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Shenandoah Valley GARDENING

Newsletter of NSVMGA, the Northern Shenandoah Valley Master Gardener Association

In This Issue…

County Helpline Contacts

Clarke County 540-955-5164
NSVMGA.info@gmail.com
(include "Clarke County Gardening Question" in the subject line)
Frederick County 540-665-5699
GreenHelpLine.FrederickCo@gmail.com
Page County 540-778-5794
NSVMGA.info@gmail.com
(include "Page County Gardening Question" in the subject line)
Shenandoah County 540-459-6140
greenhelpline@gmail.com
Warren County 540-635-4549
GreenHelpLine.WarrenCo@gmail.com

Northern Shenandoah Valley Drinking Water Testing This Month

Virginia Cooperative Extension is offering Northern Shenandoah Valley residents the opportunity to have their water tested in October. The Drinking Water Clinics give people with private water systems access to affordable water testing, help to interpret their water test results, and provide information about treatment options.

The water testing covers 14 common contaminants, including iron, manganese, sulfate, hardness, sodium, copper, nitrate, arsenic, fluoride, pH, total dissolved solids, coliform bacteria, E. coli bacteria, and lead.

Participants collect a sample from their tap at home, complete a short questionnaire, and drop off their sample at the designated location and time for their county. (Physical distancing and masks are required.)

The cost for the sample analysis if $60. A limited number of financial scholarships are available on a need-based request. Scholarships allow participants to pay $20 per sample. They are awarded on a first-come, first-served basis and are limited to one per household. Please contact the Virginia Cooperative Extension Frederick County Office to inquire at (540) 665-5699.

For more information about the water testing program contact your Extension County Helpline (shown at left).

Space is limited and pre-registration and pre-payment is required by Wednesday, October 14.

To register on-line: https://register.ext.vt.edu/search/publicCourseSearchDetails.do?method=load&courseId=1324208

Volunteer Coordinator Message

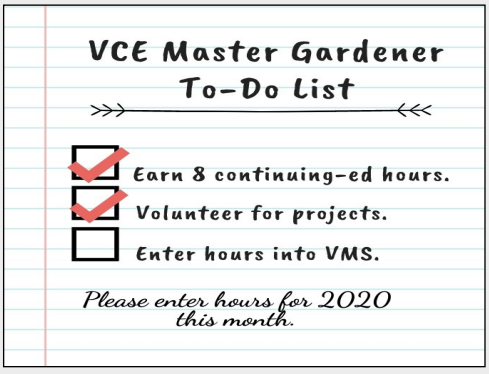
Stacey Morgan Smith

As the year grows cooler, our Extension Master Gardeners and Interns are finding ways to serve their communities during COVID-19. While we have few programs with face-to-face public interaction, we're working behind the scenes to answer gardening questions, teach our communities and volunteers, and adapt some of our events. You'll see more info on our website and Facebook page.

One program you'll hear about soon is an adaptation of our very popular Seed Exchange held at Blandy Experimental Farm. While we're unable to hold our event this January, we still want to share seed with our communities, so we're setting up seed lending libraries throughout our five counties. We hope to have these lending libraries in many places you visit. They'll provide you with free seed to "borrow," grow, try saving, and "return" at the end of the season. If you have excess seed on hand you'd like to donate toward this project, please email us at NSVMGAnews@gmail.com. If successful, we'll continue the seed lending libraries and plan to see you at the 2022 Seed Exchange at Blandy!

Good news! We have three new Extension Master Gardeners in our unit, graduates of the Intern Class of 2020: Mike Korrigan in Shenandoah, Joan Newman in Clarke, and Joanne Royaltey in Frederick. We'll recognize our new EMGs in person in 2021.

A reminder for our volunteers: please record your continuing-education hours in VMS. (While the volunteer-service hours requirement is lifted for 2020, please still record any time you have.)



A Farewell Message From President Bob Gail

My two-year term as President of the Northern Shenandoah Valley Master Gardener Association will end with the November Association meeting. Thank you NSVMGA members for allowing me the privilege to serve as your president. The truth is, the job is easy when you are surrounded by talented and dedicated people like I have been during my term. I am grateful for the outstanding support I received from other Board members, Volunteer Coordinator, County Coordinators, Committee chairs, project leaders, the general NSVMGA members, and the Virginia Cooperative Extension office. Many thanks to all of you!

My hope for the Association going forward is that the pandemic ends or is controlled in early 2021, permitting us to once again focus on our projects and activities and to have in-person monthly meetings.

Again, thank you my Master Gardener family!

Bob

Autumn

When the trees their summer splendor
Change to raiment red and gold,
When the summer moon turns mellow,
And the nights are getting cold;
When the squirrels hide their acorns,
And the woodchucks disappear;
Then we know that it is autumn.
Loveliest season of the year.

Charlotte L. Riser

Lightning Bugs* Kris Behrends

*Or do you call them fireflies? I grew up in Illinois, and we called them lightning bugs. I did not realize they were the same insect.

According to Mark Abadi (https://www.businessinsider.com/firefly-lightning-bug-english-language-map-2018-7), folks living in the West and New England call them fireflies, while Midwesterners and Southerners use the term lightning bugs.

Whatever you call them, they are actually beetles and members of the Lampyridae family. Lampyridae comes from "lampein," which in Greek means to shine. Most of them are winged as opposed to glow-worms.

An adult firefly in the daytime. *Photo by Nathaniel Walton, PhD, MSU Extension*

Lightning bugs are nature's sparklers. How many of you as children (or even as adults) were excited when nighttime came, and little lights blinked on and off in the yard? How do they shine their light? They have light organs beneath their abdomens. Oxygen is mixed with a pigment called luciferin to generate the light, and very little heat is produced. This light is efficient—in fact, it is the most efficient in the world! Almost 100% of the chemical reaction's energy becomes light. The color of the light may be either green, yellow, or orange. Would you believe that some lightning bugs can synchronize their flashes? Take a trip to the Great Smokey Mountains of Tennessee in the first few weeks of June to see this display.

The blinking is a pattern that is unique to each species and helps them attract mates. Typically the male flies through the air looking for a female by blinking in a species-specific flashing pattern. Some flash once while others may flash up to nine times. The females hang out on the ground watching the light display. If they are interested, they will flash their light once, timed to the male's flashes.

While their light induces romance, it can also warn off predators. Their blood contains a defensive steroid called lucibufagins, which makes them unappetizing. Once a predator bites the insect, they will associate the light with the taste and not attack after that.

Be thankful when you see lightning bugs: They are on the decline due to light pollution and loss of habitat. When their habitat is lost they do not relocate, and disappear. What can you do to help their population? Turn off outside lights at night, do not clear out logs and litter from under trees (gives the lightning bug larvae a place to grow), create water features in your landscape, avoid use of pesticides (especially lawn chemicals), do not over mow your yard (lightning bugs stay on the ground during the day and prefer to live in long grasses), and plant native trees. When I first moved to my property, it was a blank slate and I did not see lightning bugs. However, over the years I have planted native trees and shrubs and am now thrilled to see more of nature's little sparklers!

Would you like to learn more about lightning bugs or, if you prefer, fireflies? Please check out https://www.firefly.org. It is a very informative site!

References: https://www.pestworld.org/news-hub/pest-articles/the-science-behind-fireflies/

https://www.firefly.org

https://news.ncsu.edu/2019/07/how-fireflies-glow-and-what-signals-theyre-sending/

Off the Beaten Path: Norfolk Botanical Garden

Elaine Specht

Norfolk Botanical Garden (NBG) began as an idea conceived by then Norfolk City Manager Thomas P. Thompson in the late 1930s. Although the garden was designed by Frederic Heutte, it was 200 African American women and 20 African American men who, as part of a Works Progress Administration (WPA) project, transformed the swampland into the initial Azalea Garden. By 1941, there were 5,000 azaleas, 75-landscaped acres, and five miles of walking trails. Despite their role in creating the garden, the workers who brought it into existence were not able to go as visitors until decades later. Their contribution is commemorated at the WPA Memorial Garden that is one of more than 15 display gardens at NBG.

photo by Elaine Specht

Today, everyone is welcome to view the gardens, which have expanded to 175 acres and 12 miles of pathways. In addition to display gardens, NBG also has 10 garden areas focused on learning, including a wildflower meadow, native plant area, butterfly house, and a children's garden. The Potager Kitchen Garden (see photo), which is planned and maintained in partnership with the Norfolk Extension Master Gardeners, demonstrates ecologically-sustainable horticultural practices.

An unusual feature of the garden is its proximity to Norfolk International Airport, another WPA project built in tandem with the gardens. There is a walkway that leads directly to the airport and a viewing platform for watching inbound and departing planes.

Fall is a great time to visit. Camellias are in bloom, the berries of hawthorn trees and hollies are turning red, and beautyberry shrubs are showing their purple berries. Norfolk is Zone 8a, a climate that enables the garden to contain plants we can only dream of in the Shenandoah Valley.

Although boat tours have been cancelled for 2020, the rest of NBG is fully open. Capacity is limited for the gift shop, café and tram. Admission tickets should be purchased online in advance. Face coverings are required in buildings and in the gardens if six feet of distance cannot be maintained. Visit NBG's website at https://norfolkbotanicalgarden.org for hours and additional information.

Not ready to travel yet? No problem. Explore NBG's virtual tours online at https://norfolkbotanicalgarden.org/explore/virtual-tours/.

Strasburg Community Garden Volunteer of the Year

Mark Sutphin

The Lord Fairfax Soil & Water Conservation District selected Extension Master Gardener **Kathy Doyle** as the Strasburg Community Garden Volunteer of the Year. Congratulations!

The Commonwealth of Virginia supports Lord Fairfax Soil & Water Conservation District through financial and administrative assistance provided by the Virginia Association of Soil and Water Conservation Districts and the Department of Conservation and Recreation. Funding is also provided by Clarke, Frederick, Warren and Shenandoah Counties. http://lfswcd.org/

Kathy is hard at work at the Children's Garden at the Strasburg Community Garden in the Strasburg Park. Birdhouse gourds are hanging from a trellis.

photo by Mary Jane Corrigan

Looking for Heirloom Seeds and Stories

Elaine Specht

A family in South Carolina has been saving seed from a type of watermelon since the 1840s. Known for its sweet juiciness, people come from miles around to enjoy a Bradford Watermelon. Despite its popularity, it is unavailable in the grocery store as it doesn't transport well.

The Bradford Watermelon is what's known as an heirloom plant. The Biocultural Conservation Farm (BCCF) at the Oak Spring Garden Foundation located in nearby Upperville, VA, is helping to preserve heirloom plants and stories. Part of the goal is to highlight food crops that have been woven into the history and traditions of our region—either as seed or live plants—and to share the stories behind them. Caitlin Etherton, a farmer at the BCCF at Oak Spring Garden Foundation, explains that the organization "is growing and saving fruit and vegetable seeds that are special to our region, including heirlooms, heritage crops, and native species."

Are there seeds *you* save from edible plants that have been grown in your family for generations? Or, edible plants you harvest from the woods or meadows that appear to be native to those areas? If so, staff at BCCF at the Oak Spring Garden Foundation wants to hear your story and help save those seeds and plants to preserve the biological diversity of our food supply. Etherton says that BCCF "is always looking to expand and diversify our seed saving garden in order to help protect rare and beloved local heirlooms."

If you have heirloom seeds, stories, or native plants that you'd like to see preserved for posterity, contact Caitlin Etherton at (540) 592-3157 or caitlin@osgf.org. www.osgf.org

Open the Gate to Your Garden

Gail Fowler

Do you have a favorite home gardening activity that you would like to share?

Curious gardeners want to know.

Maybe it's your September seed-saving operation, a winter garden, an indoor plant collection or an heirloom vegetable garden.

Beginning in January, **Home Turf** will be a new tab on http://nsvmga.org/ featuring EMGS or interns at work in their garden, greenhouse, porch or shed. A new story will be published every month, showcasing gardening as a year-round activity.

You only have to raise your hand and be interviewed to earn volunteer hours for sharing your story. EMG intern Gail Fowler will do the writing and photography. Who's in?

Email Gail at gafowler17@yahoo.com or call (908)303-7109.

photo by Ginny Smith

Who Was Rachel Carson? Joyce Watson

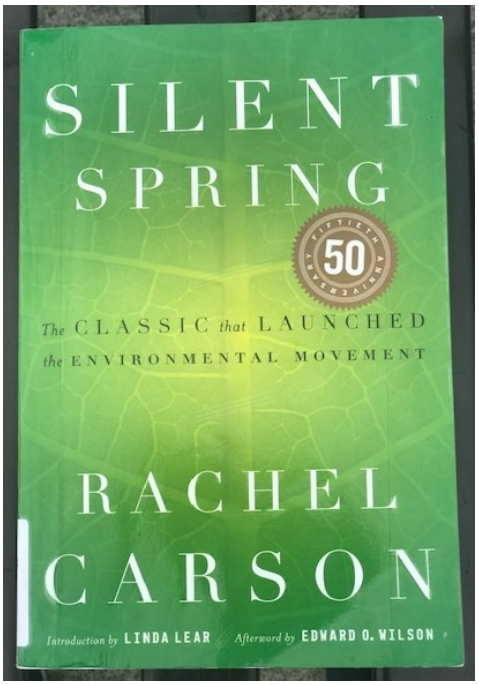


photo by Joyce Watson

Rachel Carson was a world-renowned marine biologist, author, environmentalist, and former U.S. Fish and Wildlife Service employee. She is credited with creating a public consciousness about the use of chemicals, warning that their improper use would have devastating effects on public health and the environment.

June marked the 50th anniversary of the Rachel Carson National Wildlife Refuge (NWR) located in Maine. The renaming of the refuge took place on June 27, 1970. Originally established in 1966 as the Coastal Maine National Wildlife Refuge, it spans 50 miles of coastline and hosts a habitat for plants and animals not found elsewhere in Maine.

Carson's writing expressed her thoughts and scientific findings in an eloquent way. She wrote for the general public rather than the scientific community. She was the author of four books: Under the Sea – Wind, The Sea Around Us, The Edge of the Sea and Silent Spring.

In 1958, Carson began her exhaustive research on the effects of widespread pesticide use for her final book entitled Silent Spring. Overcoming industry and government pressure to abandon her research, Carson put together a flawless case showing how the world's most powerful chemical companies were harming animals, plants, and people. Silent Spring was published in 1962, just two years before her death in 1964 at the age of 56 from breast cancer.

With the publication of this book she set into motion a course of events that would result in the ban of DDT. She testified before a congressional committee that one of the most basic human rights must surely be the "right of the citizen to be secure in his own home against the intrusion of poisons applied by other persons." She asked for an end to reckless endangerment due to using broad-spectrum pesticides. Instead she recommended precise solutions based on science and environmental knowledge.

For more information, visit https://www.fws.gov/refuge/rachel_carson/
https://hbr.org/podcast/2020/03/real-leaders-rachel-carson-seeds-the-environmental-movement
https://rachelcarsoncouncil.org/

Overwintering Perennial Container Plants

Will Daniels

As Robert Frost said to his apple trees, "Good-by and keep cold." Wait--isn't the wish supposed to be to avoid cold as much as possible? Nope, cold is a friend to perennial plants that need to shut their systems down and toughen up so that they can hunker down until time to grow again in spring. Frost maybe exaggerated when he also said to his apple trees, "Dread 50 above more than 50 below." But he was on target that emerging too soon from dormancy could be bad—blossoms killed by later frosts, poor fruit production, injured branches. (See a good explanation of chilling hours that plants require at https://www.canr.msu.edu/news/winter_dormancy_and_chilling_in_woody_plants.)

The first point to stress when talking about overwintering plants in containers is not to be overly protective. Plant experts tell us to wait at least 30 days after the first frost to take action. Give the plant time to respond to shorter days (photoperiod) and cooler night temperatures by dropping its leaves and producing chemicals that enable it to toughen its buds and other meristematic tissue, such as roots. Several months before this point, you should have stopped fertilizing and pruning the plant to avoid tender growth being damaged.

Winter protection is mostly about roots, which are less hardy than stems above ground. It's easy to understand that containers offer a lot less insulation to plant roots than the ground does. Still, you might not have to do much to protect your container plant if it has enough hardiness—two USDA zones hardier than the one it lives in. For example, a lance-leaf stonecrop (*Sedum lanceolatum*) is hardy to zone 4, so it should survive well in our zone 6. An English lavender (*Lavendula angustifolia*) is hardy to zone 5, so it may need protection—although last winter it would have been fine. Large pots will protect roots better than smaller ones.

Many of our gardeners like to raise not-quite hardy perennials in containers, the zone 7 and 8 plants like camellias and lantanas. These plants must, of course, be protected over winter. True tropical plants will need a greenhouse or conservatory.

The decision of whether, or how much, to protect the plant also depends on how well established the plant is in its pot. Mature roots are a good deal hardier than immature ones. If the plant is in its first year, the smart thing would be to insulate it from the cold regardless of its hardiness rating. Overall, the goal is to enable your plants to avoid freezing and thawing, since that will be more stressful to the plant than freezing alone.

How should you go about bedding your plants down for the winter? There are many ways to do it. The simplest would be to store plants in an unheated garage or shed after they have hardened off. Next, it might be practical to sink smaller containers right into a spot in the garden. Spread a layer of gravel in the bottom of the hole for drainage, make the top of the container about even with the ground, and don't leave any space at top for water to collect. Mulch the top if mulching is recommended care for the plant (this is done to protect feeder roots close to the surface). Dig up the plant in early spring when growth has just started, preferably before heavy rains arrive.

You might simply encase the pot in bubble wrap or burlap covered by plastic. If you have a number of plants to protect, make an insulating and wind-shielding wall around them with straw bales or bags of leaves. The less hardy plants would go in the middle. You can insulate between the pots as well, with straw or shredded leaves. Large wire cages also work well as enclosures. Keep the containers away from bright sun and winds, on the north or east side of the house. Protection against sun and wind is especially important for evergreens, the foliage of which dries out quickly, as is regular watering if the pots get dry, for both evergreen and deciduous plants.

A last point to mention is which containers are best for overwintering. Terra cotta and other clay pots are great for three seasons, but since they tend to absorb water, they can crack apart from winter freezing and should be stored empty, in a garage or shed if possible. I don't know whether burying the pots will prevent them from cracking; it's something to experiment with. Concrete pots, especially thin-walled ones, may also crack as the soil expands against the walls. Containers made of plastic, fiberglass, and wood are safe bets to last the winter.

Additional references:

https://ag.umass.edu/landscape/fact-sheets/overwintering-container-grown-ornamentals
https://ag.umass.edu/landscape/fact-sheets/effects-of-cold-on-landscape-plants
https://content.ces.ncsu.edu/preparing-nursery-plants-for-winter
https://extension.psu.edu/overwintering-plants-in-containers
"Good-by and Keep Cold," by Robert Frost. https://www.poetryfoundation.org/poems/44265/good-bye-and-keep-cold

Fall Tips: Native Plants for Winter Interest and Wildlife

Elaine Specht

Soon enough, the bright oranges and reds of turning leaves against a deep blue sky in fall will give way to more muted browns and grays in winter, but that doesn't mean your garden needs to be drab. There are all kinds of plants that will bring winter interest to your landscape, many of which are native to our region and beneficial to wildlife. Even better, the fall season is the perfect time for planting.

Bark: Winter interest can come from exfoliating or colorful bark, which is exposed once the leaves drop, such as the older branches of ninebark (*Physocarpus opulifolius*) shrubs, which exfoliate to reveal lighter shades beneath, or the peeling, papery bark of river birch (*Betula nigra*) trees.

Fruit and Seeds: Berries add a pop of color while also providing food for birds and small mammals. The flowering dogwood (*Cornus florida*) and several native viburnum species as well as the evergreen American holly *(Ilex opaca*) and deciduous winterberry holly (*Ilex verticillata*) all have colorful berries throughout winter. Be sure to plant both male and female holly plants in order to have berries. The seed heads of perennials such as purple coneflower (*Echinacea purpurea*) and New York Ironweed (*Vernonia noveborascensis*) are more pleasing to the eye than a barren landscape, plus they serve as another food source for birds throughout the winter.

Shapes: Think about interesting shapes, too. *Fothergilla* shrubs with their zig-zag twigs and red twig dogwood or red osier (*Conus sericea*, see photo) and its cultivar sister, the yellow twig dogwood, all create attractive silhouettes while offering essential hiding places for birds and small mammals. Although not a plant, you can place interestingly shaped stumps in your garden beds to provide homes for insects and salamanders.

Check out these resources for related articles and more ideas about planting native and habitat friendly plants to add winter interest to your garden:

Master Gardeners of Northern Virginia
NC Cooperative Extension
Clemson (SC) Cooperative Extension
PennState Extension

Red Osier
photo by Elaine Specht

The Tale of Two Hellebores

Lesley Mack

Someone asked me about native hellebore. (hel-eh-BORE-us)

I thought how wonderful if there really was a native hellebore to add to my hellebore collection. Turns out there is, but it is *highly* toxic! Like…

"**Warning:** POISONOUS PARTS: All parts. Toxic if eaten in large quantities. Symptoms include burning of mouth and throat, salivation, headache, stomach pain, vomiting, diarrhea, weakness, sweating and convulsions. Toxic Principle: Steroidal alkaloids. (Poisonous Plants of NC.)" [1]

Akos_Kokai_Attribution_2.0_Generic_CC_BY_2.0_ Veratrum_viride, Photo by NC State Extension

Veratrum viride, aka Green False Hellebore, False Hellebore, Indian poke, Corn Lily, Green Corn Lily, Indian Hellebore or Giant False Hellebore, is a native to eastern and western (not central) North America. It is from the Lily Family.

Veratrum viride, a toxic native plant, can be found in wet soils, in meadows, on sunny stream banks and open forests. It is a stout plant with large deeply veined, ribbed leaves that clasp (or wrap around the stem) and bears a branching cluster of yellow-greenish, star-shaped, hairy flowers that bloom summer through fall. The three-quarter inch blooms appear on the branching stems, which grow to 24 inches long.

You can purchase *Veratrum viride* from some nurseries. In my research, I read some blogs from gardeners who said they could not remove it, even with glyphosate-based herbicides. The "highly toxic" warning is what scared me off. [2]

Then, I began to research the *Helleborus orientalis*, aka Lenten rose.

Helleborus orientalis has a "low severity" poison characteristic. Which means it is toxic only if large quantities are eaten. Skin irritations are minor or lasting only a few minutes.[3]

Although, when you really do the research, almost all the garden plants we enjoy have some level of toxicity: hollyhock, aster, allium, boxwood, dogwood, carnation, et.al. [4]

Helleborus orientalis are from the Ranunculaceace Family (buttercups and more) and native to Europe and Western Asia. They are clump-forming perennials that will grow in neutral soil as well as in alkaline and acidic soils. Most hellebore prefer shade from deciduous trees, and a few species thrive when planted in the sun if given sufficient moisture. Hellebore seem to do best where they receive winter sunlight, but are protected from the wind.

Hellebore come in virtually any color you may want: white, lime-green, pink, apricot, yellow, purple, and almost black. Some flowers are speckled, some are doubled. [5] The large leathery, dark green, glossy leaves are divided into segments whose margins are serrate (notched or toothed). New varieties can have variegated or mottled leaves.

The clumps may get to be as much as a yard across. Often the leaves are evergreen, and by late February or March the wear and tear of the season starts to show; the ratty leaves can be cut back. Established plants that become congested may be divided in late summer to early fall. [6]

The best time to shop for hellebore is in February and March, when the selection is largest and the plants are in flower. Keep an eye out for hellebore sales from April onward as their flowering season winds down.

Just beware if the plant label says *Veratrum viride*, native hellebore, or Indian Hellebore!

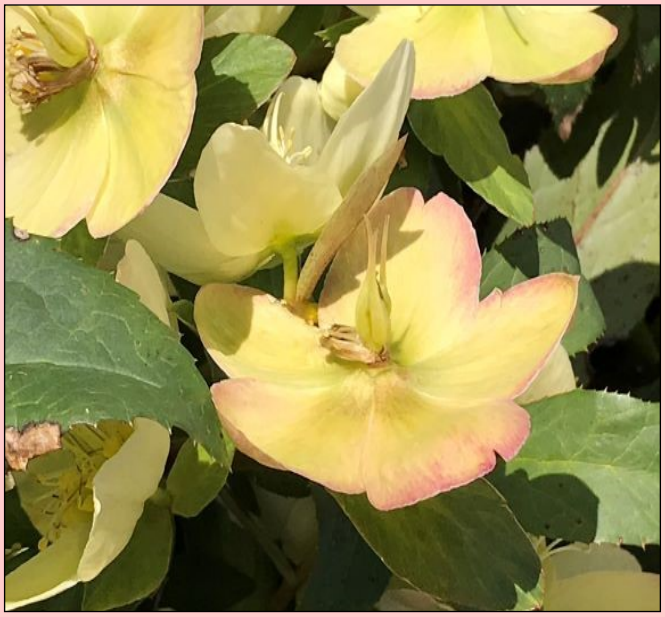
References:

1. https://www.wildflower.org/plants/result.php?id_plant=VEV
2. https://plants.ces.ncsu.edu/plants/veratrum-viride/
3. https://plants.ces.ncsu.edu/plants/helleborus-orientalis/
4. https://ucanr.edu/sites/poisonous_safe_plants/Toxic_Plants_by_Scientific_Name_685/
5. http://pss.uvm.edu/pss123/perhelle.html
6. https://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?

You tube video: https://www.youtube.com/watch?v=wtmuSTLLsnI&app=desktop University of British Columbia

A Selection of Lesley's Favorite Hellebore Photos From Her Garden

lime green *Helleborus argutifolius,* the holly-leaved hellebore



pink-edged

variegated and mottled

clear yellow at left; double flowering above

Extension Master Gardeners: Creating Sensory Garden Spaces at San Damiano Retreat

Lynn Hoffmann

This sensory garden program started in late September. Helen Lake presented a class on how gardens can be a means to experience all five senses. NSVMGA Extension Master Gardeners and two EMGs from the Central Shenandoah Valley Association attended the class on September 30.

The overall goal of the program is to create a calm, healing and meditative garden space in the inner courtyard of San Damiano Spiritual Life Center by using an environmentally friendly and therapeutic approach.

Teams of volunteers, both EMGs and members of the public, will take ownership of portions of the courtyard. The groups will plan, design and implement sensory oriented pockets of green space to be enjoyed by visiting public and groups on retreat.

The ultimate goal will be to draw together a cadre of volunteers who will consistently maintain the inner courtyard in accordance to the concepts of therapeutic horticulture and sound horticultural practices. Attendees at the September class were introduced to the general concepts of therapeutic horticulture, and the effectiveness of creating sensory gardens.

A tour in the inner courtyard stimulated discussion about the potential of the area. The next step will be to have volunteers select an area or corner of the courtyard and come up with a plan, design and implementation process. Everyone was provided with handouts and reference materials to use for creating ideas and developing plans for their spaces.

The design class in October will review the general concepts of landscape design. Types of flora and appropriate therapeutic plants will be discussed as well as the different goals a designer can have in a garden area.

Designated teams will design their selected areas of the courtyard, and EMG Project Leaders Helen Lake and Lynn Hoffmann will compile the ideas and provide options to the staff of San Damiano.

We are encouraging members of local parishes as well as the general public to sign up and contact us if they are interested in working and learning about sensory gardens and being part of this program. If you are interested, please contact either Lynn, gwendydog@gmail.com or Helen, alyena@shentel.net.

For more information on the San Damiano Spiritual Life Center in White Post, VA:
https://www.arlingtondiocese.org/san-damiano-spiritual-life-center/

At left,
The tour of the courtyard.

At right, Nancy Mancuso and Terry Hanahan

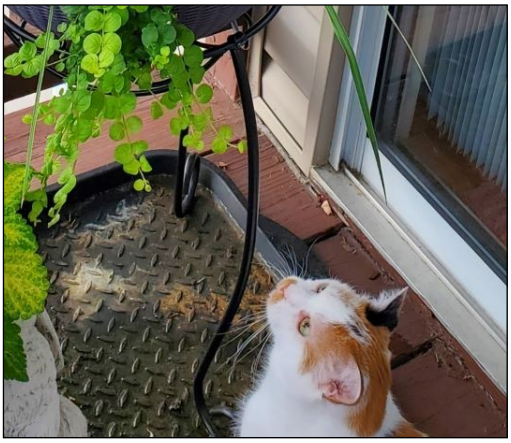
photos by Helen Lake

Hit or Miss Pet Friendly Gardening: Safe and Unsafe Plants for Pets

Jennifer Mathias

So far this year we have learned that pets and plants can live in harmony by using creative ways for your animals to circumvent your plantings. This article focuses on popular toxic and non-toxic plants for the garden and home.

Remember that any plant can cause GI upset in your pets and many are lethal. Consult this link from the University of California for an exhaustive list of what is safe and unsafe for your pet. https://ucanr.edu/sites/poisonous_safe_plants/Plant_Toxicity_Levels_523/



Cecilia and Creeping Jenny
photo by Jennifer Mathias

Toxic House Plants

1) *Lilium* – Almost all lilies are lethal to cats and many are toxic to dogs even if only a small amount is ingested. Renal (kidney) failure happens quickly and death can happen within 72 hours.
2) *Aloe Vera* and *Crassula argentea* (Jade Plant) – Many succulents can cause vomiting, diarrhea, and lethargy.
3) *Dracaena fragrans* (Corn Plant) – This common house plant can cause vomiting, lethargy, and dilated pupils in cats.
4) *Pipremnum aureum* (Pothos) – Be aware that drooling, mouth irritation, and trouble swallowing may occur if your pet ingests any part of the plant.
5) *Araucaria heterophylla* (Norfolk Island Pine) – This small tree is popular around Christmas time. Watch out for vomiting, diarrhea and lethargy if any part is eaten by your furry friend.

Toxic Outside Plants

1) *Rhododendron spp* (Azaleas) – Azaleas are a popular flowering shrub, but can cause vomiting, diarrhea, interference with the central nervous system, and possible cardiac failure.
2) *Hydrangea arborescens* – Another beautiful plant that can cause vomiting, diarrhea, and lethargy if consumed. If ingested, it may cause cyanide intoxication.
3) *Buxacea (*Boxwood) - Vomiting and diarrhea can occur if this common shrub is ingested.
4) *Malus sylvestrus* (Apple Trees) – The apple seeds, leaves and stems contain cyanide and can result in shock, difficulty breathing and even dilated pupils in cats and dogs. Never feed these parts of the fruit to your small animal friends.
5) *Helleborus niger* – Lenten Roses light up our winters but can cause abdominal pain, diarrhea, and depression in cats and dogs. (Read more about *Helleborus* on pg. nine)

Non-Toxic House Plants

1) *Chlorophytum comosum* (Spider Plant)
2) *Saintpaulia* (African Violet)
3) *Chamaedorea elegans* (Parlor Palm) and *Beaucarnea recurvata* (Ponytail Palm)
4) *Hypoestes phyllostachya* (Polka dot plant)
5) *Nephrolepis exaltata* (Boston Fern)

Non-Toxic Outside Plants

1) *Lagerstroemia* (Crepe Myrtle)
2) *Lsimachia nummularia (*Creeping Jenny)
4) *Hibiscus rosa-sinensis* (Tropical Hibiscus)
4) *Heuchera* (Coral Bells)
5) *Viburnum* (Viburnum)

Call Poison Control IMMEDIATELY when you suspect or know that your pet has eaten something that is toxic or potentially toxic.

ASPCA Poison Control - 888-426-4435 or call your local area poison control center.

Quercus alba: White Oak

Joyce Watson

I recently read Doug Tallamy's Nature's Best Hope (more on that on page 14 "From the Editor".) The inspiration for this article came from his book. He wrote that *Quercus alba*, the stately white oak, was his favorite tree as a preteen because of its wide, outspread limbs, which were good for climbing. Decades later his research has shown that in many respects oaks are ranked number one among temperate zone tree species.

The slow growing tree is prominent throughout the eastern deciduous forest. (USDA hardiness zone: 3 to 9). It draws its name from its ash-colored bark. With a broad round crown and dense foliage, it can reach heights of up to 100 feet.

Tallamy says that white oaks are superior in many ecosystems as their huge canopies break the force of heavy rain that can compact soil and their massive root systems help to prevent soil erosion. Their contribution to food webs is perhaps the greatest benefit as research shows that oaks in the Mid-Atlantic region support hundreds of caterpillar species, 557 to be exact, and at least 934 species nationwide.

The long-lived white oak is a sturdy and solid tree that develops a deep, strong root structure. The roots continue to grow throughout the tree's lifespan, always expanding outward and downward in search of water and nutrients. The deep root system allows it to thrive in a range of soil conditions and once it is established the tree is fairly drought tolerant.

The trees produce an abundant number of acorns. The protein-packed, carbohydrate and fat laden acorns are eaten by squirrels, blue jays, crows, red-headed woodpeckers, deer, turkey, quail, mice, chipmunks, ducks and raccoons.

The distinctively shaped leaves with finger-like lobes were one of the first type of leaves that I learned to identify as a child. The leaves are simple, alternate, oblong to ovate in shape and four to seven inches long. In spring, its unfurling leaves are rose-colored and mature into a dark green. This oak has fall color in the spectrum of red shades, turning to brown after frost. Its leaves cling to the tree through winter and drop when the new lead buds grow.

White oak prefers full sun and moist, well-drained, acidic soil (pH 5.5 to 6.5). Most white oaks develop chlorosis, or yellowing of leaves, when grown under alkaline pH conditions.

The wood of the white oak tree has been traditionally used to make baskets, lumber, flooring and molding. It is widely used for making barrels for aging bourbon and wine.

Unfortunately many white oak trees are declining or dying. There are a number of reasons for this including oak anthracnose, oak wilt, oak scale, oak horn gall, two lined chestnut borer, oak worm, gypsy moth and bacterial leaf scorch. You can learn more about it from reading the articles in the numerous resources provided below.

Read more about oak decline in Piedmont Master Gardener Ralph Morini's article: https://piedmontmastergardeners.org/article/whats-killing-our-oak-trees/

photo by Joyce Watson

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Nature's Best Hope, Douglas W. Tallamy, 2019

Northern Shenandoah Valley Master Gardener Association

Editor & Writer
Joyce Watson

Writers
Kris Behrends, Will Daniels, Gail Fowler, Bob Gail, Lynn Hoffmann, Lesley Mack, Jennifer Mathias, Stacey Morgan Smith, Elaine Specht, Mark Sutphin

Proofreaders
Kris Behrends, Belinda Palmer

Title Art
Elena Lycas

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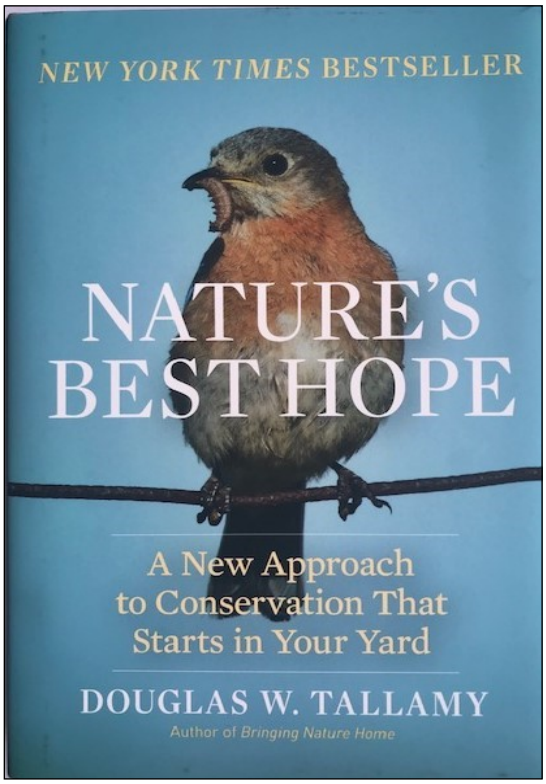
From the Editor: Homegrown National Park

This summer I read Doug Tallamy's most recent book Nature's Best Hope. Tallamy is a professor in the Department of Entomology and Wildlife Ecology at the University of Delaware. His mission of encouraging the sowing of natives in our own backyards to support the animals and insects that rely directly or indirectly on these plants is a well-known practice to Extension Master Gardeners.



Chapter five in the book is titled "Homegrown National Park." He points out several key assertions for his supposition that conservation cannot just be confined to parks and nature preserves. No longer can we ignore our own properties; we must restore habitat where we live and work.

He asks the question: What if each American landowner made it a goal to convert half of his or her lawn to productive native plant communities? This collective effort will require a cultural change and removal of much of the traditional gold standard of a suburban landscape: spans of lawn and non-native plants which provide little or nothing in the way of food or shelter for birds and other wild creatures.

What can each of us do? Tallamy advises us in chapter 11.

1) Shrink the lawn. 2) Remove invasive species. 3) Plant key native plants. 4) Be generous with your plantings. 5) Plant for specialty pollinators. 6) Network with neighbors. 7) Build a conservation hardscape. 8) Create caterpillar pupation sites under your trees. 9) Do not spray or fertilize. 10) Educate your neighborhood civic association.

(photo by Joyce Watson)

"There is in fact no distinction between the fate of the land and the fate of the people. When one is abused, the other suffers." *Wendell Berry*