UNIVERSITY OF MARYLAND E X T E N S I O N for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture

In This Issue...

- August programs
- Tough weather continues
- Cultivate 2024
- <u>August 12 report correction</u> (chiggers photo)
- Spotted lanternfly update
- Crapemyrtle bark scale
- Tuliptree scale
- <u>Scale on arborvitae</u>
- Eastern hercules beetle
- Butternut woollyworm sawfly
- Fall webworms
- Box tree moth in Delaware
- Stinging caterpillars
- Sweat bees
- Luna moth

Beneficial of the Week:

Robber flies <u>Weed of the Week</u>: Tall morningglory(*lpomoea purpurea*) <u>Plant of the Week</u>: Monarda Bee-You™ Bee-Happy

Pest Predictive Calendar

IPMnet 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 sgill@umd.edu

Coordinator Weekly IPM Report:

Stanton Gill, Extension Specialist, IPM and Entomology for Nursery, Greenhouse and Managed Landscapes, sgill@umd.edu. 410-868-9400 (cell)

Regular Contributors:

Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Nancy Harding, Faculty Research Assistant Disease Information: Karen Rane (Plant Pathologist), David Clement (Extension Specialist) and Fereshteh Shahoveisi (Turf Pathologist) Weed of the Week: Chuck Schuster (Retired Extension Educator), Kelly Nichols, Nathan Glenn, and Mark Townsend (UME Extension Educators) 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)

Aerial and Land Drone Short Course in Early August

By: Stanton Gill, David Clement, Andrew Ristvey and Hemendra Kumar

If you are in the commercial horticulture world you need to investigate how aerial and land drones can make your nursery or greenhouse operation more efficient. Come learn what are newest drones types out there and how can you work these into your business. Go to our <u>conference page</u> for the schedule and links to register.



August 13, 2024 (afternoon) IPM Diagnostic Session

Location: CMREC, 4240 Folly Quarter Road, Ellicott City, MD

July 19, 2024

Tough Weather Continues This Week

By: Stanton Gill

At the Cultivate conference in Columbus, Ohio, we had a chance to talk with people across the USA. Everyone, except the San Diego, CA area is reporting record temperature spikes, wild and spotty storms that blow in and blow out leaving more heat blanketing large areas of the USA.

The Eastern Shore was fortunate last week to receive between 3 -5 inches of needed rain. The rest of Maryland got spotty rain outburst of $\frac{1}{2} - \frac{3}{4}$ " of rain last week. We still desperately need more. Tell your customers they need to keep watering during these hot, dry periods.

David Clement, Andrew Ristvey, and I are receiving many email pictures of plant material that is dying rapidly. Plants that have poorly developed root systems and damaged root systems from the excessive rains in April and May which left soil saturated for extended periods, are browning quickly with this excessive heat wave we are enduring this summer. Before you send us pictures of dying plants, you need to do some investigative work. Dig down and examine root systems and see if they are compromised. Examine the base of the plant for wounds or damaged cambial tissue under the bark. The rapid dieback will continue through this hot, hot part of the summer for plants with compromised root systems.

We are developing a submission form for sending samples to our new lab at the research center in Ellicott City. We will also let you know when a plant pathologist is hired and the Plant Diagnostic Lab on campus in College Park is reopened.

Cultivate 2024

By: Stanton Gill

Cultivate 2024 in Columbus, Ohio has become the premier horticulture conference for the USA. A record number of attendees were at the conference in 2024. I believe I talked with half of the Maryland horticulture industry that was attending this international conference. The trade show is amazing and very extensive. If you have not attended before, look into it for 2025.

Correction: Chiggers Photo in July 12th Report

From Gaye Williams, MDA:

"It's unfortunate that the image used to illustrate chiggers in the 12 July report was actually a true velvet mite I'm concerned that this may increase the numbers of these stunning, harmless, and easily seen, beneficial animals that will end up eradicated as 'chiggers'. <u>https://mdc.mo.gov/discover-nature/field-guide/true-velvet-mites-red-velvet-mites.</u>"

We apologize for not catching the misidentification on the photo we used in last week's report.

Systemic Fungicides

By: Stanton Gill

In 2023, our University commercial horticulture team tested out two new systemic fungicides for rust control in nurseries, Postiva and Mural. We made applications in nurseries, applying these systemic fungicides using air blast sprayers and compared it to drone application to susceptible *Amelanchier* species of nursery trees. Both fungicides and the applications were equally good. I had a chance to apply Postiva on non-bearing stage apple and pears in 2024, and it gave excellent control of rust with two applications, starting at peak rust spore counts, with the second application two weeks later. It has also worked well leaf spot disease on both apples and pears.

Spotted Lanternfly Update

By: Stanton Gill

We are getting reports of 4th instar nymphs and adult stages of spotted lanternfly this week throughout the infested parts of Maryland. I cannot list all of the reported sites, sent in via e-mails, but will mention that John Denholm of Gilman School is reporting adult SLF in the Sykesville area. We are also getting many reports of assassin bugs and several wasp species feeding on the adult stages, which is very good news.

John Austin, Green Gardens, sent in this picture of a 4th instar nymph of spotted lantern fly sipping up water on a faucet in Adamstown, Maryland. Evidently the drought is also impacting spotted lanternflies and they are desperate for water like humans and other animal wildlife.

A couple of garden centers asked if we would develop a University of Maryland Extension fact sheet that they can send out to homeowners on how to handle spotted lanternflies in their landscape. Maddie Potter, UME-HGIC, and I are working on a joint fact sheet listing out what is working and what is not in the struggle against this invasive species. We will hopefully have something to print by early fall. Meanwhile you can go to our University of Maryland IPM website for a <u>2023 SLF compilation</u> of Paula Shrewsbury and my suggestions for information and control options.



Fourth instar spotted lanternflies are red, black, and white. Photo: John Austin, Green Gardens



An adult SLF in Dayton on July 16 found on an *Ailanthus* tree. Photo: Jason Hipp, Deeply Rooted Tree Care

Crapemyrtle Bark Scale (CMBS) Update

By Sheena O'Donnell, UME

In our efforts to find more CMBS for life cycle studies, we have been finding many populations collapsed or seriously reduced, seemingly by natural predators. Luckily (for us), we successfully found some infestations that were still alive and kicking in the central Maryland area. Our summer interns David, Clover & I have taken them to our research center and we will hopefully be able to get some populations established here to track. Don't worry there are no other crape myrtles close to us.

On a related note, while we were getting these branches, we saw a large number of lady beetle larvae feeding on the bark scale. There are some types of larvae in this group that may be easily confused with CMBS, such as *Hyperaspis* and *Cryptolaemus* species. These are generalist predators of soft scale insects and aphids, and they seem to be active on CMBS populations, especially in the area from where we pulled our samples. We recommend scouting for these predators before worrying about CMBS control at this point.

A couple of useful ways to tell them apart: These larvae, particularly later stages, are larger and more 'fluffy' than CMBS - their waxy cover is more filamented and kind of resembles one of those fun spiky hair wigs that come with the attached visor, or a thick fleece blanket. The beetle larvae also move quicker than the bark scale, which does not move at all once it reaches the later white stages. Also, *Hyperaspis* and *Cryptolaemus* larvae's protective waxy cover is attached to the body underneath, while CMBS' is not.

The evidence of strong activity of these and other predatory insects in the areas we have observed this year points to strong natural enemy activity on CMBS, which is looking good for these tough & popular trees.

Thank you to everyone who has been sending us updates and scouting in regards to this project.



Two crapemyrtle bark scales on the left and a lady beetle larva on the right. Photo: Sheena O'Donnell, UME



Close-up of a lady beetle larva showing the legs attached to its body with the waxy covering. Photo: Sheena O'Donnell, UME

Tuliptree Scale

By: Clover Davis, UME Intern

Around this time of year, you might start to see honeydew on which sooty mold grows at the base of your woody plants. If you also see bulbous or bubbly growths on shoots and trunks, the culprit could be tuliptree scale.

After 3519 degree days, the eggs will hatch and the crawlers will emerge from under the wax coverings, at which point pesticides and IGRs can be used for control. Check the degree day chart at the end of this report to determine the degree day status for your area.

Common hosts are tulip poplar (*Liriodendron tulipifera*) and deciduous magnolia (*Magnolia* x *soulangeana*). They can also be found on linden and basswod, hickory, walnut, red bay shrubs, and buttonbush shrubs. They live on the branches and twigs. Magnolia scale is a similar scale that is only found on large branches and trunks of magnolia. Colonies of ants will tend to them to drink their honeydew. Follow lines of ants to check for scale populations in the canopy.



Female tuliptree scale are feeding more heavily, getting larger, and starting to exude honeydew. Photo: Suzanne Klick, UME

Scale on Arborvitae

Marlee Munchinsky, Good's Tree and Lawn Care, found scale on arborvitae in Manheim, PA on July 18. Two armored scale species found on arborvitae are juniper scale and minute cypress scale. Species identification requires looking at these scales under a dissecting microscope. Common plant hosts of both of these scale species are Leyland cypress, juniper, chamaecyparis, spruce, and arborvitae. Each scale has one generation a year. Minute cypress scale hatches out about 2 to 3 weeks later than juniper scale. Both had crawlers active in June.

Control options include applications of 2 - 3%horticulture oil in November when temperatures are about 55 °F or applied in spring, again when temperatures are about 55 °F. At crawler period and 1st instars, the IGRs Distance or Talus will give effective control.

Scale is infesting this arborvitae. Photo: Marlee Munchinsky, Good's Tree and Lawn Care



Eastern Hercules Beetle (Dynastes tityus)

By: David Phan, UME Intern

Recently, Trudy Haselhuhn found an eastern Hercules beetle in New Market. These beetles are native to the eastern United States and they are harmless to humans. They mostly feed on dead wood, however, they are known to scrape the bark on ash trees to feed on the sap. Females will lay eggs in rotting tree stumps. The larvae are one of the biggest white grubs seen on the east coast. They can be easily removed and relocated, they do not infest trees. You will either see an individual or a mating pair on the ash tree. This insect, in the adult stage, is fun to view and basically harmless. Control is not necessary for the beetle but you will see them in late July through August.

The male hercules beetle has a horn (top); in the middle is the adult female; the larva is also included in this photo. Photo: Suzanne Klick, UME

Butternut Wollyworm Sawfly

By: Clover Davis, UME Intern

The butternut wollyworm sawfly is a native insect related to bees and ants (in the order Hymenoptera). It can be found across the eastern US and southeastern Canada. Their early instar larval stage resembles a caterpillar, and secretes a fluffy wax covering to protect it from parasites. Sawfly larvae can be distinguished from caterpillars by their legs; sawfly larvae have 3 true legs and 7 prolegs, while caterpillars have 3 true legs and 5 prolegs. This sawfly larva feeds on black walnut, butternut, and hickory leaves, but there are no reports of tree mortality from this feeding. The damage can look unsightly until the tree leafs out again. They overwinter underground in the pupal stage and will emerge next April.



Look for larvae of butternut woollyworm sawfly on butternut, black walnut, and hickory. Photo: Suzanne Klick, UME



Fall Webworms (Hyphantria cunea)

By: David Phan, UME Intern

We are currently in the second generation of fall webworm, so you may start to see large webbed areas on the ends of your tree branches. The population of the second generation is larger, starts in midsummr, and is present until the Fall. They feed on over 100 species of deciduous trees such as walnut, oak, hickory, apple and other fruit trees. However, the caterpillars will only feed within the webbing. You can remove them by pruning the infected branches, if within reach. Additionally, there are a variety of predators and parasites that will prevent this pest from damaging your trees further.



Elaine found fall webworms on a weeping cherry on July 16 in Richland, PA. Photo: Elaine Menegon Good's Tree and Lawn Care



Early instar fall webworm larvae. Photo: Suzanne Klick, UME

Box Tree Moth Found at Private Residence in Kent County in Delaware

From <u>Delaware.gov</u>:

DOVER, Del. (July 15, 2024) — The United States Department of Agriculture's Animal and Plant Health Inspection Service (USDA-APHIS) has confirmed a find of box tree moth (BTM; Cydalima perspectalis) at a private residence in Kent County, Delaware.

The box tree moth is a federally regulated pest that primarily feeds on boxwood species (Buxus spp.). If left unchecked, it causes significant damage and can potentially kill the plants. Boxwoods are a popular ornamental evergreen shrub common to many landscape environments in the United States.

See the <u>full article</u> for more information on this situation in Delaware and details on box tree moth.

Stinging Caterpillars

By: Clover Davis, UME Intern

As we move into late July and August, we will see stinging caterpillars in the landscape. Many kinds of moth caterpillars defend themselves from predators using hairs on their body that lodge in the skin and release venom. These caterpillars mostly pose no threat to crops or ornamentals, but can be quite painful if accidently brushed or picked up. The severity varies based on the type of caterpillar and personal sensitivity. A sting can be avoided by wearing gloves, longsleeves, and a wide-brimmed hat if working among ornametals or in wooded areas. Hairs from a sting must be removed, which can be done with tweezers or clear tape. The affected area should then be washed with soap and water to remove as much venom as possible. Bad rashes can be treated with an ice pack or numbing creams. If symptoms persist longer than a few days or worsen, talk to your physician.

Some of the stinging caterpillars in Maryland include:

Io moth caterpillars live on a wide range of flowering and berrybearing shrubs and trees. Their sting causes a rash and unpleasant sensation that clears up in 6 to 8 hours.

The white flannel moth caterpillar is most common on black locust, hackberry, and redbud. Their sting causes severe immediate pain that lasts under an hour, and a burning sensation with discoloration can last days.

American dagger moth caterpillars feed mainly on box elder and maple leaves, but can be found on other trees. Their sting causes an itchy rash that clears up in hours and rarely lasts a few days.

Saddleback caterpillars are common on berry plants, palms, and woody ornamentals. Their sting causes immediate pain that can spread to lymph nodes, and soreness can last up to a week.

Slug moths encompass a family of insects including hag moths, all with a fuzzy stinging caterpillar stage. They feed mainly on hardwood trees, but they can infest and defoliate palms. Symtoms of their sting includes rash, burning, itching, swelling, and blistering. Usually this impressive rash fades within a day.



Dogwood and redbud have been two species of trees on which we have received multiple reports of white flannel moth caterpillars. Photo: Suzanne Klick, UME

Puss moth caterpillars can be found on oak, elm, plum, roses, and ivy. Their sting causes a painful raised bumpy rash that can blister or swell, often accompanied by nausea, headache and abdominal distress. Some cases cause chest pain, numbness, or difficulty breathing. The pain generally subsides after a few hours and symtoms can last several days.



lo moth caterpillars. Photo: Suzanne Klick, UME



There are two color forms of puss moth caterpillars. Photo: Suzanne Klick, UME



This saddleback caterpillar recently molted and its cast skin is still nearby. Photo: Suzanne Klick, UME

Sweat Bees

Dave Freeman, Oaktree Property Care, found a sweat bee, likely *Augochlora pura*, on mint flowers this week in Fairfax, VA. Sweat bees are solitary bees that might land on you to get salt from your sweat. Mike Raupp, UMD, has more details on sweat bees in his Bug of the Week article for June 19, 2027 and Paula Shrewsbury, UMD, wrote an article on sweat bees in last week's report. (July 12, 2024)



A sweat bee at a mint flower this summer. Photo: Dave Freeman, Oaktree Property Care



Luna Moth

The luna moth is one of the easier moths to spot in the landscape. Brian Dahl, MNCPPC-Pope Farm, found this one on an old hickory in Carroll County. The caterpillar, a giant silkworm, of this moth feeds on a variety of woody plants. There are multiple generations per year.

Beneficial of the Week

By: Paula Shrewsbury

Robber flies are active catching a diversity of prey

I have seen a number of robber flies in these last few weeks. Robber flies are true flies (Diptera) in the family Asilidae. There are many species of these predatory flies and they occur in diverse types of habitats. Robber flies occur worldwide in their distribution and there are about 7,000 species. The greatest diversity in robber fly species is in arid, sunny habitats. I commonly see them at wood edges and in landscapes and nurseries. Like all true flies, robber flies have one pair of wings as adults. Adults have large eyes, an elongate body with a strongly tapered abdomen, and are relatively hairy. Most characteristic are their long, raptorial legs, which have strong bristles of hair to help them in capturing and holding their prey. Robber flies range in size from about 1/8" to almost 2". Most robber flies have a "bearded" appearance having hairs that cover their long, sharp piercing mouthparts used to pierce and consume their prey. Some robber flies are stout and hairy, mimicking bees, while others are slender and less hairy. Most robber flies are yellow/brown, gray, and black in coloration, while some mimic bees. Adult females lay whitish colored eggs on low foliage or in the crevices of soil or bark. Larvae of robber flies are also predacious, live in the soil or decaying wood, and are seldom seen. They are legless and have long worm-like soft bodies, and their size varies with species. Robber flies overwinter as larvae and pupate in the soil. Mating in robber flies is interesting. Some species practice a mating behavior known as thanatosis, a.k.a. feigning death. The male begins the mating process by grasping a female. If the female decides the male is not "the one" for her, she goes limp pretending to be dead. If this happens, the male drops the female and flies away.

Robber fly hunting behavior is quite interesting and given the opportunity, you should definitely watch these skilled hunters (click here; YouTube by M.J. Raupp, UMD). Adult robber flies are ambush predators and capture their prey in flight! Robber flies establish a "perching" location in open sunny areas (much like a hawk). They will sit on the tip of a piece of vegetation and watch for potential prey to fly by. Once prey



A robber fly that captured and is consuming a brown marmorated stink bug adult. Note the long, tapered abdomen and raptorial legs. Photo by D. Makowski



Laphria flavicollis, a species of robber fly, eating a boxelder bug. Note the abundance of hair that is characteristic for robber flies. Photo:Rbreidbrown - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index. php?curid=72430073)

is spotted, robber flies will take flight and capture the prey item in its long raptorial legs. At that point, there is no hope for the prey. The robber fly immediately pierces the prey with its sharp mouthparts and injects it with saliva that contains enzymes that are neurotoxic (immobilizing the prey) and proteolytic (liquefying the prey). The robber fly returns to its perch where it feasts on its liquefied meal. Yum! Consumption usually takes 5-15 minutes or longer for larger prey. Robber flies are generalist predators feeding on wide diversity of arthropods including those that are pests and others that may be beneficial. Robber fly adults are quite voracious and are known to attack beetles, bugs (including stink bugs), wasps, bees, moths, dragonflies, grasshoppers, flies, and other arthropods. Robber fly larvae live in soil and decaying wood where they feed on white grubs, worms, grasshopper eggs, and other soil insects. Robber flies are abundant and voraciously feed on many arthropods, contributing to biological control of many plant feeding insects. Robber flies make up part of the diverse complex of natural enemies that all work together towards preventing herbivores from becoming pests.



A robber fly with its bumble bee prey grasped between its legs while it sucks the fluid out of the bee. Photo: M.J. Raupp, UMD

Weed of the Week

By: Chuck Schuster, UME

It has been warm, with temperatures reaching into the upper 90's and reaching records of the low 100's this week. Plants are not doing much active growth now, many weeds are even challenged at this time. Remember that many post emergent herbicides, especially translocated products will not work well when the plant is not actively growing. Rainfall has been rather hit or miss lately.

One weed that I have noticed recently still actively growing is tall morningglory, *Ipomoea purpurea*. This member of the morningglory family, native to Central America, is a trailing and climbing vine, an annual, with heart shaped leaves. It can climb to heights exceeding six feet, with leaves that are alternate, and older leaves will overlap at the base. Found throughout the Eastern portion of the United States, it is often located in nurseries, landscapes and non-crop areas. Once established it becomes difficult to control. Leaves will be alternate on the stem, with hairs that lay flat, and the leaves will occur on a long petiole. The leaves can be several inches across. The stem is capable of climbing easily. The flowers will be white to purple, usually occurring in groups of three. They are large, being from 1.75 to 3.5 inches in length with sepals at the base. Seeds are a dark brown to black in color, are found in a dark capsule which will have four to six individual seeds. Seeds can be viable for *several years* in the soil. This plant reproduces by seed; one plant can produce up to 26,000 seeds. Seeds can be buried to 4 inches and will germinate. Similar to ivyleaf morningglory, but with leaves that are always heart shaped and never lobed.







Foliage and flowers of tall morninglory. Photos: Chuck Schuster, UME

Cultural control starts with a mulched landscape. Landscape fabric below the mulch is very useful. Early season pulling can work well. Remember that this plant can have seeds placed deep in the soil and they will or can still germinate. Weed barrier is useful. Chemical control of Tall Morningglory in open areas can be obtained using post emergent selective materials that contain 2, 4D or dicamba (Banvel D), glyphosate and glufosinate products. Pre-emergent control can be obtained using Flumioxazin (Sureguard) but with limited success. In turf, while not found often, with the dry weather it may be something that is starting to be noticed. Once adequate moisture is available 2,4D and/or dicamba can be used. Use caution with 2,4D and dicamba with the temperatures recently experienced, as they products have limitation of the label for concern for volatilization. Use extreme caution with these products as movement post application is possible in some conditions. Never use these near desired ornamentals as damage can occur.

Plant of the Week

By: Ginny Rosenkranz

Monarda Bee-You[™] Bee-Happy is also known as bee balm, bergamot and Oswego tea. It is a nativar in the mint family that has deep red buds that open to cherry red flowers which are packed into a compact 2-4 inch ball that sits on the top of stiff square stems that are an indicator of the mint family. The tiny tubular 2-lipped flowers attract ruby throated hummingbirds, honey bees, bumble bees, swallowtail butterflies and a menagerie of other colorful pollinators. These colorful flowers bloom from early summer into the autumn. The fragrant dark green foliage has prominent veining creating a quilting effect, and they clasp the square stems opposite each other. The foliage is also a host to the larva of the hermit sphinx, the orange mint moth and the raspberry pyrausta moth. Monarda thrives in full sun



Monarda Bee-You™ Bee-Happy blooms from early summer into fall. Photos: Ginny Rosenkranz, UME

and afternoon shade, and grows best in humus rich, moist but well drained soils. Bee-Happy is a compact plant that grows 15-18 inches tall and 12-15 inches wide, and are cold tolerant in USDA zones 4-9 and are shunned by deer because of the fragrant foliage. Pests can include rust but the Monarda Bee-You[™] series is very mildew resistant. These lovely flowering plants can be planted in the front of gardens, in containers, perennial borders and cottage gardens. Good air circulation helps keep most foliage problems at bay.

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 **1850 DD** (Martinsburg) to **2565 DD** (St. Mary's City). The <u>Pest Predictive Calendar</u> 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.

Obscure scale – egg hatch / crawler (1774 DD) 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 <u>Pest Predictive Calendar</u> for more information on DD and plant phenological indicators (PPI) to help you better monitor and manage these pests.

Degree Days (as of July 17)

Annapolis Naval Academy (KNAK)	2265	Baltimore, MD (KBWI)	2261
College Park (KCGS)	2249	Dulles Airport (KIAD)	2303
Ft. Belvoir, VA (KDA)	2273	Frederick (KFDK)	2229
Gaithersburg (KGAI)	2089	Greater Cumberland Reg (KCBE)	2008
Martinsburg, WV (KMRB)	1850	Millersville (MD026)	2150
Natl Arboretum/Reagan Natl (KDCA)	2551	Perry Hall (C0608)	2055
Salisbury/Ocean City (KSBY)	2066	St. Mary's City (Patuxent NRB KNHK)	2565
Susquehanna State Park (SSQM2)	2096	Westminster (KDMW)	2375

Important Note: We are using the <u>Online Phenology and Degree-Day Models</u> 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

August 5-8, 2024 Drone School Location: CMREC, Ellicott City, MD

August 13, 2024

IPM Diagnostic Session Location: CMREC, Ellicott City, MD

September 17 and 18, 2024

Cut Flower Program Locations: Central Maryland Research and Education Center, Ellicott City, MD and locations in Howard County

September 18, 2024

Urban Tree Summit (Casey Trees and Montgomery Parks) Location: Silver Spring Civic Center. To register please visit <u>Urban Tree Summit</u> or <u>https://urbantreesummit.org/</u>

October 9, 2024 MNLGA Retail Day Location: Homestead Gardens, Davidsonville, MD

December 5, 2024 Tech Day: Focus on Solar Location: CMREC, Ellicott City

December 12, 2024 2024 Cultivating Innovation in Maryland's Agriculture and Technology Conference Location: Crowne Plaza, Annapolis, MD Program and registration information



NINE AGENCY RULE GUIDANCE

Pursuant to 7 C.F.R. § 2.25 (a)(1)(3), an authority delegated from the Secretary of Agriculture to the Assistant Secretary for Civil Rights, Office of the Assistant Secretary for Civil Rights (OASCR), has the authority to provide overall leadership, coordination, and direction for the United States Department of Agriculture's (USDA) programs of civil rights, including program delivery, compliance, and equal employment opportunity, by enforcing, among other things, related Executive Orders, Congressional mandates, and other laws, rules, and regulations, as appropriate.

On February 14, 2021, President Joseph R. Biden, Jr., signed Executive Order 14015, *Establishment of the White House Office of Faith-Based and Neighborhood Partnerships*, 86 FR 10007 (Executive Order 14015). Executive Order 14015 sought to "organiz[e] more effective efforts to serve people in need across the country and around the world, in partnership with civil society, including faith-based and secular organizations." Executive Order 14015 further emphasized the importance of strengthening the ability of such organizations to deliver services in partnership with Federal, State, and local governments and with other private organizations, while adhering to all governing laws. Executive Order 14015 also revoked Executive Order 13831, which prompted the 2020 Final Rule.

Key Provisions Restored by Executive Order 14015, *Establishment of the White House Office of Faith-Based and Neighborhood Partnerships*:

Executive Order 14015 reestablishes important religious liberty protections for beneficiaries of federally funded social services.¹ Under 7 CFR § 16, a faith-based organization is eligible, on the same basis as any other organization, to access and participate in any USDA assistance programs for which it is otherwise eligible. Neither the USDA awarding agency nor any State or local government or other intermediary receiving funds under any USDA awarding agency program or service shall, in the selection of service providers, discriminate for or against an organization on the basis of the organization's religious character, motives, or affiliation, or lack thereof, or on the basis of conduct that would not be considered grounds to favor or disfavor a similarly situated secular organization. The Nine Agency Rule reestablishes important religious liberty protections for beneficiaries of federally funded social services.

Pursuant to the Nine Agency Rule, "any organization that receives direct or indirect Federal financial assistance shall not, with respect to services supported in whole or in part with Federal financial assistance, or in their outreach activities related to such services, discriminate against a current or prospective beneficiary on the basis of religion, religious belief, a refusal to hold a religious belief, or a refusal to attend or participate in a religious practice. However, an

¹ Establishment of the White House Office of Faith-Based and Neighborhood Partnerships, 86 FR 10007, E.O. 14015 of Feb. 14, 2021.

organization that participates in a program funded by indirect financial assistance need not modify its program activities to accommodate a beneficiary who chooses to expend the indirect aid on the organization's program."²

"Organizations that receive USDA direct assistance under any USDA program may not engage in explicitly religious activities, including activities that involve overt religious content such as worship, religious instruction, or proselytization, as part of the programs or services funded by USDA direct assistance. If an organization conducts such activities, the activities must be offered separately, in time or location, from the programs or services supported with USDA direct assistance, and participation must be voluntary for beneficiaries of the programs or services supported with such USDA direct assistance. The use of indirect Federal financial assistance is not subject to this restriction. Nothing in this part restricts USDA's authority under applicable Federal law to fund activities that can be directly funded by the Government consistent with the Establishment Clause."

The following are key provisions of the Nine Agency Rule:

- Notification: Recipients, including recipients, administering USDA programs must notify beneficiaries or prospective beneficiaries of their right to be free from discrimination based on religion. Mission Areas and agencies will also inform beneficiaries and prospective beneficiaries of the right to report violations of these protections (including denials of services or benefits) by an organization by contacting or filing a written complaint with USDA's OASCR.
- Non-Discrimination: All covered social service programs, whether supported by vouchers or grants, may not discriminate against beneficiaries based on their religion.
- Alternative Providers: The USDA awarding agency may determine that this written notice must also inform beneficiaries and prospective beneficiaries about how to obtain information from the awarding agency about other federally funded service providers in their area that provide the services available under the applicable program.
- Faith-Based Providers: The Final Rule maintains protections for faith-based providers, allowing them to compete equally with secular organizations for awards while retaining their religious character.

These regulations aim to safeguard Americans from religious discrimination in social services and reinforce awareness of religious liberty protections.

² Partnerships With Faith-Based and Neighborhood Organization, 89 FR 15671 (effective date: April 3, 2024).

OASCR Guidance to Mission Areas and agencies implementing Executive Order 14015 is as follows³:

- Title VI protects individuals from being discriminated against based on race, color, or national origin by entities receiving federal financial assistance from USDA (e.g., state and local agencies, educational institutions, non-profits, and other non-federal entities).
- Mission Areas and agencies must issue the Notice to beneficiaries and prospective beneficiaries provided by OASCR, as required by the Final Rule, and work with partners at the state and local level and with Tribal Nations to train and provide technical assistance in implementing this Final Rule to ensure the maximum amount of beneficiaries and potential beneficiaries receive the notice and are informed of the changes required under the Executive Order 14015 and Final Rule.
- Mission Areas and agencies may also issue written notice to inform beneficiaries and prospective beneficiaries about how to obtain information from the awarding agency about other federally funded service providers in their area that provide the services available under the applicable program.
- Where appropriate, Mission Areas and agencies will review their regulations and/or guidance to ensure Mission Area and agency regulations and guidance are consistent with the Final Rule, including guidance to state more directly that agencies will not, in their selection of service providers, discriminate on the basis of an organization or entity's religious character, motives, or affiliation, or lack thereof, or on the basis of conduct that would not be considered grounds to favor or disfavor a similarly situated secular organization such as one that has the same capacity to effectively provide services.
- Mission Areas and agencies will revise regulations and/or guidance to make clear that Mission Areas and agencies will continue to consider organizations' requests for religious accommodations, on a case-by-case basis, in accordance with the United States Constitution and Federal statutes and will not disqualify any organization from participating in a program simply because that organization has indicated it may request a religious accommodation. *See* Religious Exemption Under the Education Amendments Act of 1972.
- Mission Areas and agencies will customize and craft training opportunities in the best manner possible for those affected and inform providers receiving direct Federal financial assistance they should provide notice to beneficiaries and prospective beneficiaries of certain protections, including protection from discrimination on the basis of religion.
- ³ OASCR acknowledges the need to provide the essential discretion to enable USDA Agencies to customize and craft notice and opportunities in the best manner possible for those affected. This guidance is not all inclusive and allows the Agencies to the flexibility needed to properly implement this Final Rule.

- Mission Areas and agencies will inform recipients receiving direct Federal financial assistance should a program beneficiary object to the religious character of a faith-based provider, the State or governmental entity will undertake reasonable efforts to identify and refer the beneficiary to another federally funded programs in their area, contact for a federal office, or in some instances a State agency or other governmental entity that might be administering a federally funded social service program.
- Beneficiaries of indirect Federal financial assistance (such as vouchers, certificates, or other Government-funded means that the beneficiaries might use to obtain services at providers of their choosing) are no longer required to have at least one adequate secular option for the use of the indirect Federal financial assistance.
- Mission Areas and agencies will inform program recipients not to require beneficiaries or prospective beneficiaries to attend or participate in any explicitly religious activities offered by the organization, and any participation by beneficiaries or prospective beneficiaries in such activities must be purely voluntary.
- Mission Areas and agencies will inform program recipients to separate in time or location any privately funded explicitly religious activities from activities supported by direct Federal financial assistance.
- Mission Areas and agencies will monitor compliance with this guidance in conjunction with regular oversight of Mission Area and agency programs and services.

OASCR will implement Executive Order 14015 as follows:

Pursuant to 7 CFR § 16.4(c)(1)(iv), "Beneficiaries or prospective beneficiaries may report violations of these protections (including denials of services or benefits) by an organization by contacting or filing a written complaint with USDA's Office of the Assistant Secretary for Civil Rights."

Effective July 2, 2024, OASCR will process complaints filed by USDA program beneficiaries supported by direct and indirect Federal financial assistance, against the USDA Mission Area or agency granting financial assistance to an organization or entity. Recipients will provide beneficiaries notice of their right to file written complaints of discrimination based on religion, a religious belief, a refusal to hold a religious belief, or a refusal to attend or participate in a religious practice.⁴

⁴7 CFR § 16.4, Partnerships with Faith-Based and Neighborhood Organizations, Vol. 89, No. 43 (March 4, 2024).

Pursuant to 7 CFR § 16.4, Part III.A.3, complaints of discrimination based on religion, a religious belief, a refusal to hold a religious belief, or a refusal to attend or participate in a religious practice received will be processed using the USDA's existing discrimination program complaint process and applicable timeframes.

OASCR will offer training sessions and technical assistance to Mission Areas and agencies. Mission Areas and agencies may then provide customized training to further assist program recipients. Training will cover the Final Rule's provisions, non-discrimination requirements, and best practices.

USDA Mission Areas and relevant agencies are instructed to forward complaints of religious discrimination filed by program beneficiaries, to the Office of the Assistant Secretary for Civil Rights, Center for Civil Rights Enforcement, Program Complaint Division by mail, fax, or e-mail at:

Mail:

United States Department of Agriculture Director, Center for Civil Rights Enforcement 1400 Independence Avenue, SW Washington, DC 20250-9410

Fax: (202) 690-7442

Email: program.intake@usda.gov

OASCR requests Mission Area and agency leadership to review and distribute the attached Guidance to all USDA recipients. This Notice is required to be provided to program beneficiaries by recipients who receive USDA funding, no later than Tuesday, July 2, 2024. Implementation of the Nine Agency Rule will include coordinated efforts by OASCR, USDA Mission Areas and agencies, and their recipients to ensure equity in programmatic delivery and services.

Enclosures: Notice from USDA Recipients to Beneficiaries and Prospective Beneficiaries

cc: USDA Chiefs of Staff

USDA Mission Area and agency Civil Rights Directors

CONTRIBUTORS:



Stanton Gill **Extension Specialist** sgill@umd.edu 410-868-9400 (cell)



Paula Shrewsbury **Extension Specialist** pshrewsb@umd.edu



Karen Rane, Retir **Plant Pathologist** (retired)



Chuck Schuster Retired. Extension Educator cfs@umd.edu





Kelly Nichols Extension Educator kellyn@umd.edu



Andrew Ristvey **Extension Specialist** aristvey@umd.edu



Ginny Rosenkranz Extension Educator rosnkrnz@umd.edu



Nancy Harding Faculty Research Assistant

Fereshteh Shahoveisi Assistant Professor fsh@umd.edu

Thank you to the Maryland Arborist Association, the Maryland Nursery, Landscape, and Greenhouse Association, Professional Grounds Management Society, and FALCAN for their financial support in making these weekly reports possible.

Photos are by Suzanne Klick or Stanton Gill unless stated otherwise.

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by University of Maryland Extension is implied.

University programs, activities, and facilities are available to all without regard to race, color, sex, gender identity or expression, sexual orientation, marital status, age, national origin, political affiliation, physical or mental disability, religion, protected veteran status, genetic information, personal appearance, or any other legally protected class.



Plant Pathologist clement@umd.edu