UNIVERSITY OF MARYLAND EXTENSION

TPM/IPM Weekly Report

for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture **July 25, 2025**

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Tiger bee fly

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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

Coordinator Weekly IPM Report:
Paula Shrewsbury, Professor and Extension Specialist in Ornamental and Turf IPM, Department of Entomology, pshrewsbury@umd.edu

Regular Contributors:
Pest and Beneficial Insect Information: Paula Shrewsbury (Extension Specialist) and Nancy Harding, Faculty Research Assistant
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)
Design, Layout and Editing: Suzanne Klick (Technician, CMREC)

Please Note - No Report Next Week
The next report will be August 8, 2025

Mid-Season Note

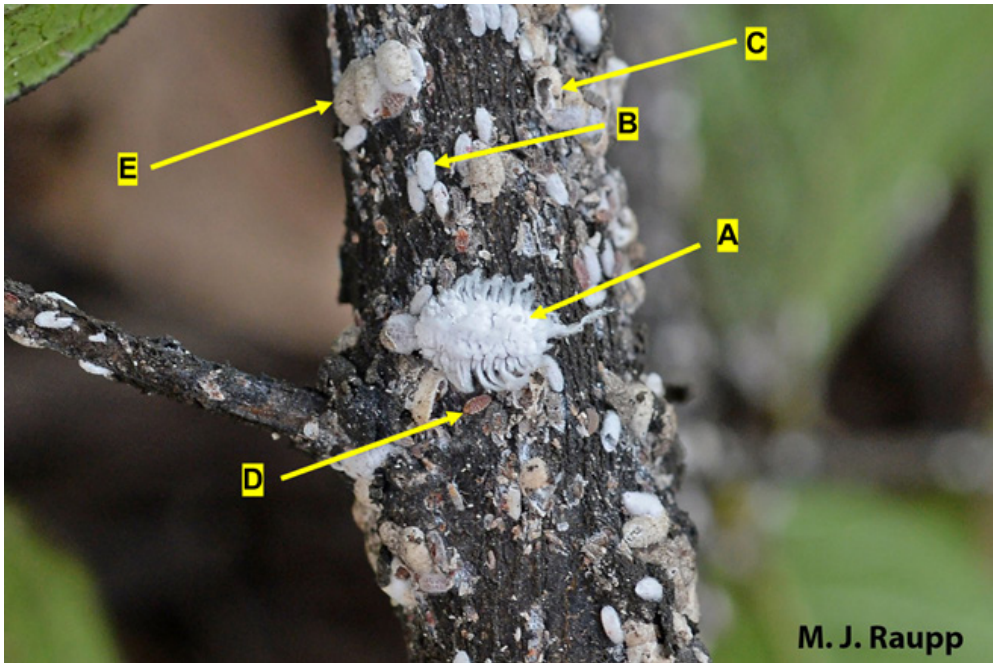
It's that time of year…. We have reached the middle of summer where the temperatures are high, the rain has slowed down (I think), and insects and diseases have slowed down too. If you see any plant problems or unusual insects or diseases, please email pictures to us (pshrewsbury@umd.edu and sklick@umd.edu).

Crapemyrtle Bark Scale Update

By: Paula Shrewsbury

Monitoring of crapemyrtle bark scale (CMBS), *Acanthococcus lagerstroemia*, life stages in University Park, MD continues. University Park was at **2351 DD** (7/23/2025). In the past week, Sheena O'Donnell (UME Technician) has found that on several of the study trees, there are very few live CMBS remaining due to an abundance of Hyperaspis lady beetle larvae that have been feeding on the scale. Go biological control! I have observed that when ovisacs with eggs are present, the Hyperaspis larvae chew open the ovisac at one end and then stick their heads in and feast on the eggs inside. When you are monitoring CMBS, be sure to check if the ovisacs you are seeing are viable (squish them and pink ooze comes out) or if they have holes in them and are empty (no pink ooze) from Hyperaspis predators consuming the eggs.

From the trees that still had live CMBS, Sheena found a range of life stages present. There does not appear to be a discrete generation, suggesting there will be crawlers emerging over time as female scales mature and lay eggs. A larger proportion of CMBS on the trees were females in ovisacs, many with eggs and crawlers becoming active.



***Hyperaspis* lady beetle larva (A) feeding on crape myrtle bark scale (CMBS); CMBS male pupal case (B), CMBS female ovisac that has been fed on (C), CMBS crawler (D), and CMBS intact ovisac made by female CMBS (E) Photo: Mike Raupp, UMD**

Recommendation: Since we are seeing multiple life stages of CMBS occurring at this time, start monitoring crape myrtles with CMBS by flipping ovisacs, or squishing them, to determine if there are females with eggs (pink) and/or crawlers (pink). Crawlers will move out from under the female ovisac and settle in a new location on the branches or trunk. If you see a large proportion of crawlers, relative to eggs, then you should treat for CMBS. Also monitor for natural enemies. If you see a large proportion of dead scales / empty ovisacs from natural enemies feeding on them, then you may not want to do anything – let Mother Nature do her thing. If controls are appropriate, there are multiple chemical controls that are available for CMBS suppression. These include systemics such as dinotefuron but most crape myrtles are flowering so pollinator protection should be considered. Contacts such as horticultural oil, neem oil or other labeled products, and insect growth regulators such as pyriproxyfen (ex. Distance) or buprofezin (ex. Talus). Be sure to follow label directions to protect natural enemies and pollinators and get optimal control. You can use a soft scrub brush and water to physically wash the scales off the branches and trunk of the tree to reduce the populations where feasible.

Caterpillars and Moths

By: Suzanne Klick, UME

July 19 – 27, 2025 is National Moth Week. What was started by a small environmental group in New Jersey as a local moth monitoring event in 2012 has expanded to include 90 participating countries. On Wednesday here at the research center, we had an in-house mothing event to see which moths showed up on the lit sheet in a spot on the farm right next to a wooded area. It was fun to watch as moths (at least 10 different species), many rove beetles, a spined soldier beetle, a few crickets, scarab beetles, a robber fly, some planthoppers, and other insects showed up.


A cecropia moth caterpillar found on buttonbush this week. Photo: Lydia Testerman, Pope Farm

Now is a good time of year to observe moths and their caterpillars in the landscape. Many of what

we see are not found in high numbers and do not warrant any control measures. It's always good to know what you are seeing to make sure they are not a species that could be a plant pest and a problem in landscapes and nurseries that you monitor.

The cecropia moth is one of the largest moth species in Maryland.
Photo: Rebekah D. Wallace, University of Georgia, Bugwood.org

Lydia Testerman, Sara Moline, and Liam O'Neill, Pope Farm, found several **cecropia moth caterpillars** feeding on *Cephalanthus occidentalis* (buttonbush) this week in Gaithersburg on July 21. These caterpillars feed on a wide variety of woody plants including apple, ash, box elder, cherry, lilac, poplar, sassafras, willow, birch, maple, and elm. A tachinid fly, *Compsilura concinnata*, brought into the U.S. to control spongy moths, parasitizes this species and is impacting its numbers in the area.

Dave Freeman, Oaktree Property Care, spotted one the area's day-flying moths, a **hummingbird clearwing moth**, in Virginia. Primary plant hosts of the caterpillar are honeysuckles, snowberries, hawthorns, cherries, and plums. Dave also found catalpa sphinx moth caterpillars that had been parasitized by wasps. This caterpillar only feeds on catalpa trees.

When monitoring nurseries and landcapes, look for parasitic wasps and other predators that help keep caterpillar populations down.


There are many cocoons of a parasitic wasp on this catalpa sphinx moth caterpillar.
Photo: Dave Freeman, Oaktree Property Care



Two of the species seen during our mothing night at CMREC on July 23: tulip-tree beauty moth (left) and grape leaffolder moth (right).
Photos: Suzanne Klick, UME

Spotted Lanternfly – Look for egg masses

By: Paula Shrewsbury

Spotted lanternfly (SLF, *Lycorma delicatula*) populations are high in many areas of Maryland and the region. The first adult activity was reported at the end of June. Current research and observations indicate that the stronger driver or cue for SLF females to begin oviposition is not temperature (ex. DD accumulations) but daylength. This information indicates that SLF should start laying eggs in mid-September.

If you see SLF egg masses, please email us (pshrewsbury@umd.edu and sklick@umd.edu) and let us know the date found, where, and on what plants.

See the SLF Update in the 7/18/2025 IPM Alert for more information on SLF adult management and links to additional information.

Egg masses of spotted lanternfly on a trunk of a tree. Note that some are covered with a protective covering of a white-grey putty-like material, while others are not covered and you can see the distinct rows of eggs.
Photo: P.M. Shrewsbury, UMD

Another example of spotted lanternfly egg masses.
Photo: P.M. Shrewsbury, UMD

Crown Gall on Ornamentals

By: Karen Rane and Dave Clement

Agrobacterium tumefaciens is the bacterium that causes crown gall disease. This disease is most common on plants in the rose family, but can infect hundreds of woody and herbaceous plant species. Galls are composed of undifferentiated plant tissue and initially are somewhat soft, lumpy and whitish in color, turning darker brown and woody (in woody hosts) with age. The galls are usually located at the base of the stem (crown), or roots of infected plants, but they can also form on branches of some woody hosts, such as willow, rose and euonymus.

Although plants are not typically killed by this disease, infected plants often show reduced plant vigor. The pathogen can survive for many years in soil, and enters the plant through small natural openings and wounds (such as pest feeding injury, frost injury, physical damage at planting or propagation) to the roots or lower trunk.

Unfortunately, there is no treatment that can cure a plant with crown gall – the pathogen can infect systemically in some hosts. Management is focused on preventing infection. Avoid purchasing or taking cuttings from plants with crown gall symptoms. Consider planting non-host plants, such as conifers, or grasses, in soils where the disease is known to occur.

Mark Schlossberg sent in photos of crown gall found on euonymus in Owings Mills.
Photo: Mark Schlossberg, ProLawn Plus, Inc.

Brown Prionid Beetle

By: Paula Shrewsbury

The brown prionid beetle (*Orthosoma brunneum*) is in the long-horn beetle family (Cerambycidae). Members of this group are known for their elongate bodies and antennae that are as long as or longer than their body. Lydia Testerman and co-workers, Sara Moline and Liam O'Neill, Pope Farm Nursery, found a brown prionid beetle in Gaithersburg, MD on 7/21/2025. The brown prionid beetle is native to the Eastern U.S. and Canada. They are 1- 2" in length, brown with parallel lines of the beetle's elytra (front wings). They are frequently attracted to lights.

Adults are active May through November and feed on flowers, fruit, and leaves. Adult females lay eggs in decaying wood with high moisture content from May through late summer. Larvae are borers that feed on decaying wood from a wide range of hardwood and conifer trees and other wood substrates. Larvae take 2-3 years to complete development. Brown prionid beetles are beneficial as they aid in the decomposition of wood and recycling of nutrients. Brown prionid beetles are usually not considered pests but they are known on occasion to damage wooden structures such as utility poles, railway timber, and other wooden structures.

A brown prionid beetle (*Orthosoma brunneum*) adult. These beetles can play an important role in the decomposition of dead and decaying wood.
Photo: Lydia Testerman, Pope Farm Nursery

Box Tree Moth is Now in Maryland!

By: Paula Shrewsbury

Box tree moth (BTM), *Cydalima perspectalis* (Lepidoptera: Crambidae) was detected in Washington County, MD this week. An established population of box tree moth was found in Fort Frederick State Park causing damage to boxwood. This was the first detection in MD. Box tree moth is a federally regulated insect and causes significant damage to boxwood (*Buxus* spp.). Please read the Maryland Department of Agriculture (MDA) press release on BTM that was put out this morning. Also review the BTM article that was in the July 18th IPM Alert that contains information on BTM. If boxwood plants are part of your life, you should be closely monitoring them for BTM and its damage.

Box tree moth adult noting characteristic marks.
Photo: Joe Boggs, OSU

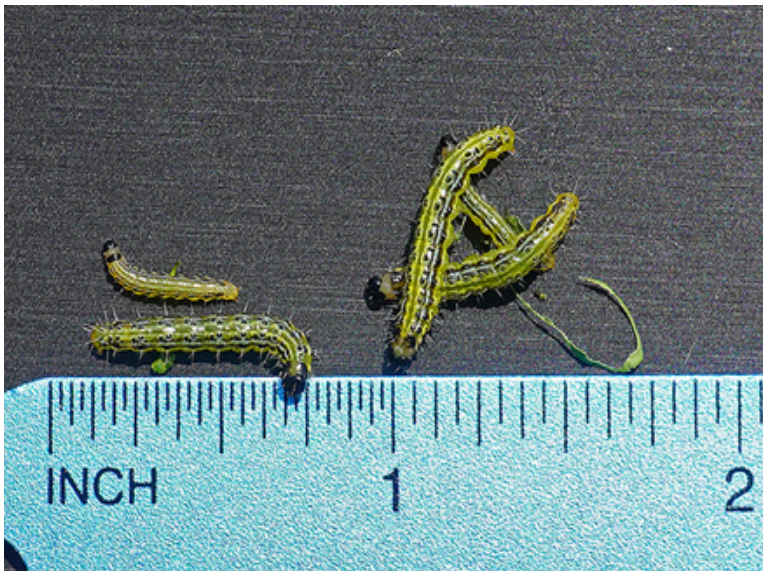
If you manage large numbers of boxwoods, you may want to consider putting up pheromone traps in these locations to **monitor box tree moth activity**. The currently used monitoring method is a bucket trap that you place a pheromone in to attract and catch adult moths. Both the trap and pheromone are commercially available. You can search online for box tree moth pheromones and bucket traps. UMass has put out a nice fact sheet on monitoring for box tree moth which includes guidelines on using the traps.

Box tree moth eggs. Each circle is a caterpillar. If the egg is further developed, you may be able to see the caterpillar inside.
Photo: AdobeStock

If you see BTM and/or BTM damage to boxwoods please let me know (pshrewsbury@umd.edu and sklick@umd.edu). Be sure to include the date found, location, and pictures. **MDA should be contacted at ppwm.MDA@MD.gov with the same information and pictures.**

Links for detailed information and pictures of BTM life stages and damage:
UME - https://extension.umd.edu/resource/box-tree-moth/
BTM OSU Part 1- https://ohioline.osu.edu/factsheet/ent-0099
BTM OSU Part 2- https://ohioline.osu.edu/factsheet/ent-0100
BTM OSU Part 3- https://ohioline.osu.edu/factsheet/ent-0101
BTM MDA - https://mda.maryland.gov/plants-pests/Documents/Box%20Tree%20Moth%204x9.pdf
BTM monitoring and trapping - https://www.umass.edu/agriculture-food-environment/landscape/fact-sheets/box-tree-moth-monitoring-trapping

Damage to the upper leaf surface of boxwood by early instar box tree moth.
Photo: Joe Boggs, OSU

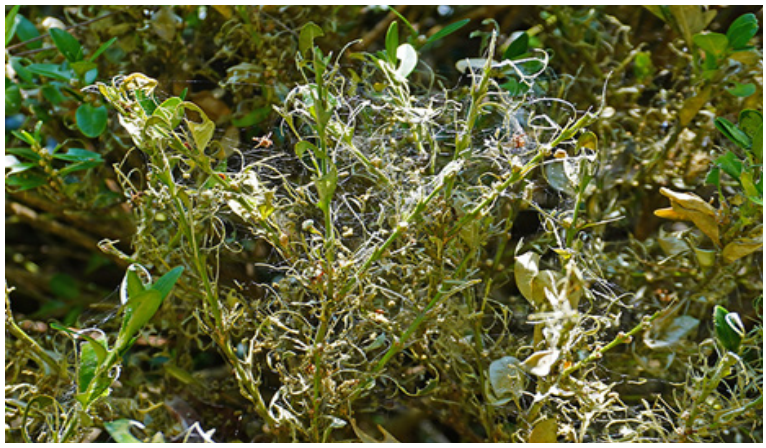


Box tree moth caterpillars can get up to 1 ½" long.
Photo: Joe Boggs, OSU

Different box tree moth caterpillar stages and messy appearance from box tree moth feeding.
Photo: Joe Boggs, OSU

Box tree moth pupal cases start out green and then become more colorful as they develop. Photo: Joe Boggs, OSU

Typical "curlicue" feeding damage caused to boxwood by box tree moth.
Photo: Joe Boggs, OSU



A more habitus view of box tree moth feeding damage to boxwood.
Photo: Joe Boggs, OSU

Beneficial of the Week

By: Paula Shrewsbury

Tiger Bee Fly – a tiger, a bee or a fly?

Last week, Josh Yospyn, sent in a picture of a Tiger bee fly, *Xenos tigrinus*, that was flying around a house in Kensington, MD. Fortunately, the large tiger bee fly is a true fly and not a bee. How can you tell? Bee flies, being flies, have aristate antennae and only 1 pair of wings with a pair of halteres behind the wings. The close resemblance of these hairy flies to pollinators such as honeybees and bumble bees has earned them the name bee fly. Bee flies are in the family Bombyliidae. Bee flies are quite interesting to observe. They have a remarkably long mouthpart called a proboscis which has been modified through evolution to be able to reach deep into flowers to sip the carbohydrate rich nectar which is an important source of energy that bee flies need to power their muscles, particularly their flight muscles. Bee flies appear to be hyperactive fliers, and their wings beat hundreds of times/minute. Their wings rapidly beat as they are busy feeding on the nectar and pollen of the flowers they visit. You can see a captivating video (by M.J. Raupp, UMD) of a bee fly busily flying and feeding on flowers with its long proboscis. Although bee fly adults do not deliberately collect pollen as a source of food for themselves or their young as do bees, their hairy body traps pollen and provides convenient transport of pollen from one plant to another resulting in pollination.

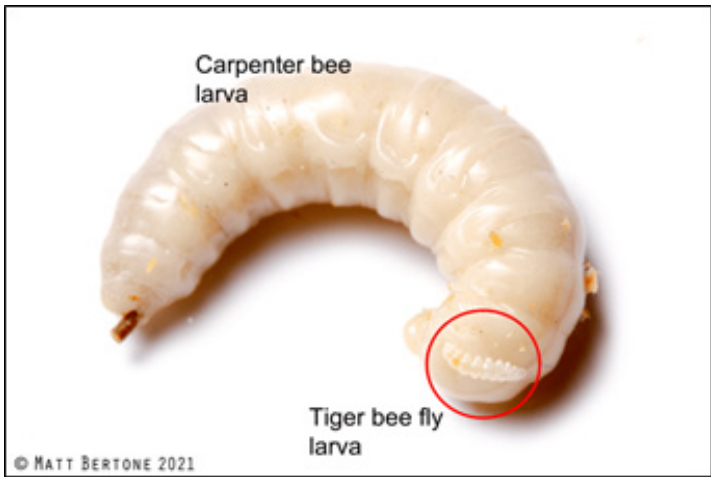
Tiger bee fly, *Xenos tigrinus*, a true fly, provides beneficial services such as pollination and biological control of carpenter bees. Photo: Joshua Yospyn

There are many species of bee flies. Most bee flies are pollinators as adults and parasites as larvae. Many bee fly species are parasites of bees (especially solitary ground nesting bees) and wasps, but there are some that target beetles, grasshoppers, ants, or caterpillars. The larvae of the **Tiger bee fly** are beneficial and help to control carpenter bees. Tiger bee flies are parasites of carpenter bees, a pest of wood structures such as decks, homes, barns, etc. Carpenter bees are also solitary bees as a single female will chew a nest (burrow or gallery) horizontally into wood, and then she provisions the nest with pollen, lays an egg, and when the egg hatches the larva has pollen to feed on as it develops. Tiger bee flies are large (~1-1.75") flies that have dark, hairy bodies with white flecks and their wings are dark with clear spots on them. They are often seen flying around homes or other structures made of wood where carpenter bees are likely nesting. Tiger bee flies have quite a loud buzz and they seem aggressive. They appear to be flying at you but never hit or land on you. They cannot sting and are harmless to humans or pets. After mating, tiger bee flies hang around the ~1/2" holes in wood made by carpenter bees, and the tiger bee fly lays its egg inside the opening of the carpenter bee hole. Once the tiger bee fly larva hatches it is quite active and works its way down the carpenter bee gallery until it finds a

A mating pair of tiger bee flies, *Xenos tigrinus* (female is at the top, male is at the bottom).
Photo: J. Gangloff-Kaufmann, Cornell Univ.

carpenter bee larva (creamy white and legless). The tiger bee fly larva attaches its mouthpart to the outside of the bee larva and proceeds to suck the contents out of the bee as it develops and ultimately kills the carpenter bee larva. It is also reported that bee fly larvae consume the pollen in the gallery that was meant for carpenter bee larvae.

The tiger bee fly provides biological control of carpenter bees. In addition, the adult bee flies are pollinators and prefer the nectar of early to late season flowers, especially coneflowers and asters. Be sure to plant floral resources to attract these large tiger bee flies and other beneficial insects.



Larva of a tiger bee fly (in red circle) which is an ecto-parasite of carpenter bee larva.
Photo: Matt Bertone, NCSU

Weed of the Week

By: Nathan Glenn

Prostrate knotweed (*Polygonum aviculare*) is a **summer annual** weed that thrives in compacted soils and high-traffic areas. Found in turfgrass, along sidewalks, and in landscape beds across the United States, this weed is among the first to germinate in early spring and can quickly establish dense mats if left unchecked.

Figure 1. Prostrate knotweed's growth habit in a pot.
Photo: Virginia Tech Weed ID Guide

Identification:

- **Growth habit**: Low-growing, prostrate stems that radiate outward like spokes
- **Leaves**:
  - Alternate arrangement on the stem
  - **Lance-shaped**, attached by short petioles
  - **Thin sheath** (called an *ocrea*) at the leaf base where it wraps around the stem
  - Leaf size: ½ to 1¼ inches long, up to ¼ inch wide
- **Stems**: Up to 20 inches long
- **Flowers**: Small, white to pinkish-white; appear in clusters of 1–5
- **Fruit**: Small, dark reddish-brown seed-like fruits
- **Root system**: Taproot

Figure 2. Prostrate knotweed's grow habit along the edge of a sidewalk and in a cool season dominated turf.
Photo: Nathan Glenn, UME-Howard.

Prostrate knotweed is often confused with spotted spurge early in the season but lacks milky sap and has smooth stems and leaves.

Fun Fact: Prostrate knotweed is often one of the **first summer annuals to emerge**, making it an early indicator of compacted soils or weak turf competition.

Habitat & Spread:

This weed thrives in **compacted, poorly drained soils**, especially:

- Sidewalk edges
- Sports fields
- Driveways and curb strips
- Thin, stressed turfgrass areas

Knotweed can tolerate low mowing and heavy foot traffic, making it difficult to control once established.

Figure 3. Prostrate knotweed's flower.
Photo: Michigan State University, Integrated Pest Management

Cultural Control:

- **Reduce soil compaction** by aerating regularly in high-traffic areas
- Maintain dense, healthy turf to outcompete seedling establishment
- Improve drainage and minimize surface sealing

Chemical Control:

Pre-emergent control:

- **Isoxaben** can be applied in late fall and it will be effective in preventing germination early next spring. You can wait until late winter to apply, but environmental conditions are not typically conducive to spraying that time of year

Post-emergent control:

- Spot treat before it goes to seed with combination products containing 2,4-D + dicamba or 2,4-D + triclopyr, which provide excellent control in cool season grasses.

Figure 4. Prostrate knotweed seedlings in early spring.
Photo: Virginia Tech Weed ID Guide

Always follow label directions for approved application sites, timing, and rates.

Plant of the Week

By: Ginny Rosenkranz

Hibiscus 'Lord Baltimore' is a hardy hibiscus that is a cultivar of *H. moscheutos*, and thrives in full sun and moist, organically rich soils. The plants are cold tolerant from USDA zones 5-9 and although they are slow to emerge from the soil, when they do, they can grow 4-5 feet tall and spread 2-3 feet wide. The plants grow erect with many almost woody branches that are covered with deeply lobed glossy green leaves that resemble a maple leaf. The flowers are formed in the leaf axils and expand to almost 10 inches across with 5 ruffled dark red petals that overlap slightly, with a prominent central column for stamens and pistils. Each day new bright red satiny flowers open from the large number of flower buds, so the plants bloom beautifully from June to frost. Some of the pollinators include hummingbirds, butterflies and bees. The flowers and foliage are unfortunately enjoyed by Japanese beetles, so it is a good idea to plant it close enough to enjoy the beautiful flowers that open each day, but far enough to no notice the damaged foliage. Hibiscuses are often late to emerge from the soil, so it is always best to trim back the old growth in the fall, leaving some of the branches to let the landscaper remember where the plants are, and leave some branches about 8 inches tall for the native bees to create their

nests. Plants thrive in Rain Gardens and can be a beautiful centerpiece to herbaceous perennial gardens or a part of a pollinator's garden. A row of hibiscus can create a low hedge or be planted at the back of a garden. Plats are tolerant of deer, dry and wet soils. Some of the pests besides the Japanese beetles include sawflies, whiteflies and aphids, and plants have some susceptibility to leaf spots, blights, cankers and rust.

Hibiscus 'Lord Baltimore' provides a striking display in the landscape.
Photos: 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 **2034 DD** (Greater Cumberland) to **2760 DD** (St. Mary's City). 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.

Spotted lanternfly – egg laying **(1825 DD)**
Orangestriped oakworm – egg hatch / early instar **(1917 DD)**
Magnolia scale – crawler **(1938 DD)**
Fall webworm – egg hatch / early instar (2nd gen) **(1962 DD)**
Maskell scale – egg hatch / crawler (2nd gen) **(2035 DD)**
Euonymus scale – egg hatch / crawler (2nd gen) **(2235 DD)**
Mimosa webworm – larva, early instar (2nd gen) **(2260 DD)**
Japanese maple scale – egg hatch / crawler (2nd gen) **(2508 DD)**
Fern scale – egg hatch / crawler (2nd gen) **(2813 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 July 23, 2025)

Annapolis Naval Academy (KNAK)	2253
Baltimore, MD (KBWI)	2364
Belcamp (FS836)	2149
College Park (KCGS)	2351
Dulles Airport (KIAD)	2279
Ellicott City	2187
Ft. Belvoir, VA (KDA)	2434
Frederick (KFDK)	2194
Gaithersburg (KGAI)	2253
Greater Cumberland Reg (KCBE)	2034
Martinsburg, WV (KMRB)	2116
Millersville (MD026)	2253
Natl Arboretum/Reagan Natl (KDCA)	2626
Perry Hall (C0608)	2114
Salisbury/Ocean City (KSBY)	2266
St. Mary's City (Patuxent NRB KNHK)	2760
Westminster (KDMW)	2485

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

Conferences

July 30, 2025
IPM Scouts' Diagnostic Session (afternoon)
Location: CMREC, Ellicott City, MD
For more information

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

September 17, 2025
Urban Tree Summit
https://urbantreesummit.org/
Montgomery Parks and Casey Trees, present the fourteenth annual Urban Tree Summit. Presentations will focus on efforts to preserve the health and welfare of trees in our urban and suburban landscapes

October 29, 2025
FALCAN Truck and Trailer Safety Seminar
Location: Urbana Fire Hall, Urbana, MD

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

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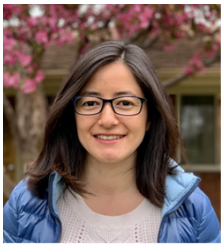

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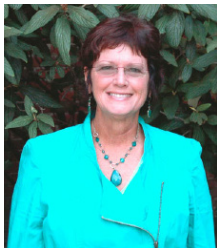

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