

Commercial Horticulture

September 15, 2023

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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

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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)

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Deer Rubbing and Browsing Increasing in September

By: Stanton Gill

Male deer are starting to rub the felt off their antlers in mid-September. This is when many nursery trees receive injury from buck rubs. If you did not have cage wire around trunks or deer fencing protection, consider doing it NOW. Female does are actively browsing on nursery and landscape trees. With the extended drought they are looking for green tissue to feed on this month.

Dropping Foliage

By: Stanton Gill

The winds and rains on September 9 and rains on September 11 resulted in huge amounts of leaf droppage. Sycamores and river birches are dropping the most foliage this week. The drought this fall is likely going to provide a pretty lousy fall color display with many of the leaves dropping prematurely.

Sycamores have been dropping a lot of their leaves over the last several weeks.
Photo: Suzanne Klick, UME



Stinging Caterpillars

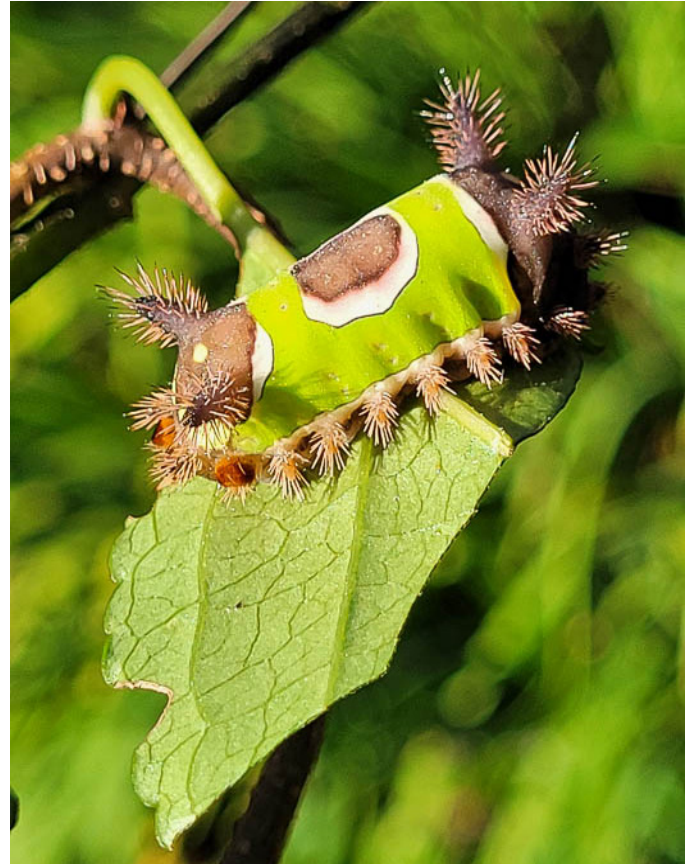
We received a report of a puss moth caterpillar at a Maryland nursery this week. It is one of the caterpillars in Maryland with stinging hairs. A worker who was tying up hollies came into contact with the caterpillar. Over the years, holly is the plant on which we most often receive reports of this caterpillar. They feed in August and September. Control is usually not necessary, unless they are found in high numbers.

Marie Rojas, IPM Scout, accidentally touched a saddleback caterpillar while deadheading some perennials on Thursday afternoon. It is a generalist feeder that is found on a variety of herbaceous and woody plants.



A puss caterpillar has 'stinging' hairs and is often reported on holly.

Photo: Pete Driscoll



Saddleback caterpillars are another one to avoid touching if possible, because their 'stinging' hairs.

Photo: Marie Rojas, IPM Scout

Tuliptree Scale

By: Stanton Gill

Tuliptree scale, found on deciduous magnolia and tulip poplar, has been dripping copious amounts of honeydew onto surfaces below the trees over the last month. Female tuliptree scale feed heavily and produce a lot of honeydew before they begin egg laying. I observed crawler emergence on September 14 in Brookeville. If you are treating plants, plan on using Talus or Distance over the next couple of weeks.

Tuliptree scale crawlers covering female covers.

Photo: Suzanne Klick, UME



UMD-IPMnet

Crapemyrtle Bark Scale

By: Stanton Gill

Update on progress of crapemyrtle bark scale: Sheena was off this week and Suzanne Klick jumped in to record the data on the life cycle of crapemyrtle bark scale at CMREC this week. Suzanne found many eggs under the females are ready to hatch very soon. The interesting thing is we are just finishing up the 2nd generation of crawlers in the last week. The 3rd generation appears to be overlapping the second generation. Suzanne photographed a couple of adult winged males which would indicate they are mating with females soon. She also found syrphid fly larvae feeding on the scale and a nymph of a reduviid (assassin bug). This scale appears to attract several predators that feed on the life stages.



Adult male of crapemyrtle bark scale has wings (left), the female does not. Various stages of the scale were present on plants this week, including eggs and females under covers (right).
Photos: Suzanne Klick, UME

White Grubs

Mark Schlossberg, ProLawn Plus, Inc., found active beetle grubs at a site in Timonium. Grubs that damage lawns are the larvae of Japanese beetles, May or June beetles, masked chafer beetles, or Oriental beetles. In the [August 3, 2018 IPM Report](#), Paula Shrewsbury, covered the digger wasp, *Scolia dubia*, which mainly feeds on Japanese beetle and green June beetle grubs. Apply registered materials if control is needed. One material is GrubGone by Phyllium Company which is a Btg.



Active white grubs found in turf.
Photo: Mark Schlossberg, ProLawn Plus, Inc.

Extension Specialist Retires

Jerry Brust, UME IPM Vegetable Specialist, has written articles on insects in vegetable gardens for the IPM report. Jerry recently retired at the end of August. Enjoy retirement, Jerry!



**Jerry is presenting on vegetables at a field day program.
Photo: Darren Jarboe, UME**

Spotted Lanternfly

Adult spotted lanternflies are still active in various areas. As noted in previous reports, we have seen collapse of populations in Harford and Cecil Counties. In response to an email, Andy Kness, UME-Harford County reported the following: "I can attest to the population crash in Harford County. Last year we had many, and many homeowners called in about it. This year I can probably count on two hands the number of SLF adults I've seen in Harford County, and no homeowners have called in to ask questions about it. I've been telling folks that the generalist predators (birds, mantids, assassin bugs, etc.) are their biggest predators. Someone also told me that their chickens love them."



**Greg is finding adults in Frederick this week.
Photo: Greg Kenel, Landscapes by Gregory**

Rose Rosette Disease

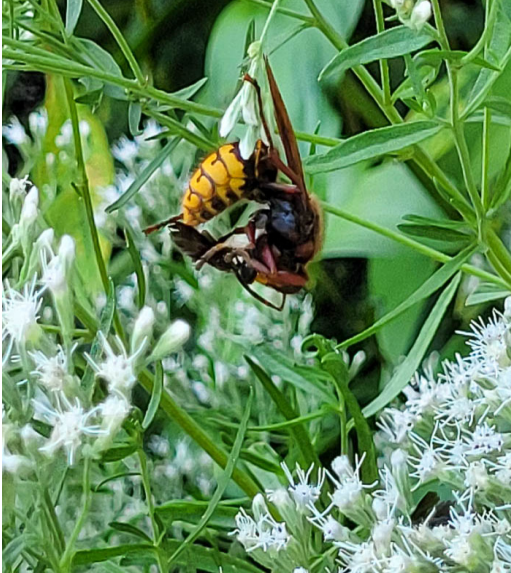
Marie Rojas, IPM Scout, reports that she has been noticing the advancing of rose rosette on multiflora roses around her farm over the last few years. She noted that "This year it finally arrived on my knockout roses which have been here for 20 years! It's also on a yellow hybrid tea rose I have as well." Symptoms at this time of year include red, distorted, witches broom type new growth. If you have this disease, the best thing to do is to destroy the plant.



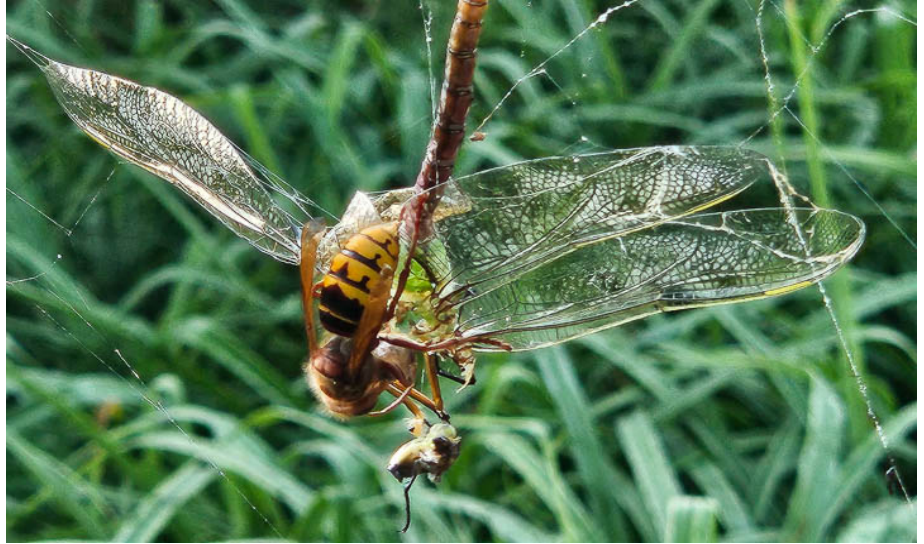
**Rose rosette symptoms
Photo: Marie Rojas, IPM Scout**

European Hornets

European hornets continue to be active this week. In Georgetown, Marc Vedder found a European hornet with a dragonfly that had gotten caught in a spider web. Marie Rojas, IPM Scout, found a European hornet that had grabbed a blue digger wasp that was on boneset flowers. European hornets are a predator on insects such as spotted lanternfly adults and caterpillars.



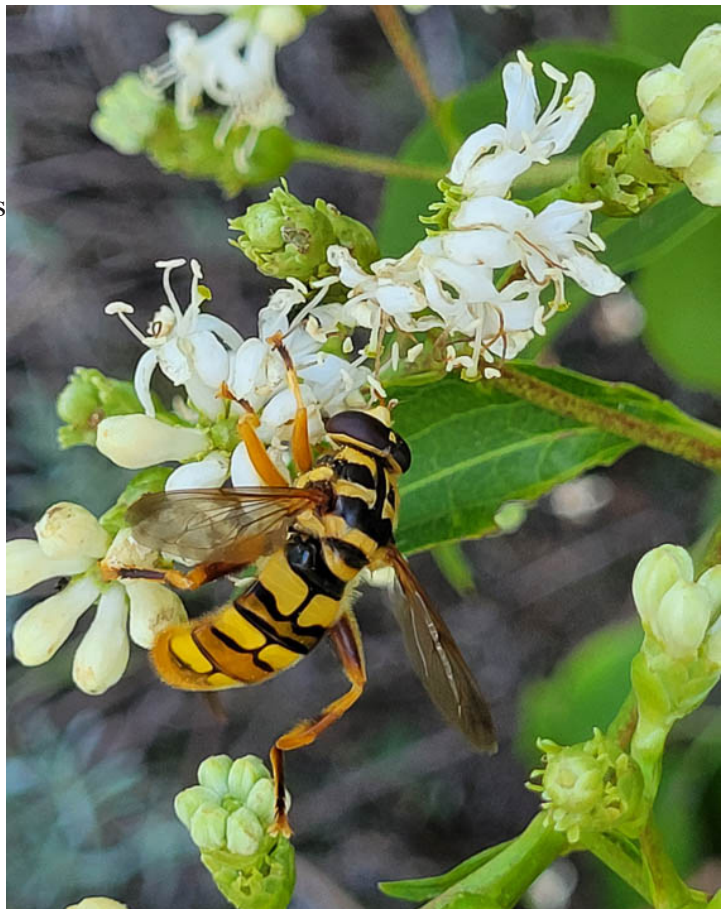
A European hornet with a digger wasp.
Photo: Marie Rojas, IPM Scout



A European hornet taking a dragonfly from a spider web.
Photo: Marc Vedder

A Hover Fly That is a Wasp Mimic

Last week, Marie Rojas, IPM Scout, found a hover fly (aka syrphid fly) called a "news bee", *Milesia virginensis*, feeding on her seven-son tree flowers. Paula Shrewsbury wrote about this big hover fly in the [July 22, 2022 IPM report](#). Look for it in open woodlands or forest edges. Marie noted how "This hover fly is called a 'news bee' because of the way it will hover in front of you as if it is giving you the next. It is one of the larger hover (syrphid) flies in Maryland. Larvae are predaceous." They feed on aphids and several different species of insects that we see late in the season.



This "news bee" syrphid or hover fly is a good wasp mimic.
Photo: Marie Rojas, IPM Scout

Beneficial of the Week

By: Anahí Espíndola and Paula Shrewsbury, Dept. of Entomology, UMD

Thinking about getting honey bee hives? Some food for thought about this somewhat controversial practice. *

Vast losses in biodiversity of insects are being seen across the world, threatening ecosystem services that insects provide. A prominent example of biodiversity loss that has moved many people is that of the great losses of pollinators and the very important consequences that this could have on the well-being of our ecosystems and ourselves. In this context, a movement that seeks to “save the bees” was formed several years ago, which has had a series of both expected and unexpected consequences. Among these unintended consequences is the very significant increase in the adoption of honey bee hives by new beekeepers with little or no experience keeping bees, especially with the goal of “helping the bees” from going extinct. Although the goal of this action is genuine and well-intentioned, there are a number of complexities that come with this decision.



A honey bee feeding on floral resources.
Photo: A. Espíndola, UMD

Is it true that bees are dying?

The short answer is yes and the long answer is more or less. Let's explain. There is a very large diversity of bees (for example, about 400 species of native bees live in Maryland alone), and it is clear that their general biodiversity trends are negative and similar to those of many other groups of insects, plants and animals. From that point of view, we can say that many native bees are dying, and it is key that steps are taken to provide a healthier habitat for them to survive.

That said, it is important to understand that honey bees are equivalent to non-native breeding animals in our region (the group of bees that honey bees belong to are native to Eurasia and Africa, not to North America). [Honey bees are managed and non-native insects](#) that are reared by beekeepers to produce honey and other materials (e.g., wax, propolis), and provide pollination services. In places where honeybees are native, local populations have been using their materials for generations, and in those regions, honeybees not only have an importance from a production perspective, but also from a cultural one ([read here to learn a bit more about some of these traditional systems](#)).

As is the case in any animal husbandry system, honey bees have health issues that need to be treated if they occur. For example, honey bees suffer from [severe parasitic and viral infections](#), appear to be negatively affected by certain pesticides applied to the plants they collect pollen and nectar from, and seem to



A beekeeper inspecting the hive.
Photo: M. Gäbler, Wikimedia

also be affected by environmental stressors such as changes in the diversity of the landscape and the quality of the plants they feed on. All of this, increases the real potential to reduce the health of colonies and, if left untreated, can decimate them.

Will I help the bees if I get honey bee hives?

The short answer is probably not. As mentioned above, honey bees are non-native to our region, so increasing their populations (for example, by increasing the number of hives) in our region is not likely to positively affect the suffering native species. For example, it has been shown in some studies that honey bees can be pretty competitive in the way they visit plants, [displacing native species](#). Further, and especially if the honey bees are not properly managed (which is unfortunately the case for many new inexperienced beekeepers), they can become sick and [spread diseases to native bees and other insects](#), also leading to increased pressure on these already-struggling native organisms.

So, are honey bees intrinsically bad?

No. In our region, honey bees are like farm animals and our relationship with them should be similar to the one we have with comparable animals such as chicken, cows, etc. However, for the same reasons that livestock must be maintained in healthy and sustainable conditions, it is important that beekeeping also be carried out in conditions that are safe and healthy for the colonies and for the environment in which they are found. For this reason, if someone is considering starting or expanding their bee hives, it is important to ask themselves why this is being done: is it to “save the bees”, or “to increase their production?”

If the reason for this decision is to “save the bees”, it may be better not to continue down this path, but to put your efforts toward other approaches that are really effective at helping biodiversity, such as creating natural habitat, providing nesting and diverse food resources for wild pollinators, and reducing pesticide use in their green spaces. You can find more information on topics [here](#), [here](#) and [here](#).

Alternatively, if the answer is that they would like to increase honey bee-related production, then certainly you should adopt colonies, ensuring that your management practices allow for a healthy production system that sustains colonies, but also decreases the risk of spreading diseases to neighboring honey bee colonies and native pollinators. In this regard, the University of Maryland has an incredible extension service specifically related to honey bee production, [the Bee Squad](#), which provides training, assistance, and information on beekeeping, disease containment and treatment, and regional updates relevant to production and beehive health. Similarly, there are also state and regional beekeepers associations (e.g., [MD state beekeepers association](#), [here an extensive list for Maryland](#)) that provide support and local contacts to experienced or new beekeepers. It is important to get in touch with services like these, especially for new and inexperienced beekeepers.

If your goal is to save the bees, then you may want to put your efforts towards improving wild bee habitat, increasing floral resources with a diversity of flower types, and reducing the use of pesticides toxic to bees.

*This article has been modified from an article on the [Extension in Spanish UME Blog](#) and can be found at: <https://extensionesp.umd.edu/2023/01/30/pensando-en-obtener-colmenas-de-abejas-meliferas-algunas-consideraciones/>

Weed of the Week

By: Kelly Nichols, UME-Montgomery County

Common teasel, *Dipsacus fullonum*, is a weed that is found throughout the United States. This plant can reach a height of greater than six feet, is a biennial, and has a taproot. In its first year of growth, a rosette is developed. Rosette leaves will be oval, occurring with scalloped teeth and will be wrinkled in appearance. Because of its low growth habit this first year, it often goes unnoticed. During this rosette stage, it can be improperly identified as common burdock or broadleaf dock; however, neither of these species have a wrinkled leaf like common teasel.

Flowering stems are produced during the second year. Leaves on the flowering stem will be opposite, and without petioles. These leaves will surround the stem, in a clasping nature. The midveins on the leaf will have small or short prickles on them. The stem will be erect, with downward facing small prickles. The flowers are egg shaped with a squared off base. The flowers will be between one and four inches in length, and will have many smaller individual white to lilac colored flowers. Several individual bracts will occur at the base of each flower curving around the head itself.



Teasel plants in bloom.

Photos: Chuck Schuster, Retired, University of Maryland Extension

This plant is considered noxious in many areas, but not in Maryland. Cultural control of common teasel can be achieved using mowing as an option; this will prevent seed stem production. Chemical controls will include 2,4-D alone, 2,4-D with dicamba, chlorsulfuron, and imazapic (Plateau). The earlier in the growth stage that weed control is applied, the more successful the results.

Plant of the Week

By: Ginny Rosenkranz

Solidago rugosa 'Fireworks' goldenrod, also known as wrinkleleaf goldenrod, thrives in full sun to part shade and average to moist, well drained soils. Like a lot of native plants, once established 'Fireworks' is tolerant of drought, clay soils, deer browsing, heat & humidity. The plants are compact clump forming herbaceous perennials which are cold hardy in USDA zones 4-9, and grow 3-4 feet tall and 2-3 feet wide. 'Fireworks' is a cultivar of the native *Solidago rugosa* and in the late summer when the plants arching stems burst into bloom with golden yellow flowers that cover the stems, it truly looks like fireworks sparkling in the garden. The tiny flowers that bloom for weeks are densely pack into panicles or small groups of flowers that cover about 2 feet of the arching stems. This beautiful cultivar provides both nectar and pollen, attracting



Solidago 'Fireworks' growth habit.

Photo: Ginny Rosenkranz, UME

lots of butterflies, pollinating beetles, tiny bees, tiny wasps plus other beneficial insects, and many songbirds will eat the seeds in the fall and winter. The thin, 3-6-inch burgundy colored lance shaped leaves emerge in spring and matures quickly into a dark green. Leaves are set in an alternate fashion on the stems, and have a toothed margin. Most native goldenrods spread by seed and rhizomes, but 'Fireworks' does not, and stays neatly in the garden where it was planted. If more plants are needed in the pollinator gardens the original basal rosette can be divided in late winter. 'Fireworks' was selected by Ken Moore who worked at the North Carolina Botanical Gardens in Chapel Hill, a leading research facility for conservations and natural habitat. Plants are well suited to butterfly, cottage, meadow, rain gardens and perennial gardens. Their bright golden yellow flowers sparkle when planted near blue flowering aster like *Aster leavis* 'Bluebird', *Symphotrichum novibelgii* 'Lady in Blue'.



There are about six soldier beetles (pollinators and predaceous in the larval stage) visiting these goldenrod flowers.
Photo: Ginny Rosenkranz, UME

Degree Days (as of September 13)

Abingdon (C1620)	3306
Annapolis Naval Academy (KNAK)	3577
Baltimore, MD (KBWI)	3636
College Park (KCGS)	3482
Dulles Airport (KIAD)	3539
Ft. Belvoir, VA (KDA)	3361
Frederick (KFDK)	3376
Gaithersburg (KGAI)	3215
Gambrils (F2488, near Bowie)	3415
Greater Cumberland Reg (KCBE)	3031
Perry Hall (C0608)	3216
Martinsburg, WV (KMRB)	2755
Natl Arboretum/Reagan Natl (KDCA)	3948
Salisbury/Ocean City (KSBY)	3560
St. Mary's City (Patuxent NRB KNHK)	3998
Westminster (KDMW)	3651

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 calculator Thresholds in: Fahrenheit °F Lower: 50 Upper: 95 Calculation type: simple average/growing dds Start: Jan 1

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 **2755 DD** (Martinsburg, WV) to **3998 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.

Japanese maple scale – egg hatch / crawler 2nd gen (**2508 DD**)

Fern scale – egg hatch / crawler 2nd gen (**2813 DD**)

White prunicola scale – egg hatch / crawler 3rd gen (**3238 DD**)

Banded Ash clearwing borer – adult emergence (**3357 DD**)

Tuliptree scale – egg hatch / crawler (**3472 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.

Conferences: Go to the [IPMnet Conference Page](#) for links and details on these programs.

October 11, 2023

FALCAN Truck and Trailer Seminar

Location: Urbana Fire Hall, Urbana, MD

[Details and Registration Info](#)

December 8, 2023

Advanced IPM Conference

Location: Carroll Community College, Westminster, MD

Details coming in late October

December 12, 2023

Maryland Turfgrass Council Conference and Tradeshow

Location: Turf Valley Country Club, Ellicott City, MD

2024 Advanced Landscape IPM PHC Short Course

This is a recertification short course for arborists, landscapers, IPM consultants, horticulturalists, professional gardeners, and others responsible for urban plant management. The course lectures will be held over four days at the University of Maryland, College Park, MD. In addition, there will be a hands-on lab following lecture (available to a limited number of course attendees).

Coordinators: Drs. Paula Shrewsbury and Mike Raupp, Dept. of Entomology, University of Maryland

Lecture dates: Monday, January 8 - Thursday, January 11, 2024 from 8:00 am – 3:00 pm

Lab dates: Monday, January 8 - Thursday, January 11, 2024 (space limited) from 3:30 pm – 5:30 pm

Course and registration information: <https://landscapeipmphc.weebly.com/>

Questions contact: Amy Yaich, 301-405-3911, umdentomology@umd.edu

Natural Area Management Services: Expanding Business Opportunities for Green Industry Professionals

October 3, 10, & 17, 2023; 6:30-8:00 p.m.

Are you a Green Industry professional interested in expanding the suite of services offered to your clients to include creating and enhancing woodlands and meadows? If so, join this three-part webinar series Tuesday nights, October 3, 10 and 17, from 6:30-8:30 p.m., and learn about expanding Natural Area Management Services to your clientele. Cost is \$50 for three webinars and you will earn a variety of recertification credits.

Developed by The Woods in Your Backyard Partnership, this program aims to inform and equip landscapers, arborists, landscape architects, horticulturalists, land managers, foresters, and other green industry professionals with knowledge and skills to provide additional services to clientele while improving ecosystem health. Small-scale Natural Area Management Services include wildlife habitat enhancement, forestry practices such as reforestation, invasive control, and more. A resource manual and specialized checklist tool complement the training and help Green Industry professionals determine which enhancement practices suit a given property.

This 3-part series provides in-depth instruction related to the management of a small-acreage property from start to finish through our case-study scenario. We start with an assessment of the client's property with a standard checklist and proceed with plan development, and finish with the implementation of various land care practices, creating wildlife habitat, managing invasive plants, tree planting, and reforesting a property. This series will increase your knowledge and skills so you can gain an edge over the competition and grow your business. Each participant will receive a copy of the Woodland Health Practices Field Guide, a \$7.50 value.

All “live” session attendees receive a certificate of attendance to obtain professional development credits. Continuing Education Units approvals are pending for: Maryland Tree Experts, International Society of Arboriculture (ISA); Chesapeake Bay Landscape Professionals (CBLP); Landscape Architects; PLNA Certified Horticulturalist; VNLA Certified Horticulturalist; and Society of American Foresters.

Register by September 25 and receive the link to access the webinar. Registrants will also receive access to the webinar recordings. Go to: <https://extension.psu.edu/natural-areas-management-services-expanding-business-opportunities-for-green-industry-professionals>. Please share with others.

This webinar series is provided by The Woods in Your Backyard Partnership; a collaboration of the University of Maryland Extension, Penn State Extension, Virginia Cooperative Extension, Virginia Department of Forestry, the Alliance for the Chesapeake Bay/Forests for the Bay, Maryland Department of Natural Resources Forest Service

Commercial Ornamental IPM Information
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