ESVMG Gardening on the Shore Fall, 2019

Message from the President

We are into fall on the Eastern Shore and are preparing our gardens for winter. Early fall had weather challenges, just as summer did. It started out dry but, within the last 2 weeks, we had a total of 3" of rain at my home on Nassawadox Creek! Plants like the soaking rains, but not the runoff. Luckily more, hopefully soakers, is forecast. Fall rain is very important for our trees and shrubs going into winter. Without it, we would not experience the brilliant colors we are about to enjoy.

ESVMGA has had many accomplishments so far this fall starting off with the best Plant Sale we ever had. Not only did we surpass previous sales, but through a generous grant from the Resource Conservation & Development Council (RCDC), we were able to give more than 500 native plants. For the first time in many years we have ordered tshirts with the ESVMGA logo. I will wear mine with pride, knowing that I belong to a great organization. There were 7 of us that attended Master Gardner College, my first. What a great experience! Then there was Farm Day, where ESVMGs demonstrated composting and helped to feed 475 3rd Graders. The 2019-2020 MG class has begun with 14 students. Each year's class entails a lot of planning & hard work, essential to our continuation. We had a major clean up at Parksley CSB Garden followed by a fantastic Symposium where approximately 90 people attended. We had many individual Milestone Accomplishments that will be acknowledged later in this newsletter. GREAT job ESVMGs!

Unfortunately, we lost a dear Master Gardener, Patsy Hand. We will miss her!

Currently, the 2020 budget and program review processes have begun. Both are essential to our financial and operational success. Thank you Officers, Leads, Volunteers & Interns for making my job as President easy!

Jim Crunk

IN THIS ISSUE

Feature Article

• Fall Foliage Color

Articles of Interest

- Fall Blooming Bulbs
- ESVMG Partners with Roads Scholars & Museum of Chincoteague

Member Spotlight

Gardener Tips

- Excerpt from Master Gardener Handbook: "Rain Gardens"
- Suggested Plants for Fall Interest
- Fall Gardening Tips

Congrats on 2018 Milestones Met

Garden Symposium – Big Success

Save the Date

Feature Article

FALL FOLIAGE COLOR – THE BASICS

by Paul Tiffany & Jane McKinley, ESVMG Master Gardeners



The turning leaves of deciduous trees and shrubs are a welcome sign of autumn and its longer, cooler nights. Vibrant reds, yellows, oranges and purples make up the color pallet of fall and are a defining part of the cyclical nature of the seasons.

But why do the leaves lose their green color? This is due to a number of factors including the presence of sunlight, temperature and rainfall. Chlorophyll makes leaves green which, in combination with carbon dioxide and sunlight, makes glucose, water and oxygen through the process of photosynthesis. Glucose is the food that makes the plant grow and thrive. Oxygen is released into the atmosphere for everyone's benefit. This is why plants are so important for the health of the Earth.

During the summer, the leaves continually manufacture chlorophyll to maintain an

optimal level of photosynthesis. As autumn approaches, the temperature and amount of sunlight decreases, nights get longer, and shorter, the reduced light triggers chemical changes in the plant. A "corky" cell layer called the abscission layer begins to form between the twig and leaf stalk. This slows nutrient flow to the leaf and readies the plant to close the wound after the leaf falls. Ultimately, scar tissue is formed, trapping glucose in the leaf which results in its decomposition to brown. The process of shedding its leaves is a brilliantly efficient one to prepare for dormancy as photosynthesis becomes less efficient and energy is no longer needed to manufacture chlorophyll molecules.

Before the leaf browns and falls, however, the natural decline in chlorophyll gives way to other pigments. Some pigments have been masked by the green of chlorophyll and others are manufactured with the onset of fall. The orange and yellow pigments of carotenoids and xanthophyll, as in carrots or egg yolks, are always present in leaves and begin to show up as the green pigment fades. Anthocyanins are a family of pigments that show as red and purple the red of sumac or the purple of sweet gum and dogwood – and are produced from sugars remaining in the leaf as the nutrient flow decreases. These colors are further enhanced with the bright light of fall.

The intensity of autumn color varies from year to year which, like the natural preparation for winter months, is influenced by the amount and timing of rainfall and sunlight and the temperature. A wet spring early in leaf development means they mature well into fully productive leaves. Drought in the spring or summer means the leaves are stressed and tend to shut down early in the fall with little or no color. Abundant sunlight and low temperatures towards the end of the growing season results in a more rapid development of fall coloration as the destruction of chlorophyll is faster. Frost, wind and rain will prematurely knock the leaves off the trees and limit fall color.

So, what conditions result in the optimum fall color display? A growing season with ample moisture that is followed by a rather dry, cool, sunny autumn accented by warm days and cool but frost-free nights provides the best weather conditions for development of the brightest fall colors.

And on a related note ... don't dispose of your fall leaves as they are a good overwintering place for beneficial insects and make excellent compost for the garden.



Articles of Interest

FALL BLOOMING BULBS

by Janet Rochester, ESVMG Master Gardener

Just when we are seeing the last of the summer flowers and are getting ready to prepare the garden for the winter, along come the fallblooming bulbs to brighten the flower beds for a few more weeks. Some of them have indicated their presence by their leaves during the summer but many flower without the leaves and surprise us.

This survey covers bulbs that flower anywhere from late August into November in our area. Actual flowering times vary depending on the conditions in each individual garden and variations in the weather. Some of my bulbs that usually flower in early- to mid-October were essentially over by the end of September. All are hardy in this area although some may need the warmest spot you can find.

Fall-blooming bulbs should be planted in late spring and summer, although some can be

planted later, and they will flower in the fall. They should be planted in good garden soil that has good drainage. If you are planting them in a new bed, dig it at least two inches deeper than the planting depth for the bulbs, adding compost as needed. If you are planting in an established garden, these bulbs will grow up through low ground covers, mulch or grass, just as the spring-flowering bulbs do.

Plant bulbs in groups, especially smaller ones, if your garden is big enough. Larger ones can feature as stand-alone focal points. Fertilize regularly so that you will have blooms year after year. Most of them do not require any more care and maintenance until the clump needs to be separated, and some do not like to be disturbed.

Here are some fall blooming bulbs well-suited for this area:

Amaryllis belladonna, Naked Lady – has clusters of large white or pink fragrant trumpet-shaped flowers on leafless stems in August. The leaves appear in early spring and then die back so the flower stems emerge alone from the soil. This Amaryllis should not be confused with the amaryllis that we buy for indoor flowering at Christmas, which are Hippeastrum.



Colchicum autumnale, Autumn Crocus – is the most common of the Colchicum species, all of which flower in bare soil with the leaves following the flowers and lasting into spring. Flower colors range from white to pink, rose, lilac, and violet, and can be single or double. They will grow in grass, (the ones at the CSB garden come up year after year) as long as cutting is limited while the leaves are present.

Belamcanda chinensis, Blackberry Lily – has foliage that looks rather like that of gladioli, and has stems with numerous orange flowers with dark spots. Each flower lasts only a day, but the many flowers bloom in succession, followed by clusters of black seeds that look like blackberries. If left undisturbed, they will form large clumps.

Crocus sativus, Saffron Crocus – has light purple flowers that appear with the leaves. The long orange-red stigmas are the source of saffron, long used in medicine, cooking, and as a dye. Other fall-blooming Crocus species are C. longiflorus, with scented flowers from October to December, and C. speciosus, with

lavender-blue flowers in October.

Cyclamen hederifolium – has pink or sometimes white flowers with a darker eye with dark green or various shades of green foliage. The flowers last from late summer into fall and will set seed that you can use to make more plants. Cyclamen will grow in shade, in rich well-drained soil with a high organic matter content. C. mirabile, C. cyprium, and C. europaeum also bloom in the fall; C.europaeum with fragrant red flowers.



Lycoris radiata, Spider Lily – usually has bright red flowers, although other colors are also available, on bare stems. The long anthers resemble spider legs. It will naturalize and form large clumps and is best left undisturbed after planting. The group shown in the picture were growing in almost complete shade.

Lycoris squamigera, Magic Lily – has rose-pink flowers on bare stems. The leaves appear in the spring and die back in the summer. It will form clumps if allowed and is happy in most soils. Both Lycoris species grow well here although L. radiata is less hardy. They may take more than a year to settle in a new location.

Member Spotlight: Janet Rochester



Janet grew up in a rural area of England. Her parents enjoyed life in the country and ensured that she and her sister learned about plants and

animals and each had garden of her own where they could grow the plants they liked.

Janet has a degree in Botany, but also studied Chemistry and Geology. She taught high-school Chemistry in London and in New Jersey, before switching to a career in scientific writing and editing. Her career ended as a radar systems engineer working on radar systems for the US Navy.

After retirement, Janet and her husband moved from Southern New Jersey to the Eastern Shore, where she became a Master Gardener. She wanted to learn about gardening in the new environment of the Shore and to share her love of plants and the outdoors with others. She worked with the Ker Place herb garden for several years and in 2011 was one of the leaders of the new CSB garden project. This project has grown and expanded over the years but continues with the basic aim of giving the CSB clients an opportunity to get out into the garden, grow vegetables, interact with others, and learn about plants and gardening.

Janet also volunteered as a literacy tutor, learned to kayak, read more books, and spent time painting.



Sternbergia lutea, Yellow Autumn Crocus – has brilliant yellow flowers that resemble crocuses. They like full sun and well-drained soil. The leaves appear just before the flowers and continue into spring. Winter mulch may be needed in the coldest locations of our region, but otherwise they flourish and multiply with minimal attention.

These genera have some late-blooming species or varieties – **Crinum, Crocosmia, Gladiolus, and Lilium**. All should be hardy in our area in a sheltered spot. All have leaves that last through the season, so they are not the surprise of the crocuses.



ESVMG PARTNERS WITH ROAD SCHOLAR & MUSEUM OF CHINCOTEAGUE

It began with a neighborly chat and ended with the ESVMG guiding Roads Scholar service project volunteers to build a rain garden at the Museum of Chincoteague. When the directors learned that Bob Shendock was a Master Gardener and interested in supporting community outreach at the museum, they made a proposal to get our unit involved in supporting their goal to create a learning lab for environmental barrier island education. And it fit beautifully with the Master Gardener's goal to encourage and promote environmentally-sound horticulture practices through sustainable landscape management.

Our first project was held in the spring with an educational program on native plants for the Roads Scholar volunteers and community and a native plant sale open to the community. The sale was a big hit and sold out in the first hour! Volunteers were also involved in replanting the museum grounds with native plants along with labeling those plants.



Removing the existing plants

The fall project included a "Rain Garden: Design, Construction and Maintenance" presentation along with actual construction of a rain garden at the museum. The presentation began with the explanation that a rain garden is "a functional landscape element to manage storm water collection, filtration, infiltration and/or discharge." The elements of a rain garden, including inflow, ponding area, mulch, soil and plant layers and an overflow feature, were discussed. General location considerations, such as a recommendation of 10' or more distance from a building foundation were presented. And adaptations required to accommodate the location at the museum were discussed - since water gushing off the roof had to be captured close to the foundation, consideration had to be given to effectively moving the water away from the building and protecting the sides from backsplash. Rain garden construction tasks including excavation, framing installation, soil amendments and construction of an outflow system were listed. These tasks were used as a plan for the work to be performed at the museum throughout the week.



Depth must be 13"

The overall goal of this Roads Scholar service-learning project was to work at the Chincoteague National Wildlife Refuge and the Museum of Chincoteague Island to help conserve the islands' wildlife, habitats, history and culture. Volunteers assisted with a variety of projects ranging from cleaning out barbed wire from Assateague island, to preserving the Chincoteague lighthouse and, of course, to work at the Museum on the rain garden project. Volunteers rotated throughout the various projects daily, each having an opportunity to participate in a variety of service work as well as experience the beauty of the Virginia barrier islands and its wildlife. With tis overall

goal in mind, Road Scholar volunteers selected this program for a variety of personal reasons.

Barry, from the Shenandoah Valley of Virginia, was curious to learn more about the design of a rain garden since his background is in engineering. Jim & Mellanie were following their commitment to be involved in nature which, at their home in St. Louis, includes volunteering in a Monarch butterfly collection and tagging project. Cynthia, from West Chester, PA, wanted to learn more about the Eastern Shore of Virginia and about the rain garden project since she has had some exposure to the principles of stormwater management as a volunteer at Longwood Gardens. Linda, from The Villages in Florida, wanted to see the ponies. Madeleine from Minnesota wanted to be involved in service-learning and wanted to experience a new area of the country. Don from Richmond, VA came along with friends to try something new. And Gene & Dale from Chesterfield, VA, impressed with all the offerings in the Roads Scholar catalog, picked this one due to its relatively close proximity. But, whatever their personal reasons were for signing up, they all left the week with a lot of in-depth knowledge about how to build a rain garden. And there were probably some sore muscles, to boot!

Thanks to Bob Shendock for his many hours spent planning, coordinating and leading the project. And thanks to Jocelyn Grover for her leadership at the site and to Claude Taylor, Joyce Almond, Marianne Francavilla and Victor Klein who provided guidance to the Road Scholars.



Excavating under the sidewalk for the outflow



Many wheelbarrow loads of soil had to be removed.



Amending the soil with compost



Successful construction/installation of the first rain garden. A 2nd rain garden is planned for 2020.

Gardeners' Tips

EXCERPT FROM MASTER GARDENER HANDBOOK

With Eastern Shore Master Gardeners becoming "experts" on the basics of building a rain garden, as evidenced through the instructions given to the recent Roads Scholar participants at the Chincoteague Museum, we are reminded of the guidelines provided in our Handbook.

Rain Gardens

Aa rain garden (bioretention) is a shallow landscaped depression that filters polluted stormwater before it evaporates, evapotranspires through the plants, or percolates through the soil into the groundwater. water infiltration. At least five percent of the impervious area should drain into the rain garden to make it worth doing cost and labor wise. The depth of a rain garden is approximately six inches. Usually they are dug and graded deeper, 13 – 24 inches, because

Basically, imagine a landscaped puddle. A rain garden has three planting zones (high, middle & low), with low being wettest and longest. Runoff

What size should the rain garden be?

To calculate the area needed for a rain garden, divide the number of square feet of impervious surface draining into it by 20. (This calculation assumes all surfaces are 100% impervious.)

organic matter is added, plant root balls displace soil, and mulch is added to the top which all raise the level. The gardens can be

should move out of the rain garden within four days. If drainage is poor, then aeration or an underdrain or dry well can be used to improve placed at any point along the runoff pathway. One large rain garden or several small ones connected together can be used depending on the available space and landscape design. Always plan for an overflow event. Many rain garden plant lists recommend using natives. Plants should be spaced so that the canopies touch and provide a solid cover to prevent weeds. They generally establish quickly and need to be divided about every 3 years. Mulch should be added sparingly after the establishment period, because adding it every year will raise the level and the garden will not hold enough water to be effective. After establishment, maintenance is minimal and manly involves removing invasive weeds, tree seedlings, trash, and debris. The most comprehensive resource for residential or small-scale rain gardens in Virginia is the rain Gardens Technical Guide from the Virginia Department of Forestry. Larger rain gardens that are used for commercial sites are typically engineered and often include underdrains if underlying soils have low infiltration rates. These larger rain gardens are known as "bioretention systems."

From Master Gardener Handbook Chapter 19, "Stormwater Best Management Practices"

SUGGESTED PLANTS FOR FALL INTEREST

The following plants are listed in "<u>Fall Landscaping Hints</u>" from Virginia Gardening magazine and from "Native Plants of Accomack and Northampton" and offer beautiful fall blooms and/or leaf color:

Japanese Maples	American Beauty-berry (native)
Fothergilla	Black Haw Viburnum (native)
Anemone	New York Aster (native)
Sedum 'Autumn Joy'	Toadlily
Fall blooming crocus	Seaside Goldenrod (native)
Witch Hazel (native)	Ornamental Grasses (some native)
Sweet Autumn Clematis	Virginia Sweetspire (native)

"Autumn is a second spring when every leaf is a flower."

Albert Camus

FALL GARDENING TIPS

Do weeding and mulching in the fall to reduce the amount of work required in the spring. Avoid creating "mulch volcanoes" which are piled up mulch around the base of trees, covering the root flare.

Add chopped leaves to your compost pile (which increases the amount of carbon, a valuable ingredient to "cook" the mixture) or use them as mulch in the garden beds.

Plant trees, shrubs and perennials to give their roots plenty of time to get established before the hot and dry summer conditions kick in.

Leave dried seed pods on your plants to feed the wildlife that visits your garden during the winter.

Wait until healthy plants are dormant to prune. Pruning too early can promote vigorous re-growth which won't survive the winter months.

Plant cool-season vegetables such as broccoli, kale, lettuces and radishes. Remember to keep the beds well-watered to promote germination and keep seedlings healthy.

Establish a new lawn (go minimal) and fertilize existing cool season turfgrasses (bluegrasses, fescues and ryegrasses).

Divide spring and summer flowering perennials which need thinning every few years. When doing so, look for problem areas that need to be removed. Share your excess!

Plant bulbs for spring color.

Monitor moisture, especially for newly planted trees and shrubs. Continue to maintain $1 - 2^{"}$ of water weekly if temperatures are above freezing.

Congratulations on 2018 Milestones Met

The following ESVG members achieved milestone awards for total hours volunteered in 2018:

250 Hours

- o Diane D'Amico
- o Jim Crunk
- o Lorna Gagneux
- Doris Gebel
- o Laura Mays
- o Jane McKinley

<u>500 Hours</u>

- o Jennifer Alley
- o Ron Allison
- o Ralph Lasher
- Bob Shendock

1,000 Hours

- o Phil Goetkin
- o Steve Rulison

Please be sure to record your hours in the VMS system so that you and ESVMG will get credit for all the hard work volunteered. Total hours for every unit are reported to Virginia Cooperative Extension, and we want to shine! And, more importantly, this recognizes you for the valuable time you have given to stay certified and to achieve the Master Gardener mission here on Virginia's Eastern Shore. We must volunteer a minimum of 20 hours and get 8 hours of continuing education per year.

2019 Garden Symposium – Big Success!

The 2019 Garden Symposium, held on October 19 at the Cheriton Firestation, was a big success. Well attended by our own Master Gardeners as well as Master Gardeners from across the bay and other interested gardeners, it was a robust event. Registrants began arriving at 8:00 am and were offered coffee, tea, fruit and pastries to help get them going. The program began shortly thereafter with a welcome by Jim Crunk, President, and Diane D'Amico, committee chairperson extraudinaire.

The symposium featured entertaining and inspiring presentations by three knowledgeable speakers whose inter-dynamics added an unexpected dimension to the day. The morning kicked off with Dan Benarcik, of Chanticleer Gardens, who in his talk "Making Your Garden Your Own, "gave inspiration on how to extend one's personality into the garden through the use of garden furniture, ornamental containers and floral container combinations. His presentation on "Foliage First" demonstrated how to use foliage as a vitally important part of the garden and landscape and offered inspiration on ways to incorporate a strong foliar background to carry the garden.

"I just wanted to take a moment to thank each and every one of you for the incredible Symposium event. That took so much organization, coordination, [and] follow-up ... Our association is so lucky to have a group of dedicated MGs like yourselves. The speakers were outstanding. Judy Kinslaw-Ellis, an MG from Williamsburg, attended and raved about the quality of the speakers. The giveaways were delightful and the whole thing was truly enjoyable. Many many thanks to all of you."

> Lorna Gagneux, ESVMG Master Gardener

Brie Arthur devotes her expertise to promoting the hobby of home gardening and, among other accomplishments, was the recent recipient of the American Horticultural Society's Emerging Horticultural Professional Award for her efforts in connecting a new generation to the art of growing. In her presentations on Foodscaping with Perennials and the Foodscape Revolution, she taught us how to create a purposeful outdoor space using a combination of native plants, her favorite perennials and seasonal food crops. These combinations were designed to create beauty, pollinator activity and yield – whether it be flowers or vegetables – and were all cultivated in her small suburban garden.

Marie Butler, from the floriculture greenhouses and design studios at NC State to the wilds of the Virginia Zoo in Norfolk, delighted the audience with her experience working alongside zoo animals while giving practical advice on "Plant Selection: Where Design Becomes a Garden."

In addition to receiving a bounty of inspiration, participants had the opportunity to participate in a raffle that offered loads of goodies from a birdhouse built by Ralph Lasher to carved birds by Paul Tiffany to a kayak trip for two and many specialty baskets. Door prizes were also given out and a lively impromptu lunch of pizza from Gerry's Ristorante on Langford Hwy outside of Cheriton was enjoyed by everyone.

Thanks to Diane D'Amico and her committee consisting of Jennifer Alley, Kim Fehrer, Joanne Fitchett, Jocelyn Grover, Doris Lajoie, Jane McKinley and Lynn Wadja and to the raffle contributors, the Cheriton Fire Department and Gerry's Ristorante (who saved the day with preparing 25+ pizzas in one hour!).

Save The Date

"Rain Gardens – Design, Construction &
Maintenance" presentation at the Museum of
Chincoteague Island, part of their 'Tuesday Night
at the Museum' series.
Executive Board Meeting
Master Gardener Class: Water Conservation,
Herbaceous Plants, Pruning
Master Gardener Class: History of the ES Water
Supply, Habitat Gardening for Wildlife
Master Gardener Class: Pathology
Annual Meeting & Holiday Luncheon

Refer to the Volunteer Management System calendar for more details and ESVMG Garden work schedules.

2018 ESVMG BOARD MEMBERS

President – Jim Crunk Vice-President – Bob Shendock Secretary – Cathy Mikel Past President – Phil Goetkin Member at Large (Accomack) – Victor Klein Member at Large (Northampton) - Paul Tiffany

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