

# In Season with MGPW

the quarterly of the  
Master Gardeners  
Prince William

Summer 2023

black-eyed Susan (*Rudbeckia hirta*)  
photo by Jason Alexander

## Summer

### PRESIDENT'S MESSAGE

We are in the middle of the busiest time of the gardening year. The trees have filled with all their summer leaves, summer vegetable gardens are producing scrumptious fresh garden treats, and summer flowers are displaying their full glory. Remember to take time out of the busyness to stop and enjoy the beauty you have created in your own garden.

I have noticed that our message of cherishing the natural environment seems to be growing in the local communities. Many more articles and programs talking about native plants, regenerative agriculture, and providing a habitat for native pollinators. We are on the *right-side-of-history* by encouraging others to respect our natural environment. By respecting and cherishing the natural environment, we ensure that our children and grandchildren can enjoy the same beauty and benefits that we have today. Continue to learn and educate yourself on how to take care of our local natural resources so you can continue to share and educate others in our community.

I thank all of the Master Gardeners of Prince William County for all you do for your local community, and I hope you are able to spend some quality time outdoors this summer to appreciate the beauty and wonder of nature. Garden On!!

-Janene Cullen, PhD, President, MGPW Board

### SATURDAY IN THE GARDEN

**Classes are held at the Teaching Garden, 9535 Linton Hall Road, Bristow, VA the first Saturday of the Month, April thru October, 9:00 am.–noon. Classes are free, but please [register here](#)**

**Aug 5–Groundcover Lawn Alternatives.** We'll explore groundcovers suitable for shady and sunny areas of your property with Master Gardener Yvonne Reid. This month's featured Garden Bed is three beds: the Red, White & Blue Bed, the Pink & Blue Bed, and Mailbox Bed.

**Sept 9–Cover Crops/Installing a Meadow.** VCE Extension Agent Thomas Bolles, will discuss how using cover crops can invigorate and improve the health of your soil. Then we'll take a walk to "The Meadow" where Master Gardeners, Linda Gulden and Greg Evans will explain the process of installing a meadow. Before you leave, stop by the **MGPW Fall Native Plant Sale**.

**Oct 7–Identifying and Removing Invasives.** Natali Walker, Invasive Management Specialist at Blue Ridge Prism will show us how to identify and remove invasive plant species from our landscape. October's featured Garden Bed is the Scented/Native Bed. ♦♦♦



#### INSIDE THIS ISSUE

Summer Lawn Management:	
Watering the Lawn	2
Lawn Care PWC	2
Sunflowers	2
Kraus Farm	3
Recipe: Stewed Eggplant with Summer Vegetables	3
Hillwood Estate, Museum & Gardens	4
Wildscape	4
The Amazing Hummingbird	5-8
Plant NOVA Natives	
Spanish Language YouTube	5
3rd Annual Manassas Bee Festival	9
Master Gardener College	10
VA Forest Landowner Education Program	10
Internal Master Gardener Conference	11-13
Inviting Fireflies to Your Yard	14
Ways to be Water Wise	15
Prince William Soil and Water Conservation District	16
Pure Gold-Green Sweat Bee	17
Free Online Classes	18

#### TOPICS OF INTEREST

- Lawn
- Prized Plants
- Garden to Table
- Out and About
- Book Nook
- Insights
- In the Community
- Plant NOVA Natives
- Conservation at Home
- Plant NOVA Trees
- Critter Neighbors
- Free Classes / Helpdesk

## LAWN: SUMMER LAWN MANAGEMENT: WATERING THE LAWN



### 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.

**excerpts from Virginia Tech publication 430-010, Revised by Mike Goatley, Professor & Extension Specialist, School of Plant and Environmental Sciences**

*This publication discusses the basics of watering lawn.*

Here are a few highlights:

- \* Deep and infrequent watering that thoroughly soaks the rootzone to a 4-inch depth maintains a healthy root system and reduces weed infestation (as opposed to light and frequent irrigation, which promotes shallow roots and germination of weed seeds).
- \* Mow grass at the right height both before and during the summer. Raise cutting heights on cool-season lawns BEFORE summer stress arrives, and stay off the lawn with mowers and other traffic during extreme drought periods.
- \* If your current grass is not drought-tolerant, consider replacing it with one that is.
- \* Cool-season grasses are ideally established in the late summer to early fall; the secondary time for planting is spring.
- \* Warm-season grasses are ideally established in late spring to mid-summer.
- \* Remember that what we do to our lawns and landscapes affects local water quality and that of the Chesapeake Bay and other watersheds.

For the full publication, [click here](#).

Contact the Horticulture Helpdesk with questions, or sign up for the [BEST Lawns program](#) ([mastergardener@pwcgov.org](mailto:mastergardener@pwcgov.org); 703-792-7747) ♦♦♦

## PRIZED PLANTS: SUNFLOWERS

**by Maria Stewart, Master Gardener Volunteer**

Add more sun to your summer—with sunflowers! Sunflowers are easy, economical, beneficial to pollinators, and just fun.

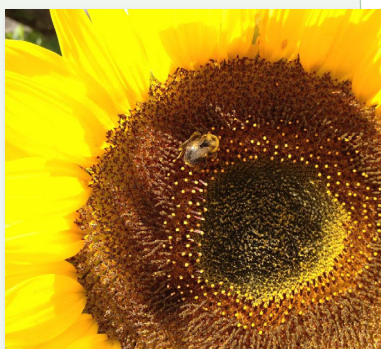
Plant in full sun. Be sure to follow seed packet instructions, but, generally, for varieties that mature at 2-5 ft., plant seeds 1" inch deep, 6" apart, 1ft. apart for taller varieties, and 2 ft. feet apart for giant varieties.

Sunflowers are annuals, but yield many seeds that can be planted the following year. During mild winters, seeds may overwinter and sprout by themselves in the spring.

Not only are sunflower seeds delicious and nutritious for humans, many pollinators and birds enjoy a sunflower treat too. Be aware that while "pollenless" varieties are useful as cut flowers, they provide no benefit for bees, butterflies, and other hungry pollinators.

For a bit of fun, check out these plans for a "Sunflower House" to plant in your garden: [The Old Farmer's Almanac, How to Grow a Sunflower House](#).

For more information on sunflowers see: [Penn State Extension](#). ♦♦♦



Sunflower (*Helianthus annuus*)  
photo by Maria Stewart



## GARDEN TO TABLE: KRAUS FARM, NOKESVILLE

by **Maria Stewart, Master Gardener Volunteer**

Not only is Lindsay Kraus a Master Gardener Volunteer, she is also the founder and owner of [Kraus Farm](#), a family-run micro-farm in Nokesville, Virginia. Kraus Farm features a 700 square foot greenhouse, a hydroponic garden, native plant beds, a few hundred square feet of dahlias, several large vegetable gardens, and habitat sanctuaries for bees, birds, and pollinators.

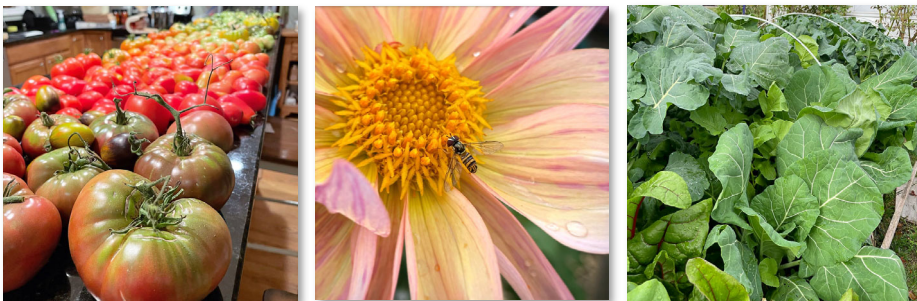
Lindsay got her start on a New Jersey tomato farm with her grandfather, and has always loved “digging in the dirt.” In 2015, she began selling plants as Kraus Farm, resigning from teaching in Prince William County Schools in 2022, to focus on the farm as her new career.

Kraus Farms caters to home gardeners, and focuses on local growing. Lindsay says “we are spray and fertilizer free, practicing IPM [Integrated Pest Management].”

“We live education.” Drawing on her experience as a teacher, Lindsay often goes to schools to talk about “growing, food preservation, and the value of making a living doing what you love.”

Not sure how to get your own garden started, or just need a little advice? Lindsay offers customized garden coaching services for gardens of all sizes, and gardeners of all levels. Maybe you just need a little splash of color in your landscape? Kraus Farm has a dazzling selection of dahlias you can make your own.

When you support Kraus Farm, “you’re supporting a family who cares about our ecosystem and our community. We care about how plants are raised and how we care for the Earth. We care about having food that’s not only healthy, but healthy for our planet.” ♦♦♦



a glimpse of [Kraus Farm](#): tomato varieties offered, native sawfly enjoying farm-raised dahlia, collard greens and broccoli; [photos from Kraus Farm](#)

### RECIPE

#### Stewed Eggplant with Summer Vegetables

##### INGREDIENTS

- 1 large eggplant, washed, peeled, and cut into cubes
- 4 tomatoes, washed and diced or 1 (28-ounce can) diced tomatoes, drained
- 2 summer squash, washed and cut into cubes
- 2 onions, washed, peeled, and diced
- 1 bell pepper, washed, seeds removed, and chopped
- 4 garlic cloves, peeled and chopped, or 1 teaspoon garlic powder
- 1 teaspoon Italian seasoning, or use dried basil or dried oregano
- Pinch of salt and pepper
- 1 (6 oz) can tomato paste
- ¼ cup vegetable oil

##### INSTRUCTIONS

- 1) Toss all vegetables together in a large pot with a tight fitting lid. Sprinkle with seasoning, salt, and pepper.
- 2) Stir in tomato paste and pour vegetable oil evenly over the top. Toss to coat thoroughly.
- 3) Bring ingredients to a simmer over medium high heat, cover with lid and reduce to low.
- 4) Cook for 45 minutes, stirring often, or until all vegetables are tender.



source: [University of Maryland Extension](#)





Hillwood Estate, Museum & Gardens; photo by Jamie Nick

## OUT AND ABOUT: HILLWOOD ESTATE, MUSEUM & GARDENS

by Jamie Nick, Master Gardener Volunteer

I have enjoyed my visits to [Hillwood](#), located at 4155 Linnean Avenue, NW, Washington, D.C., and found it worth the drive. They have outdoor and indoor restaurant seating, and a gift shop with unique items. Every staff member I came in contact with were all extremely friendly and helpful in a genuine manner.

The main attractions are the Museum and the Gardens. During my most recent visit, I introduced myself to one of the gardeners and discovered he was a fellow University of Maryland alum which led us to have a wonderful chat about the more current aspects of the gardens. He told me that they have gradually been moving away from “planting and then digging up annuals” like many gardens have done for years. They are including more natives and removing/lessening some of the less desirable specimens. The staff are aware of the need for natives and they have areas with pollinator gardens. They told me they are working on a large rain garden. I felt much better about the Hillwood gardens after my talk with the gardener. Many gardens like these grand dames are full of plants that aren’t beneficial and I feel like they are trying to move towards an environmentally conscious direction.

Here is some info from the Hillwood website under [Gardens](#):

*What’s in Bloom:* “Set on twenty-five acres adjacent to Rock Creek Park, Hillwood’s gardens feature a diverse and fascinating array of trees, shrubs and herbaceous perennials, offering something to see in every season.”

Places and plants to note in the gardens: greenhouse, cutting garden, hydrangeas. The many orchids in the greenhouse are a popular feature. Happy Summer! ♦♦♦

### 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 plants that grow 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!

*“a tour of the fascinating, vibrant web of nature outside our very own back door”*

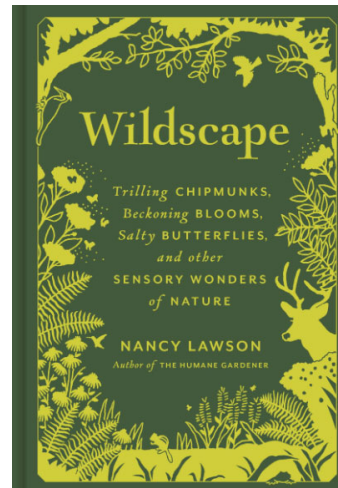
## BOOK NOOK: WILDSCAPE: TRILLING CHIPMUNKS, BECKONING BLOOMS, SALTY BUTTERFLIES, AND OTHER SENSORY WONDERS OF NATURE

BY NANCY LAWSON

by Jamie Nick, Master Gardener Volunteer

From the author of *The Humane Gardener*, a first of its kind guide that takes readers on a personal exploration of the secret lives of animals and plants. Nature writer and Master Naturalist, Nancy Lawson takes readers on a tour of the fascinating, vibrant web of nature outside our very own back door.

Combining scientific research, interviews and observations made in her own garden, Lawson shows us how to appreciate our natural environment from the perspective of our wild neighbors, along with how to respect and nurture their habitats. ♦♦♦





female ruby-throated hummingbird (*Archilochus colubris*); photo by Jason Alexander, Master Gardener Volunteer

## INSIGHTS: THE AMAZING HUMMINGBIRD

by **Abbie & Vincent Panetti**, Master Gardener Volunteers  
*reprinted from the August 2016 Turnip News*

One of the things my husband and I enjoy very much during warm weather is the hour we spend reading on the front porch in the afternoon after we've done all the outdoor things we're going to do for the day. Even when we're deep into whatever we're reading at the time, we still have an ear open to the special hum that announces the arrival of one or more of the hummingbirds who tank up at our feeder off the front porch.

They're not very good at sharing their sustenance and, in fact, behave as two or three jet fighter pilots when they arrive at the same time. The hum gets faster and deeper as they attack, avoid being hit (I've actually heard the soft thump when one of them does collide with another), and there is a serious attempt on the part of each bird to keep everyone else away from the sugar water. It may not be greed that makes them do so. The hummingbird takes in about half its weight in sugar each day, twice its weight if the nectar is 25% sugar. They fight to ensure that there will be nectar for them in the future because they burn calories at such a high rate that they are always close to starvation.

In addition to the feeder, we've also planted a good number of red or pink flowers (they favor the colors) out in the gardens nearest the porch because this is their more natural food. The flying insects and spiders they need for fat and protein in their diet seem to come, unbidden, on their own.

In our area, the hummingbirds fighting over the nectar are the ruby-throated hummingbirds, the only breeding hummingbird in eastern North America. Their wings beat about 53 times per second. They can

### The Plant NOVA Natives Campaign offers zooms in Spanish

*help spread the word about native plants, share the Plant NOVA Natives Spanish language YouTube playlist*



#### topics include:

Español- Mantenimiento de Espacios Naturales

Rescatando árboles de enredaderas invasoras

Plantas nativas

[available on YouTube](#)

## Insights: The Amazing Hummingbird

### Sources & For More Information

<https://goo.gl/cJhM5j>  
Hummingbird, from Wikipedia

<https://goo.gl/LyXIro>  
Bee hummingbird, from Wikipedia

<http://goo.gl/jNrgX6>  
Definition of "Clade"

<http://goo.gl/K14u6V>  
Definition of "Sexual Dimorphism"

<http://goo.gl/siqu4X>

Oxford Journals,  
Journal of Experimental Botany  
*Bird-pollinated flowers in an evolutionary and molecular context*,  
Quentin Cronk and Isidro Ojeda

<https://goo.gl/2qgSTe>  
Giant hummingbird, from Wikipedia

<http://goo.gl/6WJV4u>  
Sea & Sage Audubon Society  
Maintaining a Hummingbird Feeder

<https://goo.gl/eyhON2>  
The Cornell Lab of Ornithology  
Ruby-throated Hummingbird

<http://goo.gl/uNW743>  
Dictionary.com  
homeothermic

<http://goo.gl/P6FuAR>  
Merriam Webster  
alula

<http://goo.gl/YtoCg>  
National Geographic  
Ruby-Throated Hummingbird

hover, fly upside-down and backwards but, curiously, because their legs are so short, they cannot walk or even hop. The Cornell Lab of Ornithology says that the ruby-throated is able to manage to shuffle along a perch but, even with these short-comings "... it scratches its head and neck by raising its foot up and over its wing."

Hummingbirds (family Trochilidae) have the second largest number of species of any bird family. There are between 325 and 340 species described. They range in size from the "giant hummingbird" (*Patagona gigas*) native to South America along the length of the Andes, 9.1" long, a wingspan of approximately 8.5" and a weight of .63 - .85 ounces, to the smallest, the "bee hummingbird" (*Calypte helenae*) of the Cuban archipelago, 2.0" - 2.4" long and a petite .056 to .071 oz. in weight. The bee hummingbird is the smallest bird species alive today.

Because their wing bones are hollow and fragile, fossilization of the birds was difficult, and there is not a good archeological record of the hummingbird in Europe and Asia. In fact, since hummingbirds were figured to be only a New World family, when a scientist in 2004 came across two 30 million year old fossil hummingbirds - left for some time in a museum drawer - which had been found in a clay pit at a spot south of Heidelberg, Germany, they were appropriately named *Eurotrochilus inexpectatus* ("unexpected European hummingbird").

Hummingbirds are, at this time, a New World family and are thought to have originally split from insectivorous swifts (family Apodidae) perhaps 42 million years ago and probably in Eurasia. Part of the evolution involved the change to seeking nectar as part of their diet which led to their service in pollinating flowers (ornithophily).

Wikipedia states that, except for insects, hummingbirds have the highest metabolism of any homeothermic animal while flying. A homeothermic animal is one which maintains a relatively constant body temperature independent of the temperature of the surrounding environment as opposed to ectotherms such as fish and reptiles which gain their heat from the environment. The ruby-throated hummingbird may eat twice its body-weight in food each day, a necessity to sustain its mode of flight.

For a bird with such a rapid metabolism, hummingbirds have a surprisingly long possible life span. There are many losses during the most vulnerable time of life, between the time they hatch and leave the nest, but they may generally live three to five years. There have been accounts of hummingbirds surviving for ten years.

Hummingbird heart rates can get up to 1,260 beats per minute, and they breathe 250 times per minute, even when resting. They must visit a great number of flowers per day and digest what they take in at a very rapid rate. Since nectar provides little in nutrients, they also

<http://goo.gl/Gg9x1C>  
Union College  
Will Linthicum - Physics  
123  
Endotherms are animals  
that primarily produces  
its own heat.  
Ectotherms are animals  
that primarily gains heat  
through the environment.

<http://goo.gl/ABD5l>  
hummingbirds.net  
Hummingbird Feeders

supplement their diet with mosquitoes, gnats, fruit flies, and small bees. They also eat spiders.

The margin for them having sufficient nourishment and starving to death is such that when there is not enough food available, and also during the night, when they do not forage for food, they go into a state of “torpor” which is similar to hibernation. Their metabolic rate slows to 1/15th of its normal rate during torpor.

Understanding all this, it’s a matter of some astonishment that the ruby-throated hummingbird migrates great distances in the fall to reach its winter habitat. Most of them spend the winter in Central America. To get there, they must fly across 500 miles of open water over the Gulf of Mexico. Some from northern climates winter along the Gulf Coast, along parts of the south Atlantic coast or at the tip of Florida. In an effort to sustain themselves for this long trip, they store fat and may bulk up to twice their normal weight before they leave.

This is one reason why it’s such a pleasant surprise to see them appear suddenly in June, checking out the flowers and expressing annoyance that their feeder is not in place and stocked with their sweet fuel. The sight of them is a sign to us to get out the feeder and make up some sugar water. In preparing the feeder it’s important to clean it out first with very hot water. It’s recommended not to use soap or detergent because of the possibility of leaving a residue. If the feeder needs to be disinfected, put in a small amount of bleach or white vinegar and rinse it out well.

Also, it’s recommended to use only white granulated sugar, in a proportion of 1 part sugar to 4 parts water. Raw or turbinado sugars, which are sometimes used, are not as refined as white sugar and have molasses and other impurities which, in humans, may be of some benefit, but the hummingbird’s needs are different. The resulting raw sugars have some five times as much iron as white sugar. Iron is needed by hummingbirds, but is usually rare in their natural diet so their bodies hoard it. The excess of iron from brown or turbinado sugar will poison them in time. Jello is definitely not indicated. The red dye in commercial mixes is not needed and may do harm. Honey, surprisingly, is also very harmful. This would seem counter-intuitive since honey is, after all, derived from nectar. However, when the bees store it in their hives they work together creating an air flow to evaporate water from the nectar which halts fermentation. If you add water back again, as you would in filling a hummingbird feeder, you recreate the honey as nectar which would encourage the growth of microorganisms and the resulting mixture would be very dangerous to hummingbirds.

These may seem like unnecessarily strict precautions, but hummingbirds are apt to be infected with a deadly fungus, candidiasis, also known as thrush, which the birds might catch from dirty feeders infected by sickened birds. The effect of the fungus on the



hummingbirds is to thicken or cause swelling of the tongue so that the bird cannot drink. The end result is starvation for the bird and a feeder which can pass the disease on to other hummingbirds.

Gardening is regarded as a healthy form of exercise and a relaxing way to spend one's time. Having hummingbird feeders in the garden adds a welcome measure of excitement as the birds, flying and hovering with their supercharged sugar-fueled wings, swoop urgently to catch a quick drink, and then shoot away to think things over, before returning again, getting sustenance and entertaining us. ♦♦♦



male ruby-throated hummingbird (*Archilochus colubris*);  
photo by Jonathan Goldman

### **Too many veggies?**

*Find a local food party that would love to share your gardening success with those who would otherwise go without healthy, fresh produce*



**[AmpleHarvest.org](http://AmpleHarvest.org)**



## 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



Master Gardeners ready to answer questions at our *Ask a Master Gardener* booth at the Manassas Bee Festival; photo by Robin Finehout, Master Gardener Volunteer

## IN THE COMMUNITY: 3RD ANNUAL MANASSAS BEE FESTIVAL

by Maria Stewart, Master Gardener Volunteer

This year was my first time at the [Manassas Bee Festival](#), held on June 24th at the historic and picturesque Liberia House and Grounds, but the 3rd year for the event. By most estimations, it was the biggest and most well-attended year so far.

This annual, free event featured live music, a bounce house, games, crafts, farm animals, food trucks, a mead garden, many vendors offering native plants, honey, bee products, and other unique items. There were also bee, pollinator, healthy living, and native plant experts. Liberia House was open to the public, and visitors were encouraged to tour the house and its historic artifacts. The grounds, with its stately trees and native gardens, were also open for the public to explore. I enjoyed a stroll through the shady woodland trail, and visited the old cemetery. The Manassas Bee Festival truly had something for everyone.

It was such a fun day! We were certainly busy at our *Ask a Master Gardener* booth, with Master Gardeners Harriet Carter, Jeanne Lamczyk, Terri Anderson, Joye Blanscett, Terrence Steele, Stephanie Johnson, and Chris Flench answering all kinds of pollinator and horticulture questions from inquisitive and enthusiastic visitors. It was very energizing to speak to so many people who want to learn how to do the right thing for their landscape, and the wild things with which we share our environment.

Jeanne gave a presentation at the backyard stage on *Native Plants and Urban Gardens* to a very receptive crowd. She was also able to engage, one-on-one, with audience members after her talk who had follow up questions about our Audubon at Home and BEST Lawns programs.

Master Gardener and owner of [Green Steeze Conservation Landscaping Services](#), Stephanie Johnson, gave an important presentation on *Pollinators* and their relationship to native plants, to a rapt crowd. Stephanie shared her knowledge of the benefits of native plants, and how to incorporate them into any landscape. And if you don't want to do the work yourself—Stephanie and her team can help.

If you missed the festival this year, *bee* sure to visit next year!



Harriet Carter sharing information with a curious bee; photo by Maria Stewart



## MASTER GARDENER COLLEGE 2023: TREE STEWARD TRAINING, GREAT SPEAKERS

by Leslie Paulson, Master Gardener Volunteer

Five Prince William County Master Gardeners attended Master Gardener (MG) College this year at Virginia Tech in Blacksburg, in June. Tree Steward training was featured this year, and twenty-five Master Gardeners from across the Commonwealth signed up, making it a full class! The program started on Wednesday, and most MGs showed up the day before, on Tuesday. There were a total of 150 MGs attending College this year.

In the next newsletter, we will hear from MGs who attended College this year. As for me, I enjoyed the event and heard many great speakers. Even though there were repeat speakers from previous years, everyone needs to hear Holly Scoggins, who presented on Perennials with POW!, talk at least once. Having speakers return from prior years also gives those who missed them the first time, due to concurrent scheduling, another chance to hear their presentation. Mike Raup, who presented Can Insect and Mite Pests be Managed Organically in Landscapes?, was also the keynote speaker. He is always at the top of his game. Our own Thomas Bolles taught a breakout on Pollinators for Vegetables, and many of the attendees reported that they all enjoyed his talk.

I am on the Advisory Board, the group that plans MG College. We meet about six times a year. If you would like to see changes to MG College, it requires participation, and putting the time in to see it happen. As you know, so many parts of what we do and are as Master Gardeners takes this commitment. I will admit that the month of June was more than busy, but it was very fulfilling to be part of organizing such an impactful, and fun experience for so many MGs.

This year, two different surveys will be sent out by the State Office. One is for all who did not attend, and the other was for those who did. Please take the time to complete the survey and return it. The Advisory Board will be meeting in August to discuss the results.

If you have questions about Master Gardener College, ask me, Jan Rice, Suzanne Kinnison, Kim Zell, or Stephanie Johnson. Thank you and I hope I see you in the Teaching Garden soon! ♦♦♦

### Are you a forest landowner?

Virginia Tech, in partnership with numerous state, federal and private partners, offers a wide variety of science-based educational opportunities for new and experienced forest landowners through their [Virginia Forest Landowner Education Program](#).

[sign up for their newsletter](#)







attendees at [International Master Gardener Conference](#); photo courtesy of Leslie Paulson

## INTERNATIONAL MASTER GARDENER CONFERENCE: JUNE 18-22, 2023, OVERLAND PARK, KS

### reports collected by Leslie Paulson, Master Gardener Volunteer

**Diane Kean:** This was my first "In Person" IMGC and hopefully will not be my last!

The Johnson County EMGs did an outstanding job organizing this conference. They will be a hard act to follow for any other state.

I began my week with a two-day, overnight tour of Kansas. Not long after leaving Overland Park we drove through the Flint Hills Region of Kansas with hills and prairies of the open plains. Our bus took us first to Wichita and the Sedgwick County Extension Office where we were toured around their many different demonstration gardens and arboretum. After our tour (much appreciated after sitting a couple of hours on the bus) they served us the box lunches we had pre-ordered (part of the tour cost).

From there we went to Botanica, a Community Garden in Wichita where we toured on our own in order to see those areas which most interested us. I headed to the fountain garden, and then on to the Shakespeare Garden and made stops at other gardens in between.

After Botanica, we traveled to the Dyck Arboretum of the Plains in Hesston, KS. There, we were given a short talk on the history of the garden which was donated by Mr. and Mrs. Dyck and is now under Hesston College. We ended the day by driving to the recently renovated Community Center in McPherson where we had dinner and toured the 1928 building. From there we went to our motel for a welcome rest.

The next day we went to the Maxwell Wildlife Refuge in Canton. We rode trolleys out to the middle of a prairie and their herd of Bison. We were given time to walk through the prairie and see all of the native wildflowers in bloom. You had to take care not to step on one of them as they were everywhere! Our last stop of the day was the Tallgrass Prairie National Preserve. The Preserve has 11,000 acres of some of the last remaining never plowed prairie. The preserve is owned by the Land Conservancy and operated by the National Park Service. We were on our own to tour the brand-new Visitors Center, the

### International Master Gardener Conference 2023, some stats:

- ◆ 1,130 conference attendees
- ◆ 44 states represented, plus Canada, and England
- ◆ 100+ trade show vendors (plus a lot of happy shoppers)
- ◆ 12 bus tours, 11 workshops, 5 keynote presentations, 3 evening featured speakers and over 50 sessions
- ◆ 280 Johnson County Extension Master Gardener volunteers who filled over 950 volunteer slots



**SAVE THE DATES!**

**International Master Gardener Conference**  
**2025: There is No Planet B**

**August 25-28, 2025**

**A Virtual Experience of Epic Proportions**

**hosted by the Texas Master Gardener Program**



**Make Plans to Join Us**  
More details to be announced

Highlights:	Why virtual?
<ul style="list-style-type: none"> <li>• Explore gardening in the Great Beyond</li> <li>• Discover horticulture traditions from around the world</li> <li>• Explore sustainable and innovative techniques</li> <li>• Navigate the future of gardening in a changing world</li> <li>• Be inspired by virtual tours of renowned gardens</li> <li>• Learn how small efforts are transforming local environments</li> </ul>	<ul style="list-style-type: none"> <li>• Accessibility - ability to reach a broader audience and procure speakers</li> <li>• Cost-effective - the event is accessible to a wider range of participants</li> <li>• Flexible and convenient</li> <li>• Reduced environmental impact</li> <li>• Expanded reach and extended lifespan</li> <li>• Faster dissemination of information</li> <li>• Ability to enjoy all sessions and speakers for four months post-conference</li> <li>• Overcomes physical limitations and time constraints</li> </ul>

Historic Barn where we had our lunch, and the original home and of course the prairie trails.

From there (Northern Chase County) we returned to Overland Park (Johnson County) for the conference.

**Leslie Paulson:** This was my second in person IMGC, and third counting our Virtual College in 2021. This time my husband signed up for classes as well. So remember that for the next in person International Conference. Flying out of Reagan National, ugh, and landing in Kansas City's very new airport was great. Sorry, but Reagan, Terminal A is ancient and slow. By the time we got to the baggage claim in Kansas, a short walk, our luggage was waiting.

The first day we did the self-guided driving tour to 6 private gardens. The first couple had a lot of shrubs pruned as I saw in Italy and England. Striking, but I enjoyed more when one owner planted the utility easement with many natives. So did the pollinators. Several of the gardens had beautiful artwork. Each owner had their own style. On Sunday, I visited Lenora Larsen's home in Paoli. That got my attention when choosing, as my mother was a Larsen and my father's last name was Paolucci. Destiny. Lenora and husband bought 27 acres in the 80s and planted every tree, shrub and plant themselves. Lenora plants all perennials and shrubs from seed. A patient lady for sure. She weeds the meadow very early each spring so we really saw no weeds and she believes in mulch. I saw many plants we see in Virginia. This included a Big Leaf Magnolia, Persimmon and Paw Paw.

The speakers we had for the main part of the conference were very good. As at our own MG College this year, several speakers hit on the fact that they recommend and have natives but did not feel conclusively that non-natives were bad for pollinators. Interesting, but we all have our opinions.

My husband John toured the Boulevard Brewery. Of course, he enjoyed that. I had him listen to Nancy Lawson, a native wildlife supporter, hoping he will get rid of some of our turf. I enjoyed a talk on Herbs in the Landscape from Sue Goetz and mixing of some herbs to bring home. I really enjoyed listening to Dr. Susan Pell from the National Botanical Garden. She talked about Anacardiaceae, the Sumac family. It includes cashews, mangoes, and poison ivy. All their fruit are considered drupes. We really need to invite her to speak in Blacksburg. John heard her speak to what Public Gardens have to offer Master Gardeners as well.

I enjoyed a class on Traditional Indigenous Backyard Gardens. There is much to learn here. Devon Mihehuh started my journey. As many of the speakers, there are books available they have written on the subject. I really enjoyed several keynote speakers. Abra Lee, author and historian spoke on her book: *Conquer the Soil: Legendary Stories in American Horticulture*. Who knew that Black women played such important roles in the early 1900s? Jim Richardson, National Geographic photojournalist, talked on Feeding Planet Earth. His photographs were amazing as well as the information and facts to go with them. One speaker was ill and gave her talk on zoom. Sara Dykman, *Bicycling with Butterflies*, rode 10,000 miles to follow the monarch's round trip. Truly an amazing woman. All the keynotes were good. Dan Hinkley, plant hunter from Washington spoke and was very entertaining. My husband and I went to his home overlooking the Puget Sound when we took a tour with Robert MacDuffie in 2014. Dan's yard is beautiful. Consider going sometime. And talking to EMGs from across the United States and from Canada and England was icing on the cake.

The next IMGC will be hosted by Texas and will be virtual as they only have 2 years to plan. Sad but still am hoping for more wonderful speakers. 2025, August 25-28. Save the dates!

### Take Aways from IMGC, 2023

The 2023 International Master Gardener Conference in Overland Park, KS was extremely well organized with, for the most part, outstanding speakers. My favorites were Jessica Walliser who presented *Science-Based Companion Planting Strategies for the Vegetable Garden* and Dr. Charles Rice (Nobel Peace Prize winner!) who presented *Challenges of Gardening in a Changing Climate*. In addition to 8 concurrent sessions, I also attended the add-on program on *Preserving the Future: Monarchs, Wetlands, and Prairies* where we ventured for a day outside

of the city into the beautiful, nearby natural areas.

Jessica's talk was chocked full of useful information, including her descriptions of multiple plant communities that "play well together" and deter undesirable insects or attract good ones. I don't even have a vegetable garden but was scribbling down notes so fast you would've thought I had several acres of crops! I even waited in line for what seemed like forever to buy her most recent book. But, before getting up to the table, I learned that they had sold out. So, I resorted to buying copies online to share with all my veggie gardener friends!

I was mesmerized by Dr. Rice's presentation. He initially gave us shocking but not-so-surprising current information on the direction of climate change and, then, built a very solid case for the importance of the gardeners' role in addressing it. He told us that the average temperature in 1970 has increased by 1.8° F. That the North Atlantic is experiencing a heat wave with an increase of 4° F. And that there has been a 40% increase in extreme weather events over the last two decades. Now that he had our attention, he gave sound advice to gardeners on how to garden in this new and challenging environment. Much of his talk focused on the importance of nurturing the soil which, when healthy, has better water retention, promotes strong root growth, and is a thriving ecosystem essential to supporting life above ground. He discussed practices such as no-till gardening and the addition of organic material as ways to successfully garden and, at the same time, combat climate change.

**Jane McKinley:** The Prairie trip took us to the Baker University Wetlands, the home of MonarchWatch.org, and to a tall grass prairie. At the wetlands, I was surprised to see how many of the native plants to that region are native to Virginia, too. For example, the Cottonwood tree. In Kansas (*or was it Missouri?*) this tree is extremely aggressive, almost a weed. While the ones in Virginia are not a problem. Obviously, two different species but with the same common name. I was surprised to learn that Monarchs aren't really endangered. When speaking with Chip Taylor, founder and director of Monarch Watch, he told me that there was, basically, much internal scientific disagreement on whether or not to give this designation and that he was not in agreement with it. He said that the focus of this organization has recently shifted from Monarch education to the promotion of milkweed plants which are critical to the Monarch's recovery. The prairie was just that – *a prairie!* This is why I came! It was beautiful! I was surprised to learn that, like the Cottonwood, Eastern Red Cedar (another one native to both regions) is considered there almost a pest (at least in the prairie), whereas it's enjoyed in Virginia. The red cedar that was growing there was tremendous and had a lot of dead undergrowth that reached over your head. Not attractive.

Two final notes. First, it may be my biased opinion, but I saw a common thread running through the conference. This thread, whether mentioned by a featured speaker or at the concurrent sessions, came down to planting natives, nurturing the soil, and wise water usage. Working with nature not opposed to it, was a clear message.

My last note is in recognition of the wonderfully and successfully orchestrated conference. Everything from early and real-time communication to delicious meals (including a special one for this vegetarian), to recycling and sustainable practices, and stimulating sessions could not have been better. The Kansas City Master Gardener unit put on an event that will be a model for future international events. With almost 500 members, 430 of them worked on some aspect of the conference. Wherever I went, I met a member of this unit who had helped in some manner. It was inspiring!

**Suzanne Hamilton:** The International Master Gardener Conference in Overland Park, KS was such a positive event! It was so well-organized, the keynote speaker topics were relevant, and the speakers were engaging and informative. The conference began with a tour of private gardens that were quite varied, architecturally striking, and filled with memorable plantings. There was even a small garden for people with tiny spaces. The Trade Show was so much better than the usual ones, because it had such a variety of high-quality vendors. I probably spent more than I should, but I got gardening items and art.

My favorite part of this convention were the people, both the volunteers and the attendees. Great information came from the workshop speakers, but even more from those around me. The energy and inspiration generated by contact with other enthusiastic gardeners is what I cherish. It makes me rush home to try what I have learned in my own soil and to

*(continued in column at right)*

*(continued from International Master Gardener Conference: June 18-25, Overland Park, KS)*

share that knowledge with others.

The best personal experience I had was on Monday's tour Preserving the Future: Monarchs, Wetlands and Prairies. We visited the first Monarch Watch WayStation at KU and visited the founder of Monarch Watch, Chip Taylor. We gathered around Chip in small groups, and he answered our questions. As everyone was leaving, I had the chance to go up to him and personally tell him that I took a class, Principles of Ecology, from him in 1971. He had started his teaching career at KU in 1969. Chip was a great instructor, and I could tell him so. It was rewarding to see him again after so many years.

I hope you all will consider going to either our Master Gardener College next year or attending the International Master Gardener College Conference in 2025. The dates are August 25-28 and it will be "a virtual experience of epic proportions." ♦♦♦



*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!*



*Plant NOVA Trees is a focused drive by the Plant NOVA Natives campaign to increase the native tree canopy in Northern Virginia. The drive launched in September 2021 and continues through the fall of 2026.*



## PLANT NOVA NATIVES: INVITING FIREFLIES TO YOUR YARD

**reprinted with encouragement from [PLANTNOVANATIVES, June 13, 2023](#); thanks to Leslie Paulson, Master Gardener Volunteer**

When fireflies start their early summer dance, will they pick your yard for their display? Like most insects (and like most vertebrate species except humans and farmed animals), firefly numbers are in a steep decline, but there are steps we can take to foster them on our properties. Taking those steps has far-reaching benefits even beyond the joy of having our own private light shows. What we do to create habitat for fireflies can go a long way toward restoring life to our yards in general.

The first step in creating usable habitat is to plant (and preserve) native plants and trees and to remove invasive non-native plants. This is because most plant-eating insects can only eat the plants with which they evolved. Fireflies don't eat plants, though, so how does this apply? The answer lies in the food web concept. Predatory insects such as fireflies, dragonflies, ladybeetles, etc, eat the critters that eat the native plants. Sources of native plants for your landscape can be found on the [Plant NOVA Natives website](#).

The next step is to provide shelter and breeding sites. This translates into leaving the dead leaves in place and devoting as much of your yard as you can to natural landscaping. Dead leaves not only are home to many tiny critters including butterfly larvae, they are a welcome addition to landscaped areas, since they protect and nourish the soil. Perennials poke right up between them in the spring.

The third step may seem less intuitive but is understandable once you think about it: reducing outdoor lighting. If fireflies can't see potential mates blinking, they won't be able to get together. Light pollution has negative impacts on many other beings as well. Moths exhaust themselves circling around lights. Migrating birds have trouble navigating. We can help by using warm-spectrum LED lights bulbs 3,000 K or less (which don't attract moths) and by installing motion-detectors, assuming any outdoor lighting is needed at all. Lighting up our properties at night is as rude to our non-human neighbors as playing loud music outdoors is to our human ones, only with more lethal consequences.

The final step is the simplest of all to implement: do not use insecticides outdoors unless there is a dire need, such as a hornet's nest over the front door. There are many better ways to deal with mosquitoes and ticks. What most people don't realize is that insecticides (such as sprays for adult mosquitoes) kill all insects, including fireflies, bees, butterflies, crickets, etc, and totally upset the natural balance between predators and prey that is necessary for a healthy garden and ecosystem. Outdoor chemicals in general have many unfortunate consequences for the environment, but the indiscriminate use of insecticides is the most immediately destructive.

Because what is good for them is good for the other inhabitants of our properties, fireflies are the symbol chosen for the Homegrown National Park movement led by famous entomologist Doug Tallamy. His concept is that if we all give sanctuary to fireflies, butterflies, and birds in our yards, it will add up to far more habitat than even the largest of our national parks. If you have been planting native plants, you can add your property to the map and demonstrate your care for the planet, starting right at home: <https://www.homegrownnationalpark.org/> ♦♦♦





photo by Jason Alexander

## CONSERVATION AT HOME: WAYS TO BE WATER WISE

by Lindsay Kraus, Master Gardener Volunteer

Summer decided to take winter's lead this year and make it a warm one! It's a great time to be reminded of one of the most important ways to practice conservation in the home garden by being water wise. There are ways to ensure our plants are happy and healthy while still being mindful of how and when we water.

### Soil Preparation

Preparing soil by amending it with plenty of compost and organic material is a great way to ensure it retains moisture. Compost improves the soil structure and improves soil's water holding capacity. To keep it from evaporating, an organic mulch (like shredded hardwood, grass clippings, or herbicide-free straw) about 1-2" thick will go a long way in this heat.

### Frequency

Watering deeply, but less frequently, is an effective way to encourage roots to dig deep to find water. Shorter, daily bursts of water keep soil roots closer to the surface. In turn, they dry out more quickly because that zone is more prone to evaporation. For containers: A good rule of thumb is never to let your container dry out. Many potting soils contain peat moss, which is hydrophobic (repels water) when dry. Water is retained better in potting mix that isn't completely dry. Soak it with water to the point of runoff, wait a few minutes until it stops seeping water, and then give it another deep drink.

### Timing

Watering in cooler temperatures allows water to penetrate deeper into the soil without as much evaporation. While watering midday might not harm your plants, it does evaporate very easily in the heat and you won't get the deep water you're looking for. Morning watering is best; this allows the sun to dry the foliage and prepares the plant for the heat. Evening is the runner up. While it's nice and cool at that time, it's also a good environment for disease to take hold and spread since the foliage will likely remain damp.

### Work with the Weather

In general, we aim for an inch of water per week in our gardens. Native plants will need a lot less, and squashes and tomatoes are going to need a lot more than that once they start putting on size. However, rain provides the deepest and most effective watering, so



*Inspiring Personal  
Responsibility for our  
Environment and Natural  
Resources.*

The Prince William Soil and Water Conservation District (PWSWCD or District) is focused on protecting and enhancing our water and soil resources by providing leadership in the conservation of soil, water, and related resources to all Prince William County citizens through technical assistance, information, and education.

**Services focus on:**

**Agriculture  
Youth Education  
Water Quality  
Home Owners**

[\*Learn more\*](#)

working with it makes our jobs easier! If you don't want to spend money on a rain gauge, a simple tuna can placed in the garden area can tell you everything you need to know. If it's full after a good rain, you're probably good to go.

**Irrigate**

If you have a large garden, a lot of water can be wasted by hand-watering or sprinklers. Irrigation that is set to a timer can provide efficient watering right at the soil level and can be dialed in to meet the needs of your soil and the plants living there. Some like to place it under the mulch to really get ahead of evaporation. Even rain barrels can be used to direct water to your garden. (Note: it's not recommended to use rain barrels for watering edible plants)

**Go Native**

Native plants have adapted to our region and need a lot less water than standard cultivars after their first year. Once established, the long roots of our native plants will seek and provide the water it needs. Of course, "right plant, right place" is as true in this instance as it has always been. A water-loving native goes great in your swampy areas and can actually help reduce runoff and pooling. In contrast, a medium- or dry-loving native will go great in those areas that don't receive a lot of water and they're not going to require a lot of watering (if any). Reducing your lawn (which has short roots and requires a lot of water) and replacing it with natives is one of my favorite ways to be water wise.

**Reduce Impervious Surfaces**

Impervious surfaces are causing runoff issues all over the world. When rain falls, it follows a natural path that will take it to a watershed, taking pollution in every form with it along the way. Reducing hard surfaces and replacing them with native plants that can help collect and redirect water into the soil is another way to be awesome and water wise.

**Resist the Rinse**

Hoses use a *lot* of water. Instead of rinsing your car off with a hose, use a bucket. Instead of rinsing dust and debris off your sidewalks and driveways, use a broom. Fill a watering can to reach your containers instead of spraying a hose. Collect rainwater in barrels or use buckets to collect excess rainwater.

**Water Wise Landscaping**

How you mow has a huge impact on how much water your lawn uses. Mowing turf high (3.5"-4") encourages longer roots and keeps them shaded, reducing evaporation. Or, plant a rain garden! They can be any size, and can be designed to include native plants that thrive in that environment. Plus, they're beautiful! ♦♦♦



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:**  
PURE GOLD-GREEN SWEAT  
BEE (*AUGOCHLORA PURA*)

by Jason Alexander, Master Gardener Volunteer

Despite their diminutive size, about 8mm long, *Augochlora pura*'s eye-catching green-gold iridescence gets them noticed. Found in eastern deciduous forests and close by fields, they emerge in the spring and remain active throughout the summer and into the fall. They are generalist pollinators, known to collect from 20 families of flowering plants.

On a hot summer day, they may live up to their common name, and pay you a visit for a sip of salty sweat, but please don't squish them! They are an important native pollinator. ♦♦♦



photos by Jason Alexander

Source:  
[University of Florida](#)





### 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 CLASSES / HELPDESK

**CLASSES** Virginia Cooperative Extension (VCE) hosts classes via zoom **Wednesdays, 11:00 a.m. to Noon, and in person at the Teaching Garden.**

For a schedule of classes, and to register, click: [Prince William County Cooperative Extension Horticulture Classes](#).

If you would like to receive alert notifications about our programs and classes go to: [www.pwcgov.org/pwcan](http://www.pwcgov.org/pwcan)

- Select “Stay Informed” PWC Alerts icon
- Sign up for **PWC Alerts**.
- Create your profile
- To receive notifications on our classes select “**Community Information**”

**QUESTIONS?** VCE Staff and Master Gardener Volunteers are working to answer your lawn and garden questions. Please contact the Horticulture Helpdesk by emailing [mastergardener@pwcgov.org](mailto:mastergardener@pwcgov.org) or call 703-792-7747.

*Help Support Master Gardeners Prince William  
(click to learn more)*



### Master Gardeners Prince William

Virginia Cooperative Extension  
Prince William Office  
8033 Ashton Avenue, Suite 105  
Manassas, VA 20109-8202

Phone: 703-792-7747  
E-mail: [Master\\_gardener@pwcgov.org](mailto:Master_gardener@pwcgov.org)  
Website: [MGPW.org](http://MGPW.org)  
Website VCE: [www.pwcgov.org](http://www.pwcgov.org)



FOLLOW US ON [twitter](#)



PLEASE  
PLACE  
STAMP  
HERE

-Send submissions, questions, or comments to

[MGPWnewsletter@gmail.com](mailto:MGPWnewsletter@gmail.com)

The Editors,

Jason Alexander & Maria Stewart, Master Gardener Volunteers