UNIVERSITY OF MARYLAND EXTENSION

TPM/IPM Weekly Report

for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture **June 12, 2026**

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

Coordinator Weekly IPM Report:
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Regular Contributors:
Pest and Beneficial Insect Information: Laura Nixon and Paula Shrewsbury (Extension Specialists) and Nancy Harding, Faculty Research Assistant
Disease Information: David Clement (Extension Specialist) and Ana Cristina Fulladolsa (Plant Pathologist and Director, UMD Diagnostic Lab)
Weed of the Week: Kelly Nichols and Nathan Glenn, (UME Extension Educators) and Dan Buonaiuto, (Assistant Professor), Dept. of Plant Sciences and Architecture
Cultural Information: Ginny Rosenkranz (Extension Educator, Wicomico/Worcester/Somerset Counties)
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Next Week's IPM Report

Due to Extension personnel attending the MNLGA Field Day on June 18th and the Juneteenth Holiday next Friday, we will send out the next IPM report on Wednesday, June 17th.

June 23, 2026 IPM Scouts' Diagnostic Session
Time: 12:30 - 3:00
Location: CMREC, Ellicott City

The link to register for this program is on our Conferences' web page

Box Tree Moth

By: Laura Nixon

Today, we saw box tree moth (*Cydalima perspectalis*) eggs for the first time this year in Clear Spring, MD. The egg clusters we found were on the underside of the boxwood leaves and only had 2-3 eggs per clutch. As you can see in the photo, box tree moth eggs are flattened to the leaf and have a shiny yellow-orange appearance. As this is our first year tracking box tree moth phenology in Maryland, we don't have a precise estimation on hatch time. However, we expect to see newly hatched caterpillars in the next week or so. These smaller caterpillars are the most vulnerable life stage for treatments. Applications of *Bacillus thuringiensis kurstaki* or spinosad are good organic options. Alternatively, cyantraniliprole (ex. Mainspring) and chlorotraniliprole (ex. Acelepryn) are effective targeted insecticides. If you see eggs, adults, or newly hatched larvae, please report to us (Lnixon1@umd.edu) and MDA with photos.

Box tree moth eggs on leaf. Photo: Holly Greenberg, UME

Yellow Poplar Weevil – "Billions" of weevils washed up on shore this week

By: Paula Shrewsbury

Katherine Nelson, a retired MD resident, was walking along the western shore of the bay near Calvert Cliffs, MD on June 8th and 9th this week. She couldn't help but notice the billions (Katherine's estimate, which may be accurate based on the pictures) of yellow poplar weevil (*Odontopus calceatus*) adults that had washed up on shore for a long stretch of the shoreline (> than the mile she walked). Many appeared dead but some were alive. See the images of this phenomenon taken by Katherine and a video of the weevil masses that someone posted online. YPW overwinter as adults in leaf litter and can emerge in large numbers in the spring when days become warm. Populations of YPW are reported to cycle over time where some years there are huge outbreaks (ex. 2025) and other years not many are noticed. These types of "wash ups" are often related to winds and water currents, and the weevil's ability to float. Environmental conditions came together this week that resulted in so many weevils on the shoreline. In looking into this, there have been other reports of similar wash up phenomenon of YPW in MD and VA over the years.

Masses of yellow poplar weevil adults washed up onto the shore near Calvert Cliffs in MD this week. All the black you see on the sand are piles of weevils or individual weevil adults. Photo: Katherine Nelson

Yellow poplar weevil adults washed up onto the shore near Calvert Cliffs in MD. All the adults in this image were alive and crawling. Photo: Katherine Nelson

What's going on with YPW on trees? Marie Rojas, IPM Scout, found only one adult YPW on magnolias in Frederick, MD when she scouted earlier this week. Last year at this time, that location was one of the sites that had very high numbers of YPW. Today in a Gaithersburg MD nursery, Marie found more adult YPW on magnolias and *Liriodendron*. Be sure to monitor hosts of YPW. Host plants of YPW include magnolias, sassafrass, tuliptree (yellow poplar) and sweet bay.

For more information on YPW life cycle, management and other details go to the UME IPM Special Alert from June 11, 2025.

A close-up of a yellow poplar weevil washed up on shore.
Photo: Katherine Nelson

Gloomy scale: Crawler update

By: Paula Shrewsbury and Nancy Harding, UMD

In last week's UME IPM Report, we reported the first crawler activity of gloomy scale in College Park, MD. Today, Marie Rojas, IPM Scout, was scouting maples at a nursery in Gaithersburg MD and found crawler activity. Nancy Harding, UMD continues to see crawler emergence on maples in College Park, MD. Look closely at Marie's image and you will see yellow crawlers that are small (very small) yellow circles. There are also small (about the same size as the yellow crawlers) black to grey circles with a white rim around them. These are newly settled "capped" crawlers that have produced their first instar waxy cover. These are the life stages to target for control of gloomy scale. Continue to monitor over time since gloomy scale crawlers can emerge over several weeks and you may need to retreat again. See last week's IPM Report for details and gloomy scale life cycle and management.

Gloomy scale crawlers (yellow circles) and capped settled crawlers (grey to black circles with white rims) on red maple.
Photo: Marie Rojas, IPM Scout

Pine Bark Adelgid

By: Laura Nixon

Our UME summer intern, Holly Greenberg, was out scouting around Mt Airy, MD this week and took this photo of pine bark adelgid (*Pineus strobi*). Pine bark adelgid is native to our region and primarily infests Eastern white pine but can be seen on other pine species. Black wingless adults are found under the fluffy white covering, along with yellow-colored eggs. There are multiple generations of pine bark adelgid throughout the summer, but populations are usually controlled by generalist insect predators (e.g. lady beetles, flower fly larvae). If you have been treating your pine or the area with broad spectrum insecticides, you will likely see an uptick in pine bark adelgid populations (along with other secondary pest outbreaks).

Pine bark adelgid.
Photo: Holly Greenberg, UME

Mature healthy trees can tolerate fairly high populations of this species, so control is not generally needed. Unsightly infestations can be pruned or scrubbed off. If there are high populations of adelgid on newly planted, young trees, wait until egg hatch to treat with oil or a labelled chemical. Newly hatched adelgids are tiny, yellow-brown colored, and the most vulnerable stage before they develop the waxy white coating.

Four-Lined Plant Bugs

By: Laura Nixon

We had a report sent in of four-lined plant bug damage this week. The adults will be mating, laying eggs and dying off over the next couple of weeks. This plant bug only has one generation per year, so any damaged plants will regenerate foliage this summer. No control is needed at this point in the season.

Four-lined plant bug adult.
Photo: Austin Merrbaugh, Antietam Tree and Turf

Our Third Rose Sawfly Species

By: Laura Nixon

In previous 2026 Alerts, I have described the roseslug sawfly and the curled rose sawfly. This week, we were sent a photo that appears to be the third species that we see in Maryland: the bristly rose(slug) sawfly (*Cladius difformis*). This species is identifiable by its hairlike bristles, and it tends to be a paler green than the other two rose sawfly species. Early larval stages of sawfly cause windowpane damage on leaves as they feed, which increases to fully formed holes as the larvae grow bigger. The bristly roseslug sawfly is the more damaging species of the three, as it has multiple overlapping generations throughout the growing season. Low populations can be removed from the plant by hand. However, if you see large numbers of sawfly larvae or an increase in damage, these can be treated with horticultural oil (ensure full coverage and don't use in extreme heat/sun exposure), or chemicals such as chlorantraniliprole (ex. Acelepryn), cyantraniliprole (ex. Mainspring), or Spinosad.

Bristly roseslug sawfly larva on damaged rose leaf.
Photo: Austin Merrbaugh, Antietam Tree and Turf

Apple Flea Beetle

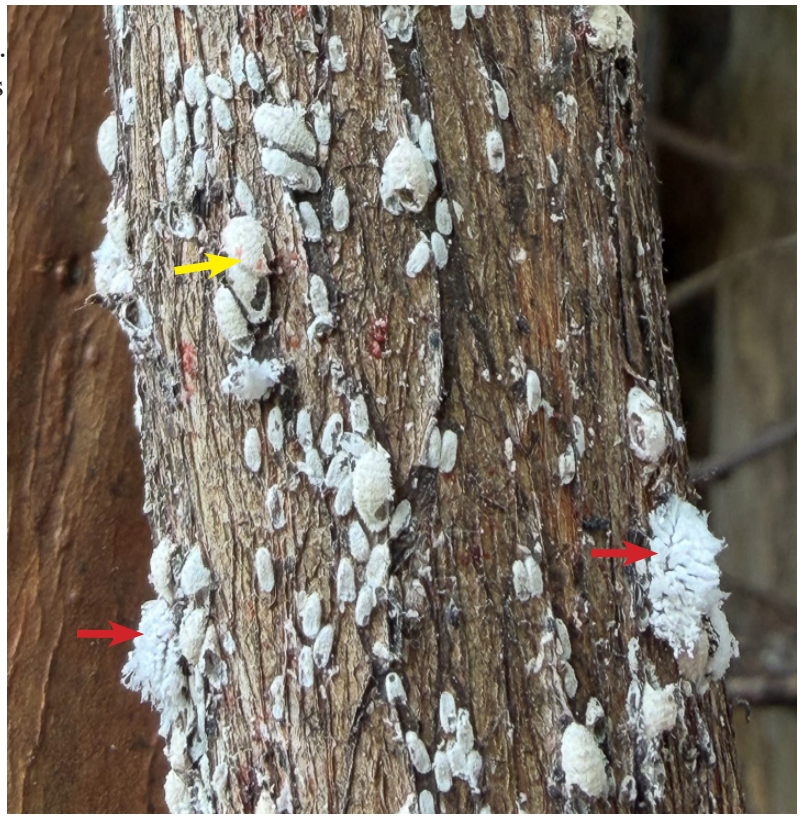
By: Laura Nixon

A couple of weeks ago, Phil Suchman (IPM Manager, Marshalls' Riverbank) contacted me with a new pest for him (and me): apple flea beetle (*Altica foliaceae*). This species can be difficult to distinguish from other *Altica* species, which are oval-shaped with metallic green/blue elytra (outer wings), and not often reported as pests in our region. However, Phil reported that this beetle was only on Gaura (commonly bee blossom) and no other nearby plant, which leads me to believe he identified this correctly. There isn't a lot of information available on apple flea beetle, however, one study looking at native *Gaura* spp. found that the predominant herbivory damage on this plant in the wild was from apple flea beetle. Apple flea beetle is a native species and is rarely in a pestiferous situation. If you do see it in damaging numbers in your containers, it can be treated with products labelled for flea beetles, and I'm told it is much easier to eliminate than redheaded flea beetle.

Apple flea beetle on evening primrose.
Photo: Whitney Cranshaw, Colorado State University, Bugwood.org

Crapemyrtle Bark Scale

Paul Subong is reporting crawlers of crapemyrtle bark scale on plants in Millersville, MD on June 9. Similar to what we have been regularly seeing this year, *Hyperaspis* lady beetle larvae were present among the female covers and early crawlers.



Two lady beetle larvae (red arrows) and a few pinkish scale crawlers (yellow arrow) are shown in this photo. There are also many female covers on this trunk as well.
Photo: Paul Subong

Leaf Galls on Elm

Dave Keane, Howard County Recreation and Parks, found galls on elm leaves this week. Galls on elms are often caused by either eriophyid mites or aphids. These galls do not impact the overall health of the tree, so control measures are not necessary.

Galls on elms can be unsightly, but do not impact the overall health of the tree.
Photo: Dave Keane, Howard County Recreation and Parks

Disease Infections in the Landscape

Dave Keane, Howard County Recreation and Parks, found gymnosporangium rust on serviceberry this week in Howard County, MD. Fungicides need to be applied early in the spring to provide effective control.

Elaine Menegon, Good's Tree and Lawn Care, found powdery mildew infection on nine bark this week in Lancaster, PA. With the recent rains and increase in humidity, conditions become more favorable to infection by powdery mildew.

Powdery mildew infection is showing up on ninebark.
Photo: Elaine Menegon, Good's Tree and Lawn Care

It's too late in the season to treat for gymnosporangium rust on its roseaceous hosts.
Photo: Dave Keane, Howard County Recreation and Parks

Lacewings

Zach Wittorff, Good's Tree and Lawn Care, found lacewing eggs on a crape myrtle in Harrisburg, PA this week. Lacewings are general predators that can help control scale insects and aphids.

Lacewing eggs are on this crape myrtle leaf with an aphid visible on the foliage as well.
Photo: Zach Wittorff, Good's Tree and Lawn Care

Beneficial of the Week

By: Paula Shrewsbury

What feeds on bagworms?

Since mid-May, there have been several reports of bagworm, *Thyridopteryx ephemeraeformis* (bagworm, Lepidoptera: Psychidae), caterpillars hatching from their overwintering egg stage. This means that when monitoring, you are likely going to see active bagworms and their feeding damage on a diversity of evergreen and deciduous trees. Since bagworms are considered key pests (cause significant damage that frequently warrants control) and can kill trees, I thought it would be good to discuss management tactics and biological controls. Bagworms are still in their early caterpillar stages which allows a greater selection of effective control options.

**A common bagworm parasitoid, *Itoplectis conquisitor*, pupa that was found in a bagworm pupa.
Photo: Joe Boggs, OSU Extension**

Optimal suppression of bagworms involves an approach that integrates different control tactics (integrated pest management, IPM). For bagworms, management should start with physical / mechanical tactics whenever feasible. This would include hand removal of bags (made from plant parts webbed together to form a protective bag) which contain the caterpillars. This task is well worth the effort since each female bag contains 500 to 1000 eggs. The best time to hand-remove the bagworms is now while the caterpillars (and their bags) are small and little feeding damage has occurred. Caterpillars are active until about early August when they pupate in the bags. The longer you wait to pick off the bags the more damage will occur, and fewer management options will be available. Be sure to drop the picked-off bagworms into a bucket of soapy water or squish them. Do not just drop picked-offworms to the ground or the caterpillars will crawl back (dragging their bags with them) onto the tree. Also do not put them in a plastic bag, which they are known to chew their way out of to escape (personal experience). If there are only a few trees infested with bagworms and the bags are within reach, then hand removal is a feasible and cost-effective approach. If bagworms are infesting a greater number of trees, then other options should be considered. The next management approach on the list would be the use of a product containing the bacteria *Bacillus thuringiensis* (Bt), or another biorational product, to target the early-instar caterpillars. Now should be the optimal time to use Bt on the early instar caterpillars. Bt is a biopesticide, which are pesticides that are made from a biological organism, also known as formulation biocontrol. Another formulated biological control that can reduce bagworm survival are entompathogenic nematodes, particularly *Steinernema carpocapsae* (nematode species). When the nematodes are sprayed onto the bags they move into the bags attacking the caterpillar inside. Other chemical controls used to target early and mid-instar caterpillars should be selected by considering their impact on natural enemies. Products such as Conserve (spinosad, a biopesticide), Acelepryn (chlorantraniliprole, EPA reduced risk), or Confirm (tebufenozide, an IGR) should

**An adult female *Itoplectis conquisitor*, an ichneumon wasp that is a generalist parasitoid attacking a wide range of Lepidoptera species including bagworms
(Image by Henry Burton, BugGuide photo# 1044915).**

have reduced impact on natural enemies and provide suppression of bagworms (thorough coverage of the foliage is important; read the labels!). The reason for this selection is that there are several natural enemies that attack bagworm caterpillars and we want to conserve as many of them as possible and let them work together to provide biological control of bagworms and other potential pests.

A diversity of natural enemies feed on bagworms. Natural enemies include birds such as finches, sparrows, chickadees and others; white-footed mice; pathogens; and predatory and parasitic insects. There are over 11 species of parasitic wasps that attack bagworms. Their ovipositors can pierce through the protective bag to reach the bagworm caterpillar or pupae (depending on the type of parasitoid and time of year) in which it deposits its egg. The parasitoid larva hatches from its egg and consumes the bagworm resulting in death of the caterpillar. *Itoplectis conquisitor* (Hymenoptera: Ichneumonidae) is a parasitoid that commonly attacks bagworms and other caterpillar species. *Itoplectis* is indigenous to North America and a generalist parasitoid known to attack and parasitize the pupal stage of many Lepidoptera (butterflies and moths) hosts, in addition to some beetle and sawfly species. Assassin bugs are generalist predators with piercing-sucking mouthparts that it uses to poke through the bag and feed on bagworms. Bald-faced hornets feed on floral resources making them pollinators, and they also rip open bagworm bags, and remove the caterpillar that it uses for food.

A bagworm bag that was ripped open by a bald-faced hornet.
Photo: Joe Boggs, OSU Extension

So as usual, remember to conserve natural enemies and other beneficial insects by choosing the right insecticides and increasing the diversity and abundance of flowering plants in a landscape or nursery that help to attract and sustain natural enemies, which in turn will help to keep bagworm populations under control.

Biological control by natural enemies helps to suppress bagworm populations, however other IPM tactics mentioned here are often integrated to prevent bagworm outbreaks.

For more information on bagworm biology and management go to: UME HGIC or http://entnemdept.ufl.edu/creatures/ or OSU Extension Bagworm

Weed of the Week

By: Kelly Nichols

Canada thistle (*Cirsium arvense*) is a creeping perennial that reproduces by seed and rhizomes. It can be found in many locations (Figure 1), so be on the lookout for it and make note of where it is found, as it may take time to get this weed under control. Canada thistle is frequently found in patches because of its horizontal rhizome growth. Roots can be found penetrating the soil up to 36 inches downward. Seeds will germinate about the same time as the appearance of root-derived shoots starting in April and going through May. Two flushes are found most years, one in late spring and then again in late fall. It can be distinguished from other members of the thistle family by looking at the stem and flowers. Both the stem and flowers on Canada thistle will be spineless (Figure 2). Bull and musk thistle have spines/prickles on the stem and flowers. Canada thistle's flowers are purple (Figure 3). Seedlings have cotyledons that are club-shaped; leaf margins are not regular and have spines. Leaves are alternate, sessile, simple, and oblong. They have an irregular lobe with spiny margins. Canada thistle plants can produce 1,000 seeds per flowering shoot. Canada thistle will not have a basal rosette (Figure 4).

Control can be accomplished by using many broadleaf post emergent herbicides. In turf areas, 2,4-D with chlorsulfuron, and dicamba are effective. In beds and nursery rows, repeated application of glyphosate is effective; be sure to use the correct formulation for dry and damp areas. Do not spray too frequently, since you want the next generation to emerge before application. Cultural controls include fertility management and maintaining a dense turf, but be mindful of nitrogen applications, as excess nitrogen will increase weed growth. A high mowing height, which allows shading of newly germinating seeds, is an effective management tool in turf. Mowing during flowering will also assist in preventing seed production. If using a combination of mowing and herbicide applications, it does not matter which one comes first; however, wait at least a week in between the two. This allows for the necessary regrowth to be mowed or absorb the herbicide.

Figure 1. Canada thistle grows in many different types of areas.
Photo: Chuck Schuster, UME Ag Agent, Emeritus

Figure 2. Canada thistle stems have no spines.
Photo: Rob Routledge, Sault College, Bugwood.org

Figure 3. Canada thistle has purple flowers.
Photo: Rob Routledge, Sault College, Bugwood.org

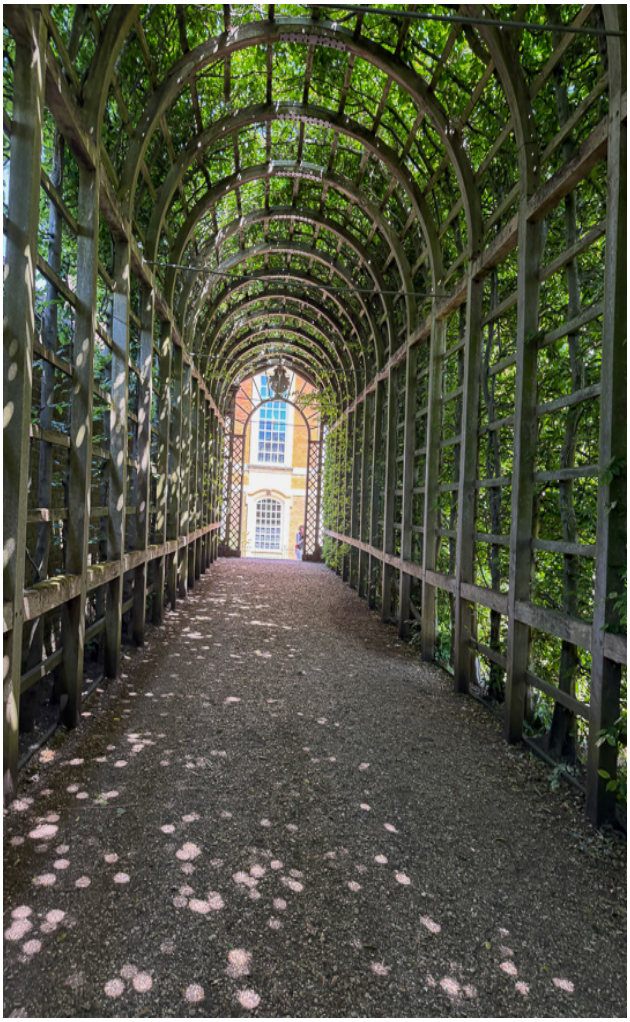
Figure 4. Canada thistle does not have a basal rosette. Photo: Chuck Schuster, UME Ag Agent, Emeritus

Figure 5. Young Canada thistle plant.
Photo: Chuck Schuster, UME Ag Agent, Emeritus

Plant of the Week

By: Ginny Rosenkranz

Carpinus betulus or the European hornbeam is a medium-sized, deciduous tree that will grow 40-60 feet tall and 30-40 feet wide in a rounded or oval form. Trees thrive in full sun and prefer to grow in moist, well drained loamy or sandy soils. In the spring, the 1½ inch long, yellow male and the 3-inch-long, green female catkins appear and are pollinated by the wind. Later, the dark green ovate, doubly-serrated leaves emerge and are attached to the stems in an alternate fashion. The veins of the 2–4-inch leaves give them a quilted look. In the autumn, the leaves turn golden yellow, and the fruit is a small brown, oval nutlet which sits on a serrated and folded bract. The light brown to light gray bark is smooth when the trees are young and as it matures becomes fluted, presenting a muscle character. Dr. Michael Dirr calls the European hornbeam one of the very finest landscape trees as it is as screens, hedges, in groups, and even in planter boxes. This lovely shady allée has been pruned to cover the wooden frame, providing a cool walk from one end to the other. Trees provide foraging sites, nesting areas, roosting perches, and shelter for small birds and small mammals. Many moth species lay their eggs on European hornbeam, so their caterpillars can feed on the leaves. The fruit is enjoyed by finches, titmice, and small mammals. Plants are cold tolerant from USDA zones 4-8, and once established, are drought resistant and can handle urban conditions.



Planted as an allée, European hornbeam can provide a cool, shady walkway in the summer months.
Photo: Ginny Rosenkranz, UME

Pest Predictive Calendar "Predictions"

By: Nancy Harding and Paula Shrewsbury

In the Maryland area, the accumulated growing degree days (**DD**) this week range from about **809 DD** (Clarksville) to **1282 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.

Calico scale – egg hatch / crawler **(765 DD)**
Oak lecanium scale – egg hatch / crawler **(789 DD)**
Rhododendron borer – adult emergence **(815 DD)**
Japanese maple scale – egg hatch (1st gen) **(829 DD)**
Fall webworm – egg hatch (1st gen) **(829 DD)**
Dogwood borer – adult emergence **(830 DD)**
European elm scale – egg hatch / crawler **(831 DD)**
Cottony maple scale – egg hatch / crawler **(872 DD)**
Winged euonymus scale – egg hatch / crawler **(892 DD)**
European fruit lecanium scale – egg hatch / crawler **(904 DD)**
Gloomy scale – crawler emergence **(912 DD)**
Dogwood sawfly – larva, early instar **(932 DD)**
Cryptomeria scale – egg hatch / crawler **(937 DD)**
Azalea bark scale – egg hatch / crawler **(957 DD)**
Hibiscus sawfly – larva, early instar **(1015 DD)**
Japanese beetle – adult emergence **(1026 DD)**
Fletcher scale – egg hatch / crawler **(1105 DD)**
Spotted lanternfly – first adult activity **(1112 DD)**
Indian wax scale – egg hatch / crawler **(1145 DD)**
Oriental – adult emergence **(1147 DD)**
Peachtree borer (*Synanthedon exitiosa*) – adult emergence **(1181 DD)**
Catalpa sphinx – egg hatch (1st gen) **(1365 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 June 10, 2026)

Annapolis Naval Academy (KNAK)	1039
Baltimore, MD (KBWI)	1078
Belcamp (FS836)	991
Clarksville (001MD)	809
College Park (KCGS)	1128
Dulles Airport (KIAD)	1113
Ft. Belvoir, VA (KDA)	1172
Frederick (KFDK)	961
Gaithersburg (KGAI)	1057
Greater Cumberland Reg (KCBE)	970
Martinsburg, WV (KMRB)	1013
Millersville (MD026)	1085
Natl Arboretum/Reagan Natl (KDCA)	1282
Perry Hall (C0608)	971
Salisbury/Ocean City (KSBY)	1074
St. Mary's City (Patuxent NRB KNHK)	1182
Westminster (KDMW)	1230

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

June 16, 2026
2026 Eastern Shore Procrastinators Conference
Location: Zoom

June 18, 2026 (full - can sign up on wait list)
MNLGA Field Day
Location: Mt Cuba Center, Hockessin, DE

June 25, 2026 (5:30 - 8:30 p.m.)
MAA Beech Leaf Disease Training

June 26, 2026
Montgomery County Pesticide Procrastinators Conference
Location: Derwood, MD

IPM Scouts' Diagnostic Session (1 - 3 p.m.)
June 23, 2026
Location: CMREC, Ellicott City, MD

August 4 and 5, 2026
The Stanton A. Gill Symposium: A focus on biological control
Location: CMREC, Ellicott City, MD

Commercial Ornamental IPM Information
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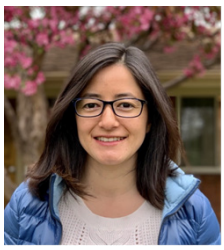

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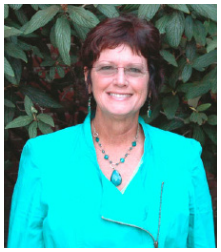

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