

# In Season with MGPW

the quarterly of the  
Master Gardeners  
Prince William

Fall 2021

blue cardinal flower (*Lobelia siphilitica*),  
goldenrod (*Solidago*)

photo by Jason Alexander

## Fall

### PRESIDENT'S MESSAGE

Cool fall weather is starting to encroach upon us signaling the reduction in our very busy spring and summer MGPW events. The Teaching Garden looks beautiful as we completed our Saturday-In-the-Garden teaching sessions. Farmer's Markets will be wrapping up soon as we calculate the pounds of produce Master Gardener (MG) volunteers have generously collected to provide for members of our community. Plant clinics are coming to an end so we can tally the hundreds of Prince William (PW) residents that our skilled MG Volunteers assisted this year while answering questions on plants and soils.

There are still several activities and opportunities to volunteer before we really settle down during the cold winter months – but do take some time to reflect on the positive impact the MGs of PW County have had in 2021 by helping our community and continuing the MGPW mission to provide current research-based, horticultural/environmental outreach and education programs for Prince William area residents. Thank you for all you do!

Stay Safe – Stay Healthy  
-Janene Cullen, PhD, MGPW President-Elect

### VMGA REPRESENTATIVE'S MESSAGE

by Jeanne Lamczyk, VMGA Representative for MGPW

Virginia Master Gardeners Association (VMGA) is a statewide group whose mission statement is:

*The mission statement of the Virginia Master Gardeners Association is to foster communication, education, and fellowship among Virginia Cooperative Extension Master Gardener Volunteers.*

It is open to all Master Gardeners in Virginia with \$12 annual membership dues. Join online at <https://vmga.net>

Did you know that Virginia Tech has a bi-weekly update site? Go to <https://mastergardener.ext.vt.edu/category/biweekly-update/>

This is an excellent place to see what other units are offering for continuing education opportunities and additional information on classes, gardening updates, and seminars offered online.♦♦♦



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## LAWN CARE FOR PWC

Virginia is part of a transition zone between areas where cool and warm season grasses thrive. This can make lawn care in our area challenging. If you're a first time homeowner, new to Prince William County or just looking to better manage your lawn, [Virginia Cooperative Extension can help](#).

We offer help with interpreting soil test results, information on cultural practices, pest identification and pest control recommendations.

For more assistance with lawn care, contact the Virginia Cooperative Extension Environmental Educator at 703-792-4037 or [BESTlawns@pwcgov.org](mailto:BESTlawns@pwcgov.org).

The [BEST Lawn](#) Program can sample and measure your lawn for you and provide you with a fertilizer schedule that will help promote a healthy lawn.



Chrysanthemum  
photo by Jason Alexander

## LAWN: FALL TURF CARE



photo by Jason Alexander

by **Judy Haeske, Master Gardener Volunteer**

It is hard to believe fall has arrived. Here are a few tips for you to keep your lawn healthy over the winter.

**SOIL.** The health of your soil is key to a lush green lawn. Before you fertilize, test your soil to identify what it needs to grow a healthy lawn through the [BEST Lawn Program](#).

**MOWING.** Mow high and often! Adjust lawn mower blades to a mowing height that will remove only the top one-third of the grass blade. Mowing high will shade the ground from the sun, reducing moisture requirements. Speaking of mowing — turf clippings left on your lawn are important. If you mow high and often, clippings will decompose rapidly and contribute a substantial amount of nitrogen and other nutrients to the soil, thus reducing fertilizer requirements.

**CORE AERATION.** Compacted turf physically restricts roots from growing and oxygen from penetrating the soil. These are two critically important factors in developing a lush green lawn. Core aeration is best done in the fall so the roots have time to recover before dormancy.

**WEED CONTROL.** If you are seeing weeds in your lawn (August-September), take care of them two to three weeks before you add grass seed. It is best to identify the weed before applying any chemicals. Some herbicides may prevent grass seed from germinating so be sure to follow the label instructions. Contact the Prince William County Horticulture Help Desk for help in identifying the weed at: [mastergardener@pwcgov.org](mailto:mastergardener@pwcgov.org).

**FERTILIZER.** The BEST Lawn program will include a specific recommendation for fertilizer based on the results of your soil test. Remember the acronym, SON. This stands for (September-October-November) – the best months to apply fertilizer.

**TOP DRESSING.** “Top dressing” a lawn means to spread a thin (1/4 to 1/2 inch) layer of compost over the lawn. Compost is relatively inexpensive and readily available at lawn and garden centers. If you plan on overseeding, you will want to do this after the top dressing.

**GRASS SEED.** After you aerate and/or dethatch your lawn, spread a layer of grass seed. Do this between late August and mid-September, when soil temperatures are still warm, as seeds will germinate faster. With the right amount of moisture, fertilizer, and sunlight, your new grass will have two to three months to establish itself before lower winter temperatures stop the growth.

Simple steps between late August and the end of October will allow your lawn to put on a beautiful show of lush green happiness in the spring. ♦♦♦

## PRIZED PLANTS: CHRYSANTHEMUM

by **Maria Stewart, Master Gardener Volunteer**

Would it be fall without mums? Maybe, but it would be a little less colorful. Mums are an easy perennial to grow, and with some care, potted mums can be overwintered inside, and planted out the following spring. If you purchased a mum for a pop of fall color, keep it in its pot, and after the blooms fade, bring it indoors, to a cool, well-lit location. A garage or basement with a window will do. Continue to water when the top couple inches of soil dries out. Once the worst of the winter is over, you can plant them outside, if there is no new growth. If there is new growth, wait until spring, after the chance for frost has passed. Be sure not to plant mums in the same location more than 3 years in a row to prevent disease and pest problems. Source: [Penn State Extension](#). ♦♦♦



Saturday in the Garden, *How to Grow Mushrooms*; photo by Pam Dixon, MG Intern

## GARDEN TO TABLE: HOW TO GROW MUSHROOMS

by Maria Stewart, Master Gardener Volunteer

July 10th at [The Teaching Garden in Bristow](#), featured Extension Forestry Specialist, Adam Downing who showed us how to grow shiitake and other mushrooms. Here are a few highlights, in case you missed it:



Nancy Berlin cooking mushrooms to sample; photo by Pam Dixon

◆ Shiitake mushrooms are best grown on logs cut from live trees after leaves fall in autumn and before leaf buds open in spring. Oak is best, and white oak, with its longer lasting, tighter structure, is better than red oak.

◆ Use live logs, but let them rest before inoculating. Trees have anti-fungal properties that need to dissipate.

◆ Lay inoculated logs on leaf litter (not soil) in the woods for about 1 year. Then stand them up against your house or a tree. Handling, moving, or banging the logs will cause them to flush with mushrooms.

◆ Slugs are the main pest, but it's ok to eat mushrooms they've nibbled first.

◆ Size doesn't impact flavor. And if a mushroom dries on the log, it's still good to eat.

To learn more see Virginia Cooperative Extension [The Basics of Hardwood-Log Shiitake Mushroom Production and Marketing \(pub. ANR-102P\)](#). ♦♦♦



drilling holes to inoculate the log  
photo by Florence Pullo



inoculating the log  
photo by Florence Pullo



inoculated logs given away to lucky participants  
photo by Pam Dixon

## RECIPE Mushroom Quinoa

### INGREDIENTS

- 1 cup uncooked quinoa
- 1 tablespoon oil (canola, olive, or vegetable)
- 1 package (8 ounces) fresh sliced mushrooms
- 1 onion, diced (about 1 cup)
- 2 cloves garlic, minced
- 1/2 teaspoon dried herb (basil, oregano, thyme)
- 1/8 teaspoon ground black pepper
- 1/4 teaspoon salt
- Optional: shredded cheese (mozzarella, parmesan, Swiss)

### INSTRUCTIONS

- 1) Cook quinoa according to package directions. Reserve 1 1/2 cups for this recipe. Store remaining quinoa for use in another recipe.
- 2) Heat oil in a skillet over medium high heat. Add mushrooms, onion, garlic, dried herb, ground black pepper, and salt. Cook 6 minutes, until mushrooms and onions are tender, stirring often.
- 3) Stir reserved 1 1/2 cups quinoa into skillet of cooked vegetables.
- 4) Top with shredded cheese, if desired.



mushrooms on a log  
photo by Florence Pullo, MG Intern

### source:

[Iowa State University Extension and Outreach](#)

## OUT AND ABOUT: GLENSTONE MUSEUM...AN OASIS OF ART

by Jamie Nick, Master Gardener Volunteer



*Split-Rocker* by Jeff Koons, 2000 at [Glenstone, Potomac, MD](#)

Amazing blend of architecture, green space, art, and welcoming walking paths.

I found Glenstone to be relaxing and peaceful, yet also stimulating. A favorite outdoor sculpture of mine and many who visit Glenstone is *Split-Rocker* by Jeff Koons, 2000.

A gem that's worth the trip! Hope you enjoy Glenstone.

### MASTER GARDENERS PRINCE WILLIAM TEACHING GARDEN

The Teaching Garden is a project of the Master Gardener Volunteers. It began as a garden to grow fresh produce for the Plant a Row for the Hungry project and a place where Master Gardeners could teach homeowners how to grow vegetables. The Teaching Garden displays low maintenance gardening techniques that homeowners can implement in their own gardens. It also features plant material that grows well locally.

View the [Teaching Garden Brochure](#) which contains a map of the teaching garden bed layout. View the upcoming events at the Garden [here](#) as well as other horticulture classes offered by the Master Gardeners.

**Sign up for [The Teaching Garden](#) blog to stay-up-to-date, and get the latest *In Season* with MGPW newsletter!**



photo by Lynne Lanier Master Gardener Volunteer

*“...mosses are the ‘largest land repository for carbon on the planet.’”*

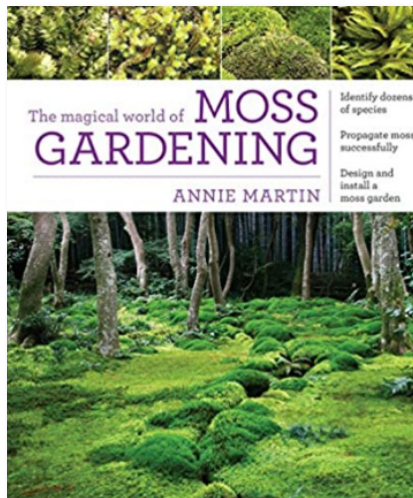
### **BOOK NOOK: THE MAGICAL WORLD OF MOSS GARDENING BY ANNIE MARTIN**

by Maria Stewart, Master Gardener Volunteer

Enter the world of plant magic in miniature, and learn how to create your own garden of enchantment with *The Magical World of Moss Gardening* by Annie Martin (aka Mossin' Annie).

If you've only ever considered moss a weed, Annie Martin will help you appreciate these oldest terrestrial plants, identify different varieties, and invite them into your landscape.

Martin gives an overview of mosses, including their environmental benefits such as erosion control, filtration, and flood mitigation. I was surprised to learn that mosses are the “largest land repository for carbon on the planet.”



*Moss Gardening* has beautiful and inspiring pictures which are most helpful in the identification section—25 *Bryophytes to Know and Grow*.

I have always loved moss, and after reading *Moss Gardening*, I was inspired to start my own moss garden. Martin provides resources, design ideas, and helpful installation and maintenance advice that I've found easy to follow.

I look forward to spending more time in the cool tranquility of my moss garden, especially in the heat of summer. ♦♦♦



Kew Gardens Palm House at sunset: Secrets of the Palm House Revealed

## INSIGHTS: A SHORT HISTORY OF GREENHOUSES

by Abbie & Vincent Panettiere, Master Gardener Volunteers

Both in spring and in fall, gardeners are apt to face the same vexing question: how to extend the season and how to save precious tropical plants from cold climates. For vegetable gardeners, there is a need to be able to start vegetables before the season is actually warm enough for them to grow. Greenhouses are apt to be one answer, and it is surprising how far back in history they go.

The first records of greenhouses date from Rome sometime around 30 CE and were described by both Lucius Junius Moderatus Columella, a noted ancient writer on agricultural matters, and, the better known, Pliny the Elder. It seems that the physician to Emperor Tiberius told him that, for his health, it was essential that he eat one cucumber a day year round. The emperor's will was the command of Roman scientists and engineers who developed what were called "specularia," which Pliny described as made of raised beds mounted on wheels. These were moved out into the sun, then, to protect the plants when night came or when the seasons changed and the temperatures got colder, they were wheeled back under the cover of frames of some sort of transparent media, mica stone plates, oiled cloth, (also known as *specularia*), or with sheets of selenite (*crystal habit varieties of the mineral gypsum*).

If it were cold, the gardeners maintaining the structure would light fires around the outer walls to keep temperatures warm enough for the precious cucumbers Tiberius desired. Later on, a mica roof was developed that could be installed to keep in light and heat.

Greenhouses developed over the years, mainly for the use of the wealthy who could afford them. The first ones are classified as "passive," in which successful protection of the plants depended on the sunlight available and general weather conditions around them. As

**Be inspired by one man's mission:**

***Forest Man***

a short film



“Since the 1970's Majuli islander Jadav Payeng has been planting trees in order to save his island. To date he has single handedly planted a forest larger than Central Park NYC. His forest has transformed what was once a barren wasteland, into a lush oasis.”

**available on YouTube**

## Insights: A Short History of Greenhouses

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Where in the world and how was the first greenhouse built?

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The Benefits of Geodesic Dome Greenhouses  
Monica Mansfield

improvements continued to be made, “active” greenhouses were developed which were designed to allow for the adjustment of air and soil temperature. An historical document discovered in 2001 described the first known active greenhouse. Described by a royal physician of the Joseon dynasty of Korea during the 1450s, a chapter on growing vegetables in winter had a description of the greenhouses used which provided the traditional heating methods of passive greenhouses with the means to actively retain heat and control condensation.

This system used the traditional Korean underfloor heating system called *ondol* to keep heat and humidity available which made it possible to grow vegetables, flowers and ripening fruit by artificially controlling the environment.

Greenhouses continued to develop, particularly as glass-making techniques improved and supplies became more available, though greenhouses were still the province of the rich and of professional people. An English gardener, Thomas Hill, wrote of passive greenhouses in 1577 in his book, “The Gardener’s Labyrinth”:

“The young plants may be defended from cold and boisterous windes, yea, frosts, the cold aire, and hot Sunne, if Glasses made for the onely purpose, be set over them, which on such wise bestowed on the beds, yelded in a manner to Tiberius Caesar, Cucumbers all the year, in which he took great delight....”

Greenhouses began to appear in the Netherlands and in England during the 17<sup>th</sup> century and were filled with the plants brought by horticulturists traveling to foreign countries hoping to find interesting, medically useful, or edible plants. The first heated greenhouse built in Britain was constructed at Chelsea Physic Garden by 1681.

Providing enough heat proved a serious problem in these early active greenhouses and they were very difficult to close up at night and to make usable in winter weather. However, experimentation among those developing improved greenhouses produced some spectacular results. The greenhouse at the Palace of Versailles, built in 1789, was more than 490 ft long, 43 ft wide, and 46 ft high.

During the 19<sup>th</sup> Century greenhouses came into their own, as glass became cheaper and available to more people. In English cities they were sought after as a way to become closer to nature. These early greenhouses were called orangeries since their purpose was often to keep citrus trees alive out of season.

Thomas Jefferson, toward the end of his life, had an orangerie that led into a terrace in his home. George Washington had an orangerie which he called a pinery since he built it to grow pineapples, his favorite fruit.

One of the most famous greenhouses, the Palm House, was built at Kew Gardens in England between 1844 and 1848 during Queen Victoria’s reign. It is said that ship designs were used by the engineers in building this structure.

To give you an idea of the service greenhouses provide in keeping tropical plants alive, a huge Jurassic prickly cypad, *Encephalartos altenstenii*, was recently re-potted at the Palm House. It is the oldest “pot plant” at Kew Gardens and is believed to be the oldest potted plant in the world. It was brought to Kew Gardens from the Eastern Cape region of South Africa by Kew’s first plant hunter, Francis Masson, and

## Insights: A Short History of Greenhouses

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[www.growingproduce.com](http://www.growingproduce.com)

Gutter-connected greenhouses vs ground to ground greenhouses  
Choose The Right Greenhouse Style

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University of Vermont  
Extension  
Department of Plant and Soil Science

<https://www.rimolgreenhouses.com/blog/high-tunnel-vs-greenhouse-vs-hoop-house-which-is-right-for-me>

Rimol Greenhouse Systems  
High Tunnel vs. Greenhouse vs. Hoop House: Which is Right For Me?

planted at Kew in 1775. After a long and difficult process re-potting the cycad, it's again on view at Palm House. It has survived there for 246 years.

Greenhouses are said to have been brought to this country during the eighteenth century. Andrew Faneuil built the first greenhouse in Boston in 1737 and had good supplies of glass available to build it. As mentioned above, George Washington and Thomas Jefferson both had greenhouses for the purpose of growing tropical fruit.

During the 19<sup>th</sup> century greenhouses became more extensively used and several countries built large structures; one of these was the New York Crystal Palace, built for the Exhibition of the Industry of all Nations in 1853. In an article in the New York Times in 2017, it was stated that the Crystal Palace was built on what is now Bryant park on West 42<sup>nd</sup> Street, had "...175,000 square feet of exhibition space and was crowned by a dome that was 100 feet in diameter and 148 feet high." At the time it was the largest building in the country but was not intended for horticultural use but as a showcase for articles of commerce, including such recent inventions as the Singer sewing machine. It was supposed to be fireproof but burned to the ground in 1858.

Greenhouse development continued into the 20<sup>th</sup> century and, in the 1940's and 1950's, the geodesic dome, developed by Buckminster Fuller, became adapted for use in houses but also made a special place for itself in greenhouses. Buckminster Fuller was a mathematician and engineer, among several of his talents, and realized the strength that can be achieved by connecting triangular pieces into a dome shape. The domes are stronger than rectangular buildings and can handle hurricanes, tornadoes and earthquakes because the weight is distributed evenly throughout the dome. Strong winds flow over the dome rather than having to butt up against a flat building side. This same quality means that snow falling on a dome will just slide off rather than causing damage.

Plants growing in such conditions are more likely to get the full days' sunshine that they may need because there are no walls needed to support the domed roof.

This writer was privileged to have had access to a state-of-the-art greenhouse built in the mid-20th century. It had glass panes in the windows, the framework was of steel, certain windows could be opened at the push of a button to let in outside air if it got too hot, and the heat in the building was always available automatically. It was a gift to the students at the educational installation where I worked, from a group of wealthy and kind people. I remember it fondly. However, the glass panes were sometimes broken, by the action of heat and cold, ice and snow, and occasionally by the mischief of person or persons unknown. The greenhouse required a good bit of upkeep, but it was quite a joy to visit.

Greenhouse structures often changed after the 1960s when plastic in the form of polyethylene film became available in wider sheets. Hoop houses became popular. Hoop houses are a step down from greenhouses. They are simpler in construction and a good deal less expensive to build, though they don't last as long. Their construction requires aluminum or galvanized steel tubing. In simpler versions, lengths of steel or even PVC water pipe can be used for the skeleton of the hoop house. Polyethylene film is stretched over the metal or PVC structure and securely fastened to the ground. A door may be constructed at either end

## What is a Master Gardener?

Virginia Cooperative Extension Master Gardeners (VCE-MG) are trained volunteer educators who provide the public with environmental information that draws on the horticultural research and experience of Virginia Polytechnic Institute and Virginia State University.

### Join Us!

[click here to learn more](#)



Master Gardener Volunteer Cynthia Long answering questions about Charlie the snake at the Manassas Farmers Market

photo by Jason Alexander

to allow easy entrance without changing the temperature inside radically and, in what are called “high hoop houses,” an important feature is that the hoop house may be made tall enough and wide enough to allow large farm machines to enter and exit, something that isn’t available in greenhouses.

This simpler construction made hoop houses much less expensive to make and made them financially available to smaller farms, garden centers and also the home gardener with lots of space. In the 1970s, UV-inhibitors were developed which made the polyethylene film usable for three to four years rather than the one to two years of earlier versions.

In the 1980s and 1990s another improvement was added to greenhouses: gutter-connection. In general, there are three types of greenhouse: lean-to, detached, and ridge and furrow or gutter-connected. The lean-to greenhouse is attached to a building and is limited in size and location by the size and location of the building wall it is attached to. They may receive some heat from the building. Freestanding greenhouses can be placed anywhere on the property where they are needed and may be oriented east to west to be sure they receive the maximum amount of sunlight each day.

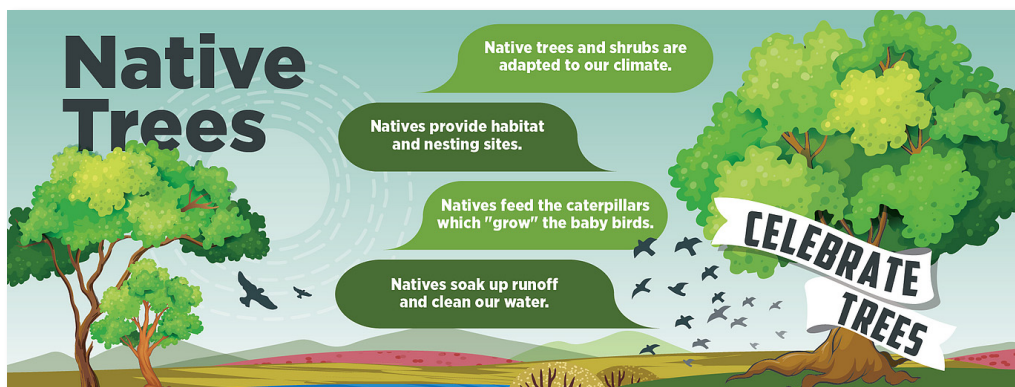
Gutter-connected greenhouses consist of two or more bays connected by a common wall or row of support posts. One significant advantage to this is that, when you have several open areas opening onto each other and connected by a gutter, there are fewer external walls; the ratio of floor area to external wall area is increased and you need less heat to warm the interior of the greenhouse. This sort of greenhouse is also less expensive to build and allows more efficient use of the available space.

The walls and roof of gutter-connected greenhouses may use a double layer of polyethylene film with heated air blown between layers, providing more warmth, or they may be covered with structured polycarbonate, which is another very popular material. They are both high on the lists of popular types of sheeting, each with advantages and disadvantages, cost and maintenance as major factors.

When you enter into a greenhouse, quite often you embark on a journey that puts you into a magical world of foreign, exotic and luxuriant vegetation that surrounds and overpowers you as you look around and see the wonders: trees and fruit, multicolored leaves, many of them species unseen outside the building. The whole experience compels you, like some powerful musical experience, to enjoy the full power of nature.

◆◆◆





A native tree is one that evolved within a given local ecosystem and therefore participates fully in its intricate plant/animal/fungal interactions.

## ANNOUNCEMENT FROM PLANT NOVA TREES: NORTHERN VIRGINIA CELEBRATES TREES!

*reprinted with encouragement from [PLANTNOVATREES](#), August 29, 2021; thanks to Leslie Paulson, Master Gardener Volunteer*

**Who doesn't love trees?** September 2021 marks the start of Plant NOVA Trees, a five year campaign to promote the planting and preservation of native trees and shrubs in Northern Virginia. To launch the campaign, numerous organizations are inviting the public to fun and educational events to celebrate the beauty and value of native trees.

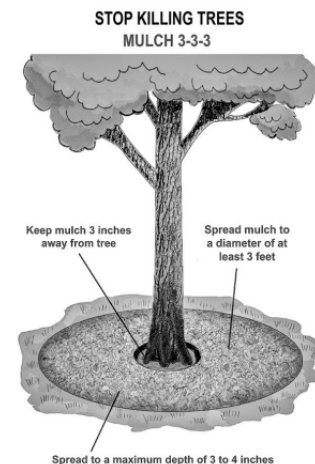
These celebrations will remind everyone how much they love trees and how important it is to protect them. The [Plant NOVA Trees calendar](#) has events throughout the region from September to November and beyond.

**Why a native tree campaign now?** As temperatures rise and rainstorms become more intense but less frequent, trees that cool the environment and capture stormwater become increasingly important. Trees take time to grow, so it is essential that we take action ASAP!

The dozens of organizations that have been collaborating on the Plant NOVA Natives campaign to promote native plants have been joined by tree advocates from across the region to organize Plant NOVA Trees. Why native trees in particular? Only plants that evolved within a local area are able to participate meaningfully in the intricate plant/animal/fungal interactions that make up its ecosystem. In other words, if we want to see songbirds and butterflies, we need to choose native trees and shrubs. (There is no important distinction between a tree and a shrub, other than size.)

**We need everyone to help.** The greatest need for trees and tree care is on privately owned property. The budgets of our local governments are unable to cover the costs even on public land. It will be up to each of us to look around our places of residence, employment, education, recreation and worship to identify where more trees are needed and where the existing ones are under threat. The [Plant NOVA Trees website](#) will provide a clearinghouse to link people to the resources needed to act, whether that be educational materials or sources of plants, services and discounts.

**This isn't rocket science.** Putting a tree in the ground is simple, especially when they are small. There are over fifty native tree species in Northern Virginia, most of which will grow easily in almost any yard. [Local garden centers](#) are well stocked— 21 of them have invited volunteers to put special tags on the native trees – in addition to the [garden centers that specialize in native plants](#) and carry smaller, easier-to-plant specimens. Let us get a shade tree up in every spare space before the temperatures go even higher. Every native tree planted brings hope for the future. Every native tree preserved gives us life today. ♦♦♦



### Proper Tree Mulching

- Make sure mulch is at least 3 inches away from base of tree trunk. You should see the flare at the base of the tree.
- Mulch should be 3 inches deep out to the edge of the drip line—do not over-mulch.
- Refresh mulch every 2 years as necessary.

### When to Mulch

- Flower beds and vegetable gardens are usually mulched in mid-spring. For best results weed prior to application. Mulch should be 3 inches deep and kept away from stems.
- It is not necessary to refresh every year unless bald spots appear, weeds start to thrive or it has decomposed to under 3 inches. You can rake old mulch to revive the look.
- Winter mulch is applied to help insulate from harsh winter temperatures and frost heaving of the ground. It can be applied in late fall to gardens.

### Types of Mulch

Use mulches that are suitable for your plants and landscaping:

- Organic: bark, wood chips, pine straw, lawn clippings, leaf, etc.
- Inorganic: gravel, stone, etc.

source: [Proper Mulching: Stop Mulch Volcanoes; Loudoun County Master Gardeners](#)

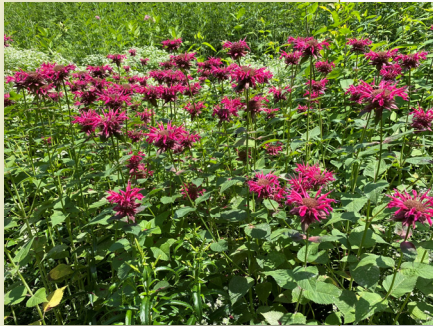


Master Gardener Volunteers hard at work, Forest Park weeding night  
photos by Janell Bryant

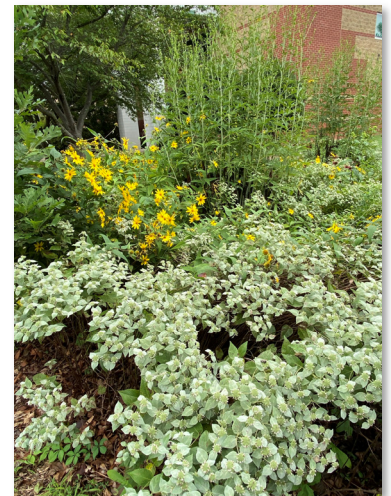
## IN THE COMMUNITY: A REPORT FROM FOREST PARK HIGH SCHOOL NATIVE PLANT HABITAT LEGACY GARDEN

by Jannell Bryant, Lead Master Gardener Volunteer

Until recently, the garden at Forest Park High School had not been worked on for almost two years due to Covid restrictions. Master Gardeners have conducted three volunteer work sessions, cleared away dead rubbish, and are now tackling some very aggressive natives that must be kept under control otherwise they take over the area.



The garden is alive with native bees, honey bees, insects, wasps, and pretty butterflies and birds. There may be a couple of nests hidden amongst the tall plants. The stand-out shrub is the beautiful American Cranberry Viburnum (*Viburnum trilobum*) that is covered in clusters of red berries. It was planted in late 2015 and this is the first year I have seen it with berries. The Cup Plant (*Silphium perfoliatum*) is another standout perennial with yellow flower clusters just opening. The three oak saplings that were planted are tall and straight and thriving.



clockwise: bee balm (*Monarda didyma*), Forest Park Garden, oak (*Quercus*), cranberry viburnum (*Viburnum trilobum*), cup plant (*Silphium perfoliatum*)

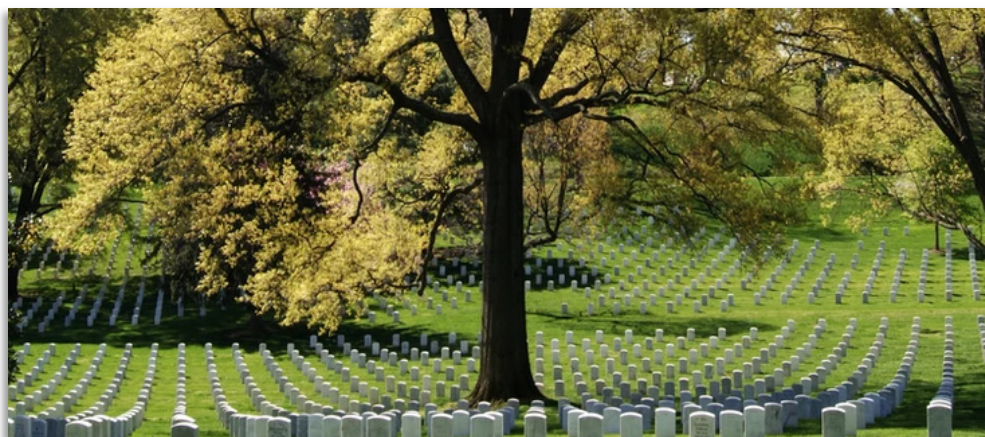
This is just a very short overview of the garden as it was being cleaned up and readied for the incoming students. ♦♦♦



*Plant NOVA Natives is the joint marketing campaign of a grand coalition of non-profit, governmental, and private groups, all working to reverse the decline of native plants and wildlife in Northern Virginia.*

*Our strategy is to encourage residents as well as public and commercial entities to install native plants as the first step toward creating wildlife habitat and functioning ecosystems on their own properties.*

*All are welcome to participate in this collective action movement!*



## **COURTESY OF PLANT NOVA NATIVES: ARLINGTON NATIONAL CEMETERY TREASURES ITS TREES**

***reprinted with encouragement from PLANTNOVANATIVES, September 12, 2021;  
thanks to Leslie Paulson, Master Gardener Volunteer***

Arlington National Cemetery is a place to honor, remember, and explore. The beauty of the grounds and the comfort of its visitors is enhanced by close to 10,000 trees, some dating back to before the Civil War. The diverse collection of this Certified Level III Arboretum include many species native to Northern Virginia including the state co-champion Pin Oak, near the Memorial Amphitheater. (A champion tree is the largest representative of its particular species within a geographic area.)

Arlington National Cemetery is dotted with native trees such as Redbuds with their lavender flowers in spring, Black Gum with its bright red fall foliage, and American Hollies that shelter the birds. Oaks are the most common species, which reflects their predominance in the Eastern forest.

Forester Greg Huse gives tours of the arboretum to visitors four times a year and points out the ecosystem services provided by mature trees. That Pin Oak, for example, not only supports the caterpillars that are the food for baby songbirds – a feature intrinsic to native plants but nearly absent in non-native ones – but also absorbs 1,400 pounds of atmospheric carbon and intercepts 23,000 gallons of storm water every year.

After President John F. Kennedy was assassinated in 1963, a landscape architect firm designed the Kennedy memorial site, home of the Eternal Flame. The designers worked around a 200 year-old Post Oak, 60 inches in diameter, which later became known as the Arlington Oak. In 2012, this massive tree was blown down by Hurricane Irene and could not be rescued. By good fortune, though, its acorns had been collected by American Forests as part of their historically significant trees project. Three of those saplings were donated back to Arlington Cemetery and planted in the same plaza, where they are now ten to twelve feet tall and thriving.

Trees are not the only native plants at the cemetery. Horticulturalist Kelly Wilson has been steadily adding a diversity of herbaceous and woody plants throughout the last decade, especially in the newer bio-retention areas (rain gardens). In these public areas, she designs with a small number of species to keep a neat-and-clean look, while in a staff parking area, she allows for more exuberance. Favorite natives utilized are the purple-flowering Ironweed which attracts many pollinators. Monarch caterpillars have taken advantage of the Butterflyweed. River Birch with its beautiful peeling bark does very well in rain gardens.

The 639 acres of Arlington National Cemetery, which is the resting place for 400,000 American servicemembers and family, are cared for by five permanent staff members who supervise the work of 90-100 contractors. The trees that grace this National Treasure are an essential feature, just as they are in any neighborhood where residents value the beauty and services they provide.

To learn what you can do to plant and protect trees on your own property, visit [www.plantnovatrees.org](http://www.plantnovatrees.org). Many of the trees will still have their fall colors in November when Arlington National Cemetery hosts the Centennial Commemoration of the Tomb of the Unknown Soldier. On November 9-10, a flower ceremony takes place where the American public will be able to place a flower at the Tomb of the Unknown Soldier. On November 11, an Armed Forces full honors procession takes place as it did a hundred years ago on November 11, 1921. Find out more about the Tomb of the Unknown Soldier Centennial Commemoration at [www.arlingtoncemetery.mil](http://www.arlingtoncemetery.mil). ♦♦♦

# CONSERVATION AT HOME: LEAVES TODAY, LIGHTENING BUGS FOR TOMORROW

by Maria Stewart, Master Gardener Volunteer

Many of us have been taught to “tidy up” in the fall. We’re supposed to shake our fists at trees for shedding their leaves, as we bag, mow, or burn the offending debris.

Fallen leaves are just junk, right?

If you’ve ever enjoyed a mesmerizing summertime light show in your own backyard, then no. Fallen leaves are not junk. They are critical winter homes for lightening bugs (*Lampyridae*), and many, many important pollinators such as butterflies, native bees, and moths, and invertebrates whose survival is necessary for a healthy environment.

If you’re concerned about keeping your lawn clear, consider raking or a leaf vacuum to remove leaves whole, and setting them aside in an unnoticed part of the landscape. Shredding leaves, although it can help speed up composting, also increases the chances of killing any critter tucked in for a long winter’s nap. As a compromise, think about leaving

## Conservation At Home: Leaves Today, Lightening Bugs for Tomorrow

Learn more at

Xerces Society for Invertebrate Conservation; [Leave the Leaves!](#), By Justin Wheeler  
October 6, 2017

*“Fallen leaves are not junk.”*

leaves whole in garden beds as free mulch and the edges of the lawn. Create a leaf pile in an inconspicuous location in your yard to allow natural composting, or add whole leaves to your compost pile gradually.

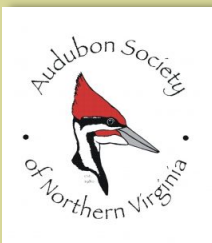
Just a few simple steps can help improve the biodiversity of your landscape. You’ll thank yourself in the spring and summer when the butterflies flutter in the sunshine and lightening bugs twinkle in the moon glow.

My husband and I noticed a big change in our own backyard. When we first moved into our home, the yard had been mowed and cleared severely which reduced the spring and summertime insect population. Each year, as we left more leaves and reduced lawn coverage, we were rewarded with exponentially more butterflies, moths, and the thrilling lightening bugs.

I encourage you to give it a try—leave the leaves—at least a small patch or pile. The lightening bugs will twinkle their thanks. ♦♦♦

leaves getting ready to become winter homes for lightening bugs (*Lampyridae*), and other tiny critters

photo by Jason Alexander



Prince William has a core group of trained Master Gardeners in the [Audubon at Home program](#) who have certified over 100 homes. To make more land in Prince William County wildlife-friendly, start to certify your property today. If you are ready to make your backyard or community space more environmentally friendly give us a call at 703-792-7747 or email [master\\_gardener@pwcgov.org](mailto:master_gardener@pwcgov.org).

## CRITTER NEIGHBORS:

### MARBLED ORB WEAVER (*ARANEUS MARMOREUS*)

by Jason Alexander, Master Gardener Volunteer

The marbled orb weaver may look threatening, but it will only bite to protect its egg sac. Resulting bites are typically not more severe than a wasp or bee sting for most people. Orb weavers try to avoid danger by falling to the ground and hiding until the danger has passed.

Female orb weavers do not sit on their web to wait for prey. Rather, they hideout close by, usually in a pile of dead leaves. One strand extends from her web to her hiding place. When it vibrates, she knows something is caught in her web.

She will also attach her egg sac near her leaf pile cover so she can guard it. If it is cool, the spiderlings will overwinter in the leaves and hatch in the spring. If it is warm, they will hatch soon after temperatures rise.

The marbled orb weaver works hard to spin a new web each day. Their webs are the classic circular pattern, perfect for seasonal decoration. They are usually found near wooded areas, close to water, or on shrubs and trees near homes. ♦♦



photo by  
Jason Alexander

#### Sources:

**Penn State Extension**  
[\*Marbled Orbweaver Spider\*](#)

**InsectIdentification.org**  
[\*Marbled Orb Weaver \(Araneus marmoreus\)\*](#)

Master Gardeners Prince William

Master Gardeners of Prince William (MGPW) is the supportive organization for active Master Gardener Volunteers in Prince William County, Manassas City and Manassas Park. There are approximately 200 active volunteer environmental educators serving in various capacities.

Volunteers and volunteerism are central to the MGPW mission as we strive to make our community a more sustainable, healthy and beautiful place to live and to educate residents about the many benefits of gardening, including the opportunity to grow nutritious, healthy food, environmentally friendly landscapes, all with the ultimate goal of protecting water quality in local waterways and the Chesapeake Bay.

## FREE ONLINE CLASSES

Virginia Cooperative Extension (VCE) is hosting classes via zoom Wednesdays, 11:00 a.m. to Noon. For a schedule of classes, click here: [Prince William County Cooperative Extension Horticulture Classes](#).

Please register for classes by contacting the [Horticulture Help Desk](#) at [mastergardener@pwcgov.org](mailto:mastergardener@pwcgov.org) or call 703-792-7747.

All classes as well as [Teaching Garden](#) tour videos can be found on our [YouTube channel](#).

Although Prince William County Buildings are closed to the public, VCE staff and Master Gardener Volunteers are working remotely to answer your lawn and garden questions. Please contact us by emailing [mastergardener@pwcgov.org](mailto:mastergardener@pwcgov.org) or call 703-792-7747.

**Help Support Master Gardeners Prince William while you shop with (click the icons to learn more):**



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-Send submissions, questions, or comments to  
[MGPWnewsletter@gmail.com](mailto:MGPWnewsletter@gmail.com)

The Editors,  
Jason Alexander & Maria Stewart, Master Gardener Volunteers