damage. You may have to apply multiple applications of one of the IGR's that was mentioned.

As more camellias are being planted in landscapes, tea scale infestations are showing up on the plants.
Photo: Sam Fisher, Bartlett Tree Experts

Plant Damage

Plant damage from the cold and snowy winter can show up after we get beyond the winter season.



Winter burn on camellia foliage.
Photo: Ginny Rosenkranz, UME

Salt damage in turf areas along the roadway.
Photo: Kevin Nickle, Scientific Plant Service

Flowering Cherry Defoliation and Cherry Shot Hole

By: D.L. Clement and A.C. Fulladosa

This cool, wet, windy spring can result in severe flowering cherry defoliation later in the season. The symptoms will include leaves with many holes, yellowing leaves, and early defoliation. These very common foliar symptoms are caused by the "Shot-Hole diseases". The two pathogens that commonly cause these symptoms are bacterial leaf spot caused by the bacterium, *Xanthomonas pruni*, and cherry leaf spot caused by the fungus, *Blumeriella jaapii.* Both diseases are favored by wet cool weather.

These diseases will continue to infect leaves throughout the growing season if rainy weather persists. On high value trees or trees with a history of severe foliar disease, the use of fungicides may help manage the fungal disease. Be aware however, that these treatments will only provide preventative disease management or slow down the rate of disease development and will not cure already infected leaves. Therefore early sprays have to start as the new leaves are expanding and continue while rainy periods persist.

Three fungicides for landscapes include Eagle (myclobutanil), Protect DF (mancozeb) and Cleary's 3336 (thiophanate methyl). Be sure to check all label instructions. Also, note that commercial orchards have different fungicide labels for edible cherries and these are not interchangeable with landscape usages.

Management during the season involves removal of older heavily damaged or poorly growing trees. Try to adjust tree spacing and use proper pruning to allow better air circulation to promote faster leaf drying and remove fallen leaves in the fall to reduce overwintering pathogens.

White Pine Weevils

Bob Trumbule, Robert Trumbule Horticultural and Entomological Consulting, found his first white pine weevils in tedder traps. They were baited with a Pissodes lure near Upperco on March 28 2025 (32 GDD at Finksburg Station). White pine weevils overwinter as adults. To prevent damage, treat terminal growth when the adult activity is noted on conifers or in traps. Avaunt insecticide is labelled for weevil control in nurseries.

White pine weevil adult activity is starting now.
Photo: Suzanne Klick, UME

Reminder: The UMD Plant Diagnostic Lab is Open!

The UMD Plant Diagnostic Lab has a new director and new contact information. Dr. Ana Cristina Fulladolsa is a plant pathologist and works closely with UMD entomologists and IPM specialists to help answer plant problem questions and diagnose samples. You can find contact information and guidance for sample collection and submission on the lab's website: https://go.umd/edu/plantlab. This information is also available in Spanish in the UMD blog Extensión en Español .
Lab email: plantlab@umd.edu
Lab phone: 301-405-0730
Physical location: 3171 Plant Sciences Building, 4291 Fieldhouse Drive, College Park, MD 20742
Mailing address:
UMD Plant Diagnostic Laboratory, 4291 Fieldhouse Drive, 4112 Plant Sciences Building, College Park, MD 20742-4454

Allium Leafminer Oviposition

Bob Trumbule, Robert Trumbule Horticultural and Entomological Consulting, observed Allium leafminer oviposition activity on March 30 in Greenbelt/Beltsville, MD (88.5 GDD at Laurel Station)

Check for Allium Leafminer in Any Allium Species (from May 5, 2023 IPM Report)

By: Jerry Brust, UME and Karen Rane, UMD Diagnostic Lab

If you grow any type of Allium plant species (onion, leeks, garlic, ornamental onions), now and for the next few weeks is the time to watch for the tell-tale marks left by Allium leafminer. Allium leaf miner Phytomyza gymnostoma tell-tale marks consist of many linear small white dots (made by the female's ovipositor) that appear in leaf blades (fig. 1) of any Allium species. If you had some infestation last year you will especially want to be looking for the signs of this pest. Larvae getting into the bulb of these plants opens them up to pathogens.

To go over recommendations for this pest: new transplants or seedings of Alliums should be watched closely for the tell-tale signs of the fly's damage. When eggs hatch, the larvae at first mine leaves and then move down to the bulbs and leaf sheathes where they feed and eventually pupate. You can cover any just-transplanted Allium planting with a row cover to keep the flies off or if needed treat with insecticides. Adult flies are active from April through May and September through October. After adult flies are no longer active in June through August plants do not need to be covered.

Research out of Cornell University has found using applications of spinosad (Entrust, which is OMRI-labelled) two weeks after oviposition marks are first found and then another application 2 weeks after this will give adequate control of the pest. But the oviposition marks must be watched for carefully and discovered very soon after they are made. A penetrant adjuvant also is recommended to be used when treating for the larvae. If you have constant fly pressure (find new oviposition marks every week) weekly applications of an insecticide (such as pyrethroids or Spinosad) may be necessary to reduce damage.

Arborvitae: Seiridium canker and Phyllosticta Needle Blight

A.C. Fulladolsa

Earlier this month, we examined a 'Green Giant' arborvitae with severe needle blight and branch dieback. We found two fungal diseases often associated with arborvitae, Seiridium canker and Phyllostica needle blight. The tree had many branches with all needles appearing tan to brown and other branches with a bronzed appearance. Upon closer examination of the bronzed branches, most needles were discolored (pale green to yellow) with fully tan needles throughout. *Seiridium* sp. and *Phyllosticta* sp. fruiting bodies and spores were observed on brown needles after placing the branches in a moist chamber for 24 hours.

Flagging on branches of Leyland Cypress with Seiridium canker
Photo: Jennifer Olson, Oklahoma State University, Bugwood.org

Seiridium canker is first observed as flagging, individual branches that become tan to brown in color. At the base of these affected twigs and branches, we find cankers, observed as sunken, darkly colored areas. Sometimes, large cankers can be seen at the base of larger branches where flagging is observed, and they can be oozing resin. With wet, warmer weather,

black, fruiting bodies break through the bark near the cankers and spores are released and spread by water splashing, runoff, and on pruning tools. Seiridium canker usually affects lower branches first, or those in deep shade or areas with little direct sunlight. Leyland cypress is also susceptible to this disease.

Phyllostica needle blight causes discolored needles (pale green to tan or brown). The infection often starts at the tips and moves toward the base of branches. With wet weather, fungal black, fruiting bodies (pycnidia) will form on the needles and release spores, which then spread by splashing, wind, and pruning tools.

Phyllosticta needle blight on arborvitae
Photo: Bruce Watt, University of Maine, Bugwood.org

Both diseases are often associated with stressed trees. Shearing the foliage and winter injury can create wounds in which the fungi can easily enter and colonize the plant. When flagging or browning needles are observed, it is important to prune. Look carefully for cankers on those branches and prune them out, making sure to clean your tool between cuts. Avoid pruning in wet weather. Keep trees healthy, with steady irrigation, proper mulching, and avoiding over-fertilization is important to minimize stress. Avoid overhead irrigation reduce free moisture on needles that could lead to the formation of fungal fruiting bodies and spore release. Proper spacing can also help reduce stress.

Gymnsosporangium Rusts

By: David Clement, UME

This week would be good timing to spray fungicides in central Maryland on the alternate hosts to protect against the Gymnosporangium rusts. Alternate hosts include apple, hawthorn, juneberry, and serviceberry.

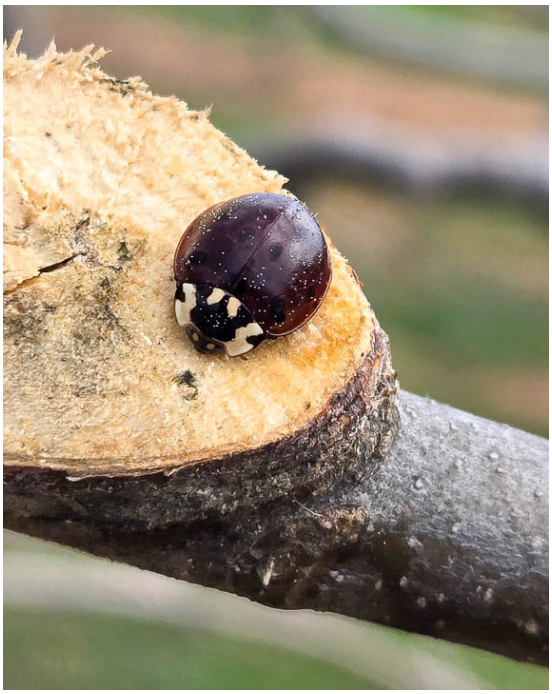

Gymnosporangium rust galls on juniper.
Photo: David Clement, UME

Look for Beneficial Insects - Including the Eggs

Marie Rojas, IPM Scout, is finding 'good guys' such as a couple of different species of lady beetles, including the 15-spotted one lady beetle.

When there are no leaves on the trees and shrubs is a good time to look for egg masses of some of the beneficial insects.. Depending on the weather, look for them hatching starting this month into May.

Look for wheel bug eggs on small trunks of young trees and small branches.
Photo: Suzanne Klick, UME



This species is another multicolored lady beetle. There is one with a white background and black spots. Diagnostic features are on the pronutum. Note the black triangle shape in the white area of the pronotum.
Photo: Marie Rojas, IPM Scout

Go this Marylandbiodiversity.com page to see the color variation - https://maryland-biodiversity.com/media/species/2636.

Egg masses of Carolina praying mantids are more narrow than the larger, rounder Chinese mantid egg cases.
Photo: Suzanne Klick, UME

Beneficial of the Week

By: Paula Shrewsbury

Birds: many feast on insects

The spring temperatures are warming up and insects are becoming more active. Although I have seen a few arthropod predators this season (ex. ground beetles, spiders) I would like to start the season by discussing a non-invertebrate group of insect predators – BIRDS.

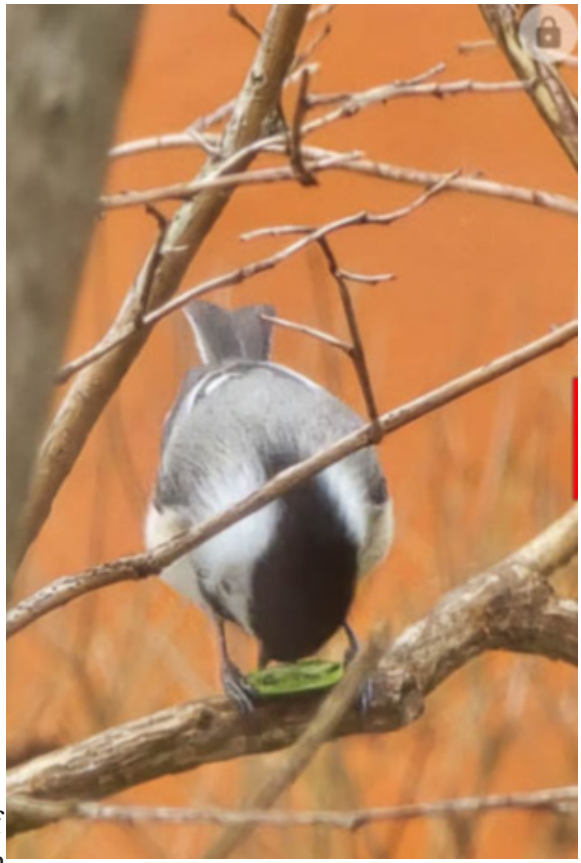
Bluebird with a caterpillar in its beak.
Photo: Mike Onyon, Science News

Worldwide, it is estimated birds eat between 400 – 500 million tons of insects a year! In general, birds are voracious predators of many insects, spiders, and other arthropods. From a pest management perspective this means that birds provide biological control of insects. Birds are usually classified as insectivores (insect eaters), frugivores (fruit eaters), granivores (nut / seed eaters), and/or nectarivores (nectar feeders). However, bird diets can be more diverse where some birds eat other birds, eggs, small mammals, fish, aquatic invertebrates or vegetation, dead animals, garbage and more.

Chickadee eating a caterpillar.
Photo: D. Tallamy, UDel

The type of insects a bird feeds on depends on the nutritional attributes of the insect prey (ex. moisture content, carotenoid levels), the habitat type it lives in, the time of year, and the needs of the bird. For example, birds that do not migrate will eat fruits and seeds in the cold months when insects are sparse. Breeding birds, even those that are usually non-insectivorous, actively hunt insects to feed their young which need protein rich insects. A recent robust study (Nyffeler et al. 2018) of different biomes (ecological zones) around the world found that forest dwelling birds consume about 75% (~300 million tons) of insects annually, whereas birds in other biomes (savannas, grasslands, agriculture, deserts, etc.) collectively consume the other 25% (~100 million tons). Some birds mainly forage on the ground or in leaf litter and feed on earthworms, spiders, and ground-dwelling insects, others catch flying insects, while others forage on the foliage or bark of plants for insect. Some birds, more generalists, will forage in all these habitats. For example, robins forage on earthworms and ground insects. Caterpillars on the foliage of vegetation are a favorite food of many birds such as tanagers, grosbeaks, and warblers. Swallows, swifts, flycatchers, some warblers and waxwings will pick off insects flying in the air. Hummingbirds, chickadees, and finches forage on aphids or other tiny crawling insects on foliage or flowers food (ex. image of the chickadee feeding on boxwood leafminer). Woodpeckers are dominant predators of wood boring insects (ex. emerald ash borer, EAB). Woodpecker activity on ash indicate the tree is infested with EAB.

With all that is known about bird diets there are still many unanswered questions. Ashley Kennedy and Doug Tallamy (University of Delaware) were conducting experiments and surveys to better identify diets of specific bird species in North America. For example, some of their findings on bluebirds is quite interesting (https://youtu.be/shVA_OHOsbg). Bluebirds forage on insects from vegetation and the ground. Their diet consists of 42% caterpillars, with a preference for smooth green caterpillars, 22% orthopterans (grasshoppers, field crickets, katydids), and 14% spiders (wolf, orb weavers, crab and jumping spiders). Likely explanations for this choice in diet are to meet their nutritional needs. Caterpillars have high fat and low chitin content which make them easier to consume. Caterpillars and orthopterans have high carotenoid levels which boost immune system and vision and give brighter plumage for mate attraction. Caterpillars and spiders have high moisture content and lots of crude protein. Kennedy and Tallamy infer that understanding the diet of a particular bird species will help in conservation efforts for birds. Many insects are host specialists to some level (ex. orange striped oakworm feeds on oaks). By knowing what insects a bird species feeds on, recommendations can be made as to what plant species to include in a landscape to provide food towards the conservation of specific birds or groups of birds. The American Bird Conservancy has information on what can be done in landscapes and otherwise to conserve birds.



Chickadee feeding on boxwood leafminer larvae that it picks out of the leaves. Photo: Ben Morris, SavATree

Birds are significant predators of beetles, caterpillars, flies, ants, aphids, grasshoppers, crickets and other arthropods. They play an important economic and ecological role in pest management. Birds are excellent biological control agents.

References:

What do bluebirds eat? A. Kennedy and D. Tallamy, University of Delaware. https://youtu.be/shVA_OHOsbg
Nyffeler, Sekercioglu and Whelan. The Science of Nature, 2018; 105 (7-8) DOI: 10.1007/s00114-018-1571-z

Weed of the Week

By: Chuck Schuster

The roller coaster of spring temperatures is upon us. Several days ago, we saw temperatures in the low 80 °F range in much of central Maryland. Several days later we were back to upper 40s °F for daytime highs. In recent travels on MD 32 near Columbia, callery pear was noted from near Fort Meade through The Ten Oaks area. Yes, spring is quickly showing itself. It is also time to be considering tackling the turf and landscape for weed control. Spring germinating weeds including crabgrass need control plans that usually look to having product on the ground as early in the spring as possible. A review of data from across the region shows that soil temperature lows in some areas have already met the needed 55 °F for several days that will allow crabgrass to germinate. Japanese stiltgrass has germinated in some areas. Our target soil temperature, taken at one inch of depth, is between 55 to 64 °F for crabgrass, one of our earlier emerging weeds. One needs to have pre-emergent products on the ground and activated prior to seedling emergence. That activation is usually .25 to .5 inches of moisture, either rainfall or irrigation. Some products do have early post emergence properties. Dithiopyr (Dimension) used for crabgrass does have ability to control up to the first tiller. For other spring germinating grasses this product must be placed and activated prior to germination. Some turf managers will use a split application of dithiopyr to help prevent a lapse in coverage due to the fact that some crabgrass will not germinate until

soil temperatures get to 73 °F or above at a one-inch depth. This may occur after the first material applied has already broken down. Since soil temperatures are can be found for many locations around the state of Maryland by using the website https://mesonet.umd.edu/ and selecting a site near where you have interest. Soil temperature data is available throughout the day. Another indicator is the use of growing degree days (GDD), crabgrass will not germinate until 200 growing degree days (GGD) are achieved.

Working in landscape to prevent the germination of Japanese stiltgrass and other spring emerging grassy weeds, one also need to pay attention to timing. Applying product and having it activated prior to seed germination is critical. When provided the opportunity, look to the southern exposed slopes to apply product to first, and work towards the northerner exposed slopes last. For many turf and landscape managers, this may be a way of planning which properties to route to first. Areas closer to population centers where there are a number of buildings also see soil temperatures that are warmer than the areas that are less populated.

Moisture activation of pre-emergent products is very important. Some areas are not receiving the rainfall that will allow the products to do the needed job. Use care when applying a spring germinating grassy weed product with an added post emergent broadleaf killer. Not that anything bad will happen, but that the weed is actively growing to allow the broadleaf products to enter the plant and do its job.

Plant of the Week

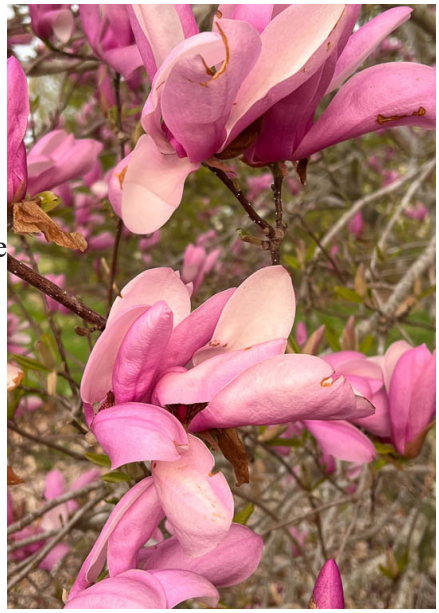
By: Ginny Rosenkranz

Magnolia 'Jane' is a hybrid from *Magnolia liliiflora* 'Reflorescence' x *Magnolia stellata* 'Waterlily, and bred to bloom in April to May, 2-4 weeks after both *Magnolia soulangiana* and *Magnolia stellata* so the flowers would be protected from early frost. 'Jane' is a sister to 7 other of the Little Girls Magnolias that were born at the U.S. National Arboretum, 'Ann', 'Betty', 'Judy', 'Pinkie', 'Randy', 'Ricki' and 'Susan'. All of the Girls are from 2 *Magnolia liliiflora* cultivars, either 'Nigra' or 'Reflorescence' and 2 *Magnolia stellata* cultivars, either 'Rosea' and 'Waterlily'.

Magnolia 'Jane' in full bloom.
Photo: Ginny Rosenkranz, UME

All of the Girls prefer to grow in full sun to partial shade, and thrive in organically rich, slightly acidic, moist but well drained soils. A layer of 2-3 inches of mulch will protect the roots, which when planted prefer not to be disturbed again. Once established 'Jane' is tolerant of clay soils, air pollution and heat, which allows her to fit into many Maryland landscapes. 'Jane' has 4-inch large, cup-shaped, fragrant flowers in shades of purple to reddish purple outside and pure white inside. Her leaves can grow to 6 inches long with an entire margin or smooth edge and an oval shape. The foliage starts out copper with copper -red tints that hide all summer under the dark green, then emerge again in the autumn. 'Jane' is also the most cold tolerant of all the Little Girls. The earliest to bloom is 'Ann' who grows 10-12 feet tall and up to 15 feet wide withe dark reddish purple outside and lighter on the inside. 'Betty', 'Judy', 'Randy', 'Ricki' and 'Susan' all bloom mid-season, with 'Betty' and 'Susan' growing up to 15 feet tall, 'Randy' and 'Ricki' growing 10-11 feet tall and 'Judy' only reaching 7-9 feet tall. 'Jane' and 'Pinkie' are the latest to bloom with 'Jane' growing 20-25 feet tall and 'Pinkie' growing 10-11 feet tall. The flowers bloom before the foliage emerges and each of the Girls are wonderful in their own right when in full

bloom. They all will have flowers bloom sporadically during the summer with lighter colored petals. All of the Girls make excellent shrub borders or a tall informal hedge where their pink to purple flowers glow against the deep green leaves. They also make excellent specimens in the lawn or along a woodland border and can fit nicely in a courtyard or by a patio where the flowers can be appreciated. Potential disease problems can include anthracnose, canker, dieback, leaf spots and powdery mildew while potential insect pest can include scale, snails, thrips and weevils.



Close-up of the flowers on Magnolia 'Jane'.
Photo: Ginny Rosenkranz, UME

Pest Predictive Calendar "Predictions"

By: Nancy Harding and Paula Shrewsbury, UMD

In the Maryland area, the accumulated growing degree days (**DD**) this week range from about **70 DD** (Belcamp) to **203 DD** (Nat'l Arboretum/Reagan Nat'l). The Pest Predictive Calendar tells us when susceptible stages of pest insects are active based on their DD. Therefore, this week you should be monitoring for the following pests. The estimated start degree days of the targeted life stage are in parentheses.

Euonymus leaf-notcher caterpillar – egg hatch **(37 DD)**
White pine weevil – adult first activity **(84 DD)**
Eastern tent caterpillar – egg hatch **(86 DD)**
Boxwood spider mite – egg hatch **(141 DD)**
European pine sawfly – larva, early instar **(154 DD)**
Woolly elm aphid – egg hatch **(163 DD)**
Inkberry holly leafminer – adult emergence **(165 DD)**
Spiny witchhazel gall aphid – adult/nymph **(171 DD)**
Spruce spider mite – egg hatch **(179 DD)**
Boxwood psyllid – egg hatch **(184 DD)**
Tea scale – egg hatch / crawler (1st gen) **(195 DD)**
Hemlock woolly adelgid – egg hatch (1 gen) **(197 DD)**
Viburnum leaf beetle – first egg hatch **(210 DD)**
Azalea lace bug – egg hatch (1st gen) **(214 DD)**
Birch leafminer – adult emergence **(215 DD)**
Elm leafminer – adult emergence **(219 DD)**
Roseslug sawfly – larva, early instar **(230 DD)**
Honeylocust plant bug – egg hatch **(230 DD)**
Elongate hemlock scale – egg hatch / crawler (1st gen) **(232 DD)**
Boxwood leafminer – adult emergence **(249 DD)**
Hawthorn lace bug – first adult activity **(259 DD)**
Spotted lanternfly – egg hatch **(270 DD)**
Bristly roseslug sawfly – larva, early instar **(284 DD)**
Imported willow leaf beetle – adult emergence **(290 DD)**
Hawthorn leafminer – adult emergence **(292 DD)**

See the Pest Predictive Calendar for more information on DD and plant phenological indicators (PPI) to help you better monitor and manage these pests.

Degree Days (as of April 2, 2025)

Annapolis Naval Academy (KNAK)	77	Baltimore, MD (KBWI)	114
Belcamp (FS836)	70	College Park (KCGS)	116
Dulles Airport (KIAD)	126	Ft. Belvoir, VA (KDA)	142
Frederick (KFDK)	104	Gaithersburg (KGAI)	116
Greater Cumberland Reg (KCBE)	77	Martinsburg, WV (KMRB)	71
Millersville (MD026)	104	Natl Arboretum/Reagan Natl (KDCA)	203
Perry Hall (C0608)	71	Salisbury/Ocean City (KSBY)	110
St. Mary's City (Patuxent NRB KNHK)	179	Westminster (KDMW)	141

Important Note: We are using the Online Phenology and Degree-Day Models site. Use the following information to calculate GDD for your site: Select your location from the map Model Category: All models Select Degree-day calculatorThresholds in: Fahrenheit °F Lower: 50 Upper: 95 Calculation type: simple average/growing dds Start: Jan 1

Washington Cherry Blossom Bloom Times

Matthew Morrison, National Park Service, shared their Tidal Basin Peak bloom (at least 70% of flowers in bloom) dates from recent years. Matthew noted that he uses DD to help make the annual peak bloom prediction. In 2018 & 2019 it was in the first week of April.

2022 - 3/21
2023 - 3/23
2024 - 3/17
2025 - 3/30

Phenology

PLANT	PLANT STAGE (Bud with color, First bloom, Full bloom, First leaf)	LOCATION
Ficaria verna (lesser celandine)	First bloom	Ellicott City (March 31)
Sassafras albidum	Full bloom	Ellicott City (April 4)
Viburnum carlesii (Koreanspice viburnum)	First bloom	Clinton (April 4)

Conferences

Upcoming IPM Scouts' Diagnostic Sessions (afternoon)
June 17, 2025, July 30, 2025, and August 26, 2025
Location: CMREC, Ellicott City, MD

June 18, 2025
Eastern Shore Pesticide Recertification Conference
Location: Zoom

June 24, 2025
Stanton Gill Symposium and Lab Dedication
Location: CMREC, Ellicott City

Co-sponsors: University of Maryland Extension and Maryland Nursery, Landscape, and Greenhouse Association

June 27, 2025
Pesticide Recertification Conference
Location: Montgomery County Extension Office, Derwood, MD

September 11, 2025
MNLGA Field Day
Location: Raemelton Farm, Adamstown, MD

Stanton Gill
1952 - 2024

The lab in the new building at CMREC-Ellicott City is named in honor of Stanton.

Commercial Ornamental IPM Information
http://extension.umd.edu/ipm

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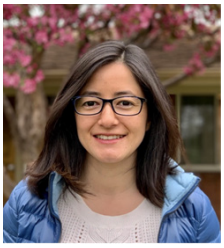

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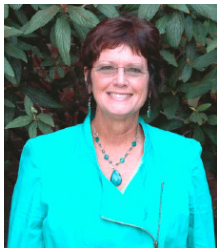

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