

Trumpet Vine

Knowledge for the Community from Loudoun County Extension Master Gardeners

Spring 2022

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LOUDOUN COUNTY EXTENSION MASTER GARDENER LECTURE SERIES

Free and open to the public 7 p.m.

HOSTED BY LOUDOUN COUNTY LIBRARY, PLANNED BY LOUDOUN COUNTY MASTER GARDENERS.

Free Virtual Presentations via WebEx on first Thursdays.

April 7, 7-8 p.m. Hitchhiker's Guide to Beekeeping, by Dale Demmin.

May 5, 7-8 p.m.
An Engaging Garden Where
Children and Wildlife Thrive,
by Lisa Doseff.

June 2, 7-8 p.m. Creating a Wildlife Pond--Water Gardening for Toads, Dragonflies, and more! by Michelle Detwiler.

Check the event calendar on our website for updates on topics and speakers.

Visit us on Facebook: Extension Master Gardeners of Loudoun County, Virginia.

Sustainable Spring Cleanup

In the fall, we are advised to forego cleaning up our perennial gardens to provide food and cover for wildlife including birds and beneficial insects over the winter. The same advice holds true in the spring until temperatures are consistently above 50°F. We are all anxious to get out in the garden and start cleaning up, but we want to make sure we are doing no harm.

Protect pollinators. Many pollinators and other beneficial insects such as ladybugs, assassin bugs, and damsel bugs overwinter as adults or nymphs in the stems of last year's perennials and in leaf litter. Try to leave the stems as is for a few weeks longer. If they must be cut down, bundle them up, and prop them against a fence or tree to allow any sheltering insects to exit when they are ready. Hold off on removing leaf piles or move them to the edge of the garden where they can be left undisturbed for awhile longer.

Don't mulch early. Many beneficial insects overwinter in the soil. A 2- to 3-inch application of mulch may prevent them from emerging. Make sure the soil has begun to warm before you apply mulch.

Prune carefully. Do not prune any spring blooming trees or shrubs until after their bloom period. When pruning woody material, watch out for chrysalises and cocoons. If a branch hosts one of these, leave it in place for now.

What you should do now. Take advantage of the soft, moist spring soil and remove the weeds and invasives, which will come up relatively easily. Target the hairy bittercress, which is small and cute now but in a few more weeks will become an aggressive monster. This is also a good time to remove out-of-control non-natives such as vinca, English ivy, and pachysandra.

Happy Spring Gardening!

VCE Loudoun Tree and Water Steward Programs

The Virginia Association of Counties Award Winning Water Stewards developed a Pond/Stream/Erosion Site Assessment program that provides assistance to residents and community properties. Through this program, the Steward Volunteers assess ponds, landscapes, and stream sides that, through the years, have grown shady and stagnant and may threaten natural resource conservation during a weather event. Expanding the county's community outreach education, the Master Gardeners assist in best management practices that contribute to natural resource conservation. And in the end, this program contributes to the Chesapeake Bay Watershed improvement plan.

The Master Gardeners document the issues through photos and samples of pond weed and water, and they survey the surrounding landscape. They then provide property owners a detailed report, including options that can help the property owners better maintain their own landscape and, as a result, a healthy ecosystem. The Assessment program is open April through mid-October, and a form can be accessed here when the program is open in April:

https://loudouncountymastergardeners.org/programs/pond-stream-site-assessment/.

VCE Loudoun County Master Gardener Tree Stewards are volunteers who are committed to provide leadership in tree management, needs assessments, and education. Drawing on the horticultural research and experience of Virginia Tech and Virginia State University, Tree Stewards actively promote appreciation of the social, economic, environmental, and mental health benefits provided by trees within the community. Activities include (but are not limited to):

- Educational presentations on the environmental value of trees.
- Training on planting trees properly so they thrive and survive--an economic and social benefit.
- Guidance on landscaping through publications on "right tree, right place" to select a tree appropriate for the condition.
- Site assessments for erosion.

Contact the Tree Stewards at TS@loudouncountymastergardeners.org or loudounmg@vt.edu.



Answering a proper pruning question. Photo Beth Sastre.



Pond Assessment. Photo: MG Water Stewards.



Determining pond water temperature. Photo: MG Water Stewards.

Barbara Bailey, VCE Loudoun Community Engagement Coordinator

A Stroll on the Wild Side

A walk through the woods is a special joy in the spring when the early wildflowers emerge. But we don't have to visit a park or nature preserve to enjoy these early bloomers; many of them adapt readily to our own gardens if we can provide them with a suitable environment. Some of the best and easiest are bloodroot, wild columbine, trout lily, and squirrel corn or its close relative, Dutchman's breeches. All of these plants are available commercially although you may have to shop at some specialty wildflower nurseries to find them.

Sanguinaria canadensis (bloodroot)

Bloodroot is named from the orange-red sap found in the roots, stems, and leaves of the plant. Native Americans used the sap of bloodroot for dye, as war paint, and medicinally.



Bloodroot. Photo by Lina Burton

Bloodroot can begin blooming in late March although I've usually seen it in our area from early-to-mid April. Each flower lasts only a day or two (until pollinated), but the show continues as more flowers bloom over a two-week period. The 6 to 10-inch-tall flower stem is totally enclosed by the separate leaf as they both emerge from the soil; then the flower stem rises above the leaf and the flower opens as the leaf unfurls. The 1- to 2-inch wide flowers have 8 to 12 white, slender petals with bright yellow stamens. At night and on cloudy days the flowers will close and look very much like small white tulips. After the flowers

fade, the deeply lobed, gray-green leaves continue to grow until finally they are about the size of a

man's hand and are from 8-12 inches tall. The leaves remain attractive until mid-to-late summer (or somewhat earlier in dry years).

Bloodroot prefer humus-rich, slightly moist but well-drained soil with a pH range of 6 to 7 and partial shade although they are rather forgiving of less than ideal situations. They are drought tolerant, going into early dormancy during dry years instead of dying.



Bloodroot. Photo by Carol Ivory

Bloodroot grows slowly and seldom needs dividing although this is one method of propagating the plant. It self-sows readily if happy in its environment. It is a carefree plant with no serious insect or disease problems.



Wild Columbine. by Lina Burton.

Aquilegia canadensis (wild columbine)

Wild columbine is perhaps one of the daintiest of the early wildflowers, with its red (sometimes pinkish red) and yellow, 1- to $1\frac{1}{2}$ -inch long, nodding, bell-like flowers dancing merrily above its light green, finely cut foliage at the slightest breeze. They are a favorite of ruby-throated hummingbirds.

Wild columbine grows from 12 to 30 inches tall and usually begins blooming in late April to early May in our area. Depending on the weather, the plant can bloom for as long as six weeks, although in my garden it usually blooms for a shorter period. Nevertheless, it's always a welcome sight at the back of my

small wildflower bed.

Aquilegia canadensis naturally grows in partial shade in well-drained sites, even dry rocky areas such as cliffs and ledges. It prefers a soil pH between 6 and 7.2, but it grows in virtually any soil provided the soil is not too rich, is well-drained, and is sited part in shade. (Very rich soil promotes lush foliage but weak-stemmed flowers and shortens the life of the plants.) Generally, these columbines are short-lived plants, but they self-sow readily if seed pods are left on the plant and allowed to ripen. Once seedlings are large enough to handle, they can easily be transplanted elsewhere.

The basal foliage of wild columbine is large, growing up to a foot long; on the flower stems, however, the leaves are considerably smaller. Like all other columbines, the light-green, finely divided foliage of wild columbine is attractive to leafminers. If the foliage is cut to the ground after blooming, it will grow back and be attractive for the rest of the season after the leafminers have completed their life cycle. If you cut the seed-pod-bearing stems off at the same time, obviously, they won't reseed. My solution is to cut the foliage of all but one of the plants in my garden back almost to the ground, allowing this one plant to self-sow, then cutting it back too. This seems to work well, providing both fresh foliage for the summer garden and seedlings for transplanting. Warning: Aquilegia canadensis will cross-pollinate with other aquilegias in the garden. To prevent hybridizing, keep it separated from other columbines.

'Corbett' has yellow flowers and was found near Corbett, Maryland, in the late 1960s. 'Corbett' is 12 to 24 inches tall and requires the same care as the species.

Erythronium americanum (trout lily, fawn lily, adder's tongue)

The flowers of *Erythronium americanum* are a special delight in the spring, blooming with some of the earliest of the spring ephemerals. Unlike with many of the other ephemerals, however, to enjoy trout lilies, you may have to get your knees wet—it grows naturally in the shade along streams and in damp places that may even be boggy in the spring just as they're blooming.



Trout Lily. Photo by Carol Ivory at Balls Bluff

The lily-like yellow flowers are 1 to 2 inches wide, nodding, and face downward, with their petals sweeping dramatically backward. The flower stems are 5 to 12 inches long and hold the golden flowers nicely above the foliage where they are quite showy.

Trout lilies tend to grow in large colonies. However, only a few individuals in a colony will bloom, with some being too young and others being too crowded. Still, a large colony with its glossy green leaves, mottled with purple splotches and yellow flowers dancing above the leaves is a sight to behold. Unfortunately, soon after blooming the plants

go dormant and the leaves die back, leaving a bare spot in the garden. Ferns or wild ginger can be used to fill in the gap nicely.

Erythronium americanum is definitely not the plant for a dry garden, but if you have a shady, damp area, stream, or boggy sink in your yard, this may be the plant for you. Its roots work their way down deeply in the soil; thus, if you are planting them in a damp garden situation, it is

necessary to add plenty of humus made from finely chopped leaves deeply into the soil to a depth of as much as 12 inches. It prefers acid soil with a pH of 5 to 6.

Propagating this plant is not for those lacking patience. From seed to flower takes a minimum of three years, usually more, and possibly as long as seven years. From purchased plants, it may take two years to flower. Plants are available, although they are harder than most wild flowers to find.



Bluebells. Photo by Carol Ivory.

<u>Mertensia</u> virginica (Virginia bluebells, Virginia cowslip)

Is there anyone who isn't familiar with Virginia bluebells? One of the most beloved of spring flowering plants, bluebells naturalize to create large carpets of blue in bottomlands and moist gardens before going dormant in mid-summer and disappearing for another year. Every April there are numerous bluebells walks in our region, and if you haven't taken the walk at one of our local parks, you owe it to yourself to do so. It's an experience not soon forgotten.

The flowers of Virginia bluebells start out as tight pink buds in terminal clusters of 5 to 20. They open to become 1-inch- long azure blue funnel-shaped flowers nodding at the end of 12- to 24-inches-long stalks and remain in flower for a number of days before fading. Shortly after blooming, the flower stalks begin to sag, eventually almost touching the ground as the seed pods grow and the seeds ripen.

The blue-green leaves go dormant about two months after flowering, leaving a hole in the garden in early summer that can easily be filled by interplanting bluebells with hosta or transplanting shade-loving annuals into the gap.

Virginia bluebells naturally grow in moist meadows and along streams in partial to heavy shade in humus-rich soil. They are very forgiving and will grow well in dryer soils or in clay but will not bloom as well. They will not, however, do well in extremely dry soil although they will survive an occasional drought. If planting in the garden, add leaf mold or compost to the soil before planting.



Bluebells. Photo by Carol Ivory.

Virginia bluebells are easy to propagate either from seed sown immediately after it ripens in early summer or by division. They

are readily available at nurseries specializing in wildflowers. If you have one plant that is happy, it will self-sow nicely and eventually spread to form a large colony in your woodland garden, along pathways through the woods, or in shady creek bottom meadows.

Dicentra canadensis (squirrel corn) and D. cucullaria (Dutchman's breeches)

These two delightfully dainty plants are among the earliest of the spring ephemerals to bloom. They are close relatives of bleeding heart, and their flowers show that relationship.

Both squirrel corn and Dutchman's breeches grow naturally in deciduous woods in humus-rich, slightly damp soil with a pH of 6 to 7. If given these conditions in the garden, they will self-sow and naturalize readily. They are usually found growing in close proximity to each other in the wild.



Squirrel Corn. Photo by Carol Ivory at Balls Bluff.

Squirrel corn blooms about a week before Dutchman's breeches on 4- to 6-inch stems arching above the low-growing foliage. The pure white, heart-shaped flowers are longer and narrower than Dutchman's breeches and lack the pantaloon-like spurs of Dutchman's breeches. The fragrant flowers are about ½ inch long, but the plant itself is slightly shorter than Dutchman's breeches and less common.

The flowering stalks of Dutchman's breeches are about 6 to 10 inches high, with 4 to 10

nodding creamy-white twin-spurred flowers at the ends looking very much like pantaloons–thus the name. The flowers are $\frac{1}{2}$ to $\frac{3}{4}$ inches long and fragrant.



Dutchman's Breeches. Photo by Carol Ivory at Balls Bluff.

The leaves of both squirrel corn and Dutchman's breeches are gray-green, with those of squirrel corn being just a shade more on the gray side. They are both finely cut and ferny, 3 to 6 inches long. The entire plant goes dormant soon after blooming and by early June, the leaves have disappeared.

Like most spring ephemerals, the plants are virtually maintenance free.

Lina Burton, Loudoun County Extension Master Gardener

Places to See Wildflowers

Spring is a great time to visit local parks to see wildflowers. Here are a few parks you may want to explore. Note that because of overcrowding, especially on weekends, some parks may now have entrance or parking fees or require reservations. To avoid disappointment, check before you go.

Close to home:

<u>Balls Bluff Regional Battlefield Park</u> (Northern Virginia Regional Park Authority), Balls Bluff Road, Leesburg https://www.novaparks.com/parks/balls-bluff-battlefield.

<u>C&O Canal National Historic Park (Maryland side of the Potomac)</u> including the Towpath, especially from Great Falls Park downstream to the Bear Island area. Home page: http://www.nps.gov/choh/index.htm.

<u>Great Falls Park (Maryland side of the Potomac)</u> (part of C&O Canal National Historic Park), 11710 MacArthur Blvd, Potomac, Maryland.

For a list of trails, see https://www.nps.gov/choh/planyourvisit/maps.htm.

<u>Billy Goat Trail</u>, (Maryland) Reportedly, the best wildflowers are in Section C; it's a moderate hike. If you are tempted to try Section A of the Billy Goat Trail, first see https://www.nps.gov/choh/planyourvisit/billy-goat-trail.htm.

<u>Great Falls Park (Virginia side of the Potomac)</u> (National Park Service), 9200 Old Dominion Dr., McLean Home page: https://www.nps.gov/grfa/index.htm.

A list of the hiking trails, almost all of which are wildflower-rich, is at https://www.nps.gov/grfa/planyourvisit/hiking.htm Areas particularly recommended for wildflower viewing are the Swamp Trail, the Mine Run Trail, and the North River Trail to Riverbend Park (all in Virginia).

Turkey Run Park (National Park Service)

George Washington Memorial Parkway, McLean. http://www.nps.gov/gwmp/planyourvisit/turkeyrun.htm.

<u>Fairfax County Park Authority trail system.</u> Fairfax County has an extensive system of trails, many of them suitable for viewing wildflowers. For a list and links to the trails, go to http://www.fairfaxcounty.gov/parks/trailsframe.htm. They include:

Riverbend Park (Fairfax County Park Authority)

8700 Potomac Hills Street, Great Falls. For more information see home page at http://www.fairfaxcounty.gov/parks/riverbend-park/.

<u>Scott's Run Nature Preserve</u> (Fairfax County Park Authority), 7400 Georgetown Park, McLean. For information about the park, see http://www.fairfaxcounty.gov/parks/scottsrun/.

Fairfax also has a list of accessible trails at https://www.fairfaxcounty.gov/parks/accessible/trails.

Bull Run Regional Park (Northern Virginia Park Authority, 7700 Bull Run Drive, Centreville, Va. The largest display of Virginia bluebells on the east coast is in this park—300 acres! See https://www.novaparks.com/parks/bull-run-regional-park.

<u>Manassas National Battlefield Park (National Park Service)</u>. The Stone Bridge Loop Trail is good in the spring. See https://www.nps.gov/mana/planyourvisit/hiking.htm.

<u>Loudoun County</u> has a list of county-owned parks at https://www.loudoun.gov/4136/Parks-Trails, at least some of which, such as Banshee Reeks, include nature trails. The list is worth exploring for its possibilities. Several new parks will be opened in or near Loudoun County in the near future. Keep your eyes open for new possibilities very close to home!

Further afield:

Merrimac Farm Wildlife Management Area (Prince William Conservation Alliance) http://www.pwconserve.org/merrimacfarm/index.htm, Nokesville, Va. Over 300 acres of fields, floodplains, wetlands, and hardwood forests, with one of the largest patches of Virginia bluebells in Northern Virginia.

<u>Thompson Wildlife Management Area,</u> Linden (Virginia Department of Game and Inland Fisheries). https://dwr.virginia.gov/wma/thompson/. The trilliums here are wonderful.

<u>Shenandoah National Park</u>, (National Park Service) Well worth the trip. Hikes range in difficulty, length.

Park home page: http://www.nps.gov/shen/index.htm.

For information on park wildflowers:

http://www.nps.gov/shen/naturescience/wildflowers.htm.

White Oak Canyon

Shenandoah National Park (Rated as difficult, 5.2 miles long, 3½ to 5½ hours) Google White Oak Canyon for more information. The following sites provide useful information about White Oak Canyon: http://www.summitpost.org/whiteoak-canyon/229998 and http://www.midatlantichikes.com/id112.html.

Places to Buy Wildflowers

When buying wildflowers for your garden, be sure that any plants you buy are nursery grown, not dug from the wild. Many reputable environmentally oriented organizations sponsor wildflower sales in the spring. Locally, here are a few places where you can buy wildflowers:

- The Loudoun Wildlife Conservancy Spring Native Plant Sale, at Morven Park in Leesburg. See https://loudounwildlife.org/habitat-conservation/native-plant-sales/. This year (2022) the spring sale will be held on April 16 from 9 a.m. to 3 p.m., and the fall sale will be held on September 10 from 9 a.m. to 3 p.m.
- The Blandy Experimental Farm and State Arboretum's popular Mother's Day Garden Fair is now being held at the Clarke Count Ruritan Fairgrounds in Berryville. This sale usually has at least one native plant vendor. It will be held on May 7 and 8 from 9 a.m. to 4 p.m. each day. For more information, see https://blandy.virginia.edu/2022-garden-fair.
- For a list of other nearby garden sales featuring wildflowers, see https://www.plantnovanatives.org/local-native-plant-sales.
- A number of garden centers also carry native plants. For a list of those that do, see https://www.plantnovanatives.org/other-sellers.

In addition to the local sales, a number of nurseries specialize in or sell wildflowers. To find sources, check for nurseries on one of the following lists of approved vendors:

- The Virginia Native Plant Society. The Society is the best source of native plant information in our area, without question. Regional Native Plant Nurseries and Plant Sales are listed at http://vnps.org/native-plant-sales/. +
- The Lady Bird Johnson Wildflower Center at the University of Texas at Austin extensive list of plant and seed suppliers, 1,325 of them, to be exact. The mid-Atlantic list can be accessed at http://www.wildflower.org/suppliers/search.php.

Lina Burton, Loudoun County Extension Master Gardener

Seed Starting "101" in a Nutshell--Fun and Gratifying

About five years ago, I stopped hesitating and jumped into growing annuals from seed. This move was mostly precipitated by economics, i.e., the rising cost of flowers to fill my garden and numerous pots. The price for a six-pack of annuals, usually \$2.00, had risen to \$3.50, and today it's closer to \$5.00. And, if I want that specialty coleus I love, it's \$7.98 to the grower--cha-ching, cha-ching. So, as I considered the cost to purchase some basic supplies, I also read widely and listened to many webinars on growing plants from seed. In retrospect, the latter led to success! Years since that time, preparations for growing seed have become easier, and I realize that my trepidation and fretting were unfounded. I also have a greater understanding as to why plants are costly: time and labor. My goal is to assure anyone, particularly a master gardener, that he or she can be successful at starting seeds and actually enjoy the process en route with some basic provisions. I've included some of my sources at the end of this article.

Space: This year I relocated my "operations" from my home's lower level to an upper bedroom that wasn't getting much use. I covered the carpet with plastic, wall-to-wall. Because I didn't have room to store the existing bed and dresser, I stood the headboard, mattress, etc. up against the wall at one end of the room. The dresser got covered with waterproof padding and a tablecloth for further use. A simple shift of just a few furnishings and I was ready to transfer my setup from the lower level. This room generally maintains a 70-degree temperature when the vent is open, and it has a large window that brightens the room. I retained my grandfather's antique roll top desk for use in my garden planning and added a 40-inch square folding table in the middle to accommodate the activities to follow. My point? Any available space can be altered to provide an inviting location to begin growing plants.



Folding table, shown with supplies, but soon to have hanging light fixture to create additional space.



Folding table on which actual work (pleasure?) of seeding will occur--soon!

Light: A windowsill does not provide sufficient light to grow seeds, so don't let anyone convince you it will, even if it receives full sun. Seedlings need 14 to 16 hours of bright light per day, consistently. In my new space, I hung a 4-foot fluorescent shop light with two bulbs from the ceiling above the "undercover" dresser where some of my 40+ coleus (from last fall) cuttings now sit; they will soon be replaced by my seed trays. I purchased some adhesive hooks that I attached to the ceiling without having to drill holes, and I found them to be sufficient to bear the light fixture's weight. I'm planning to add a 2-foot fluorescent tube light above a lower, narrow folding table I recently acquired at Habitat's ReStore. The bulk of my seedlings will be placed on a 4-shelf unit; it originally included two shelves, each 36 inches wide by 16 inches deep, with two tube light bulbs above each shelf, but I've since added two additional shelves. The shelves are adjustable so that as a seedling develops, the light can be maintained 2 to 3 inches from its height. This item was my greatest expense because I was committed to success one way or the other, but it has now more than paid for itself. Some invest in expensive LED or plant lights, but I've found that tube fluorescents work just fine, allowing for replacement each season, and they are far less expensive. The shelf unit I initially purchased does feature LED bulbs, but I notice no difference in plant growth. I use a multiple-plug timer to control the 14 to 16 hours of light.



A reflective interior expands light available to plants.



Adhesive hooks and extended chain needed for shop light.



Shelf unit with adjustable shelving and lights. Seed starting kits can be seen on the shelves, ready for seeding. Note the black plastic covering the carpet.

Growing Supplies:

Growing Medium: <u>Just any soil will not work well</u>, and that includes potting or garden soil. It's best to use only a mix designed for seedlings because it is lighter and thus allows for better aeration, drainage, and ease of root development for a "baby" seedling. Before placing this mix in seed cells, it should always be well moistened because doing so after seeding will often displace seeds. The surface can be sufficiently misted when seeding is complete.

Seed Starting: My choice, especially if this is your first try, is the "Seed Starting Success Kit," which includes two 24-cell seed starter trays with hoods, 6 quarts of organic seed starting mix, and 24 wood markers. The trays that are placed beneath the cells allow for bottom watering whereby water is absorbed up into the cells rather than water "raining down" from above. This prevents seedling disturbance and overflows, and excess water can easily be poured off. The components of the kit can be cleaned and reused year after year. When plants outgrow the cells, repotting into larger 3-inch or 4-inch pots is often needed; typically, cow pots are my choice because they can be planted directly into the garden and they really do decompose well.

<u>Seeds</u>: Choices are vast and limits are few, except to say that some require more patience than others; and, more importantly, it's good to be prepared for the occasional disappointment that results from a weak or bad batch of seeds. Directions for seeding are

included on the packet; some seeds like to be covered while others prefer being exposed to light.

Typically, it's wise to place a couple of seeds in each cell to be assured each cell is occupied after germination; extra or weak seedlings can be transplanted to empty cells or discarded. The plastic hood should remain over the tray until seedlings are up and growing, usually after the first set of leaves; leaving the hood in place until this time will provide humidity and offer a sort of "greenhouse" for the seedlings. If too much moisture gathers, the edge of the hood can be raised. Note when purchasing seeds that some are "pelleted," which can be helpful with even distribution of the seeds, particularly as some seeds are very tiny and difficult to see against the growing medium. Most seeds should be planted 6 to 12 weeks before the season's last frost, so order early in January or February. Personally, I have found that backing this start date from Mother's Day to be most reliable, unless we have a forecast certain.

Watering: Seedlings must not be allowed to dry out while germinating or in the early stage of growth. Death can rapidly result if this occurs. Best practice is to check seedlings around the same time daily and monitor the soil's moisture. The roots of seedlings are tender and require lightly moist soil to grow. However, too much moisture will invite problems of its own--damping off, soil gnats, root rot, etc. While learning how much moisture is needed is a bit of a trial-and-error process, common sense should prevail. Placing a humidifier in the area is often a good idea, especially as seeding is done in winter when dry heat is prevalent and humidity is often low.

Miscellaneous: To encourage germination, a heating mat placed under the tray can be helpful. While mats are not inexpensive, my preference is to use one to protect the "investment" already made, to speed germination, and to increase the likelihood of success; a mat should be removed after germination occurs. Further, an oscillating or vortex fan directed on young seedlings after being "unhooded" and until transplanted (hardened off) in the garden will result in stronger plants and reduce the chance of disease. In order to maintain a reasonably constant temperature, a space heater may be needed if an area is in one's unfinished basement and is unheated.

Last, and perhaps most importantly, **patience is required**. Nature is at work during the seeding process, and often our best efforts may not be sufficient. But that's okay--there's always tomorrow and another opportunity to refine this skill. You'll find it's quite exciting to see small green stems and leaves finally peak out of the soil! Enjoy the experience during those cold winter months when glancing yet again through the plant catalogs is just not enough!

Sources:

Shop Light, 4-foot fluorescent: Amazon for better selection and quality.

Ceiling Hooks: Adhesive, manufacturer: WOVA; pkg of 10: Amazon.

Plant Shelf Unit: Gardeners Supply (gardeners.com): Modular Stack-n-Grow Light Item#

8595770.

Growing Medium: Preference for Jiffy or Espoma (Amazon).

Growing Cells/Tray: Seed Starting Kit: Gardeners Supply, Item #8592393.

Cow Pots: Gardeners Supply or Amazon; usually 4-inch for repotting.

Seed Sources: My preferences are: Swallowtail, Renee's, Harris, and Park Seed; Merrifield.

Heating Mat: Amazon had most competitive pricing.

Pamela McGraw, Loudoun County Extension Master Gardener
All photos by Pamela

Moving Is Stressful—Even for Plants!

If you are a plant, relocating can be just as stressful as it is to people and animals. Although plants don't have to call utility companies, pack boxes, or decide what to get rid of and what to take with them, moving a plant outside can result in stress that weakens it and may even cause your plant to sustain fatal injuries.

Some of you may have seen previous articles about preparing your plants to bring them indoors over the winter (I know, I know, it seems like we just did that last week). Well, taking them back outside requires the same effort in reverse.

Outside conditions are considerably different from conditions inside the typical home. The key to minimizing the stressors on your plants is to transition them slowly from one environment to the other. Like most, I know that I need to transition slowly but tend to rush this process so that I can move onto other important spring and summer tasks like mowing the lawn or planting my garden. Below are some considerations to help you ensure that your plants settle nicely into their summer vacation locations.

1) **Decide which plants to take outside.** Taking your plants outside over the summer can increase their growth resulting in a renewed appearance with new, shiny, cleaner leaves, but not all plants like summer homes.

Consider each plant's growing requirements like sunlight, temperature, humidity, wind resistance, etc. You may need to research your plant to see if it is a good candidate. Many plants such as aloe, cactus, amaryllis, ferns, snake plant, bamboo and small citrus trees transition well.

Some plants such as ficus can be tricky and require additional attention that you may not be able to give. You might also contemplate how easy it will be to move the plants around. If the plant is smaller, lightweight, or easily moved with rollers, you will be more likely to bring it back inside when necessary, during the transition and when poor weather is in the forecast.

- 2) Do you need to change the pot or planter? This is a good time to ask yourself if the plant is in the proper pot and if it has room to grow. Because the relocation will cause the plant to put on increased growth, you will want to ensure that it is not rootbound and is in the proper sized pot. If you see roots coming for the bottom of your planter or large roots are circling at the bottom of the plant, it's time for a larger container. This might be a good time to divide your plant or take cuttings from it to share. You will also want to make sure that the plant has proper drainage for being outside. This is particularly important for plants that will be in an open location and exposed to inconsistent rain levels.
- 3) Keep an eye on the weather to time the move. Wait until outdoor temperatures are warm enough at night. In our area, you can usually start doing this sometime in May. It's best to wait to fully transition until nighttime temperatures are over 50 degrees for most plants. Again, it is important to know the proper growing conditions for each of your plants. If you want to take advantage of a particularly nice day before nighttime temperatures are ideal, be sure to move the plants back inside after a few hours and

especially at night. Moving your plants out too early in the season, like during the few nice days in March, can be risky.

4) Acclimate, Acclimate, Acclimate! You want to avoid shocking your plant. Regardless of the type of plant, it is important to transition slowly to minimize stress. One common mistake is thinking that a plant that loves the warmth and sun can be immediately placed in direct sunlight. All plants will require time to acclimate to the more extreme outdoor conditions. Both windburn and sunscald pose a serious threat to your plants. Dried out leaves, leaves that are almost transparent or white, and light brown spots are all signs of sunburn and windburn. This can be minimized and avoided by giving the plants a few hours out at a time and placing them in a shady location that is protected from the wind for a few weeks. Even consistent light winds can be a problem over a period of hours. If this does occur, remove the damaged leaves. Plants mildly damaged can overcome this damage especially if they are putting out new growth.

Leaves Damaged by Sun and Wind:







Photos by Thersa Hutton-Sherman.

5) Provide additional Tender Loving Care. During the transition you will want to be more observant and attentive to your plants. Look out for pests that may be more prevalent due to the stress and the outdoor environment.

Your plant will need the proper food to get energy for all the renewal and growth. It's a good time to fertilize. This will also help with replacing leaves if your plant loses some during the move outside.

Watch the water levels. Depending on the location, forecast, planter, and humidity, your watering frequency may differ. Plants tend to dry out more quickly in an outdoor environment, but you want to make sure they are not sitting in water either.

If you are considering moving your plants outside, a little patience and extra attention will help to ensure that your plants not only transition but thrive outside during the summer.

Thersa Hutton-Sherman, Loudoun County Extension Master Gardener

Insects: The Engines of the World

Insects are critically important to our lives, which is why we should respect, nurture, and, yes, even love them. They have an "ick" factor for many people, but please do everything you can to get over that.

Benefits of Insects

The main benefits insects provide to humans and the environment are:

- More than 80 percent of the world's flowering plants need pollinators to reproduce, and
 most of our food crops are flowering plants. According to the USDA, one out of every three
 bites of our food is created with the help of pollinators. This includes fruits, vegetables,
 chocolate, coffee, nuts, and spices.
- Insect pollination increases outputs of 87 percent of leading food crops according to the Food and Agricultural Organization of the United Nations. Bees, flies, beetles, and ants are the major pollinators. Birds, bats, other insects, and animals are the balance of pollinators.
- Insect larvae, spiders, and small adult insects are required food for bird nestlings and fledglings.



Transverse-banded flower fly. Photo by Lindsay Loyd.



Crab Spider. Photo by Lindsay Loyd.

Importance of Insects

It is said that we could only live about a month without insects, whereas insects do not need humans for their existence. We've done serious damage to the insect biome with our industrial agricultural practices; habitat destruction due to human land use for housing, transportation, etc.; the planting of non-native trees, shrubs, and vegetative plants; and the indiscriminate use of pesticides on our lawns, in our gardens, and even on "natural" areas like meadows, roadsides, campgrounds, and backyards.

One hundred percent of our local bats eat insects. Bats are a critical control for mosquitoes.

Ninety percent of terrestrial birds require spiders, insects, and insect larvae (caterpillars) to feed their nestlings and fledglings. Insect larvae are soft enough for baby birds to eat. Caterpillars contain fat and protein required for young birds to survive. Some nestlings and fledglings require up to 100 caterpillars a day to reach the stage at which they can safely eat seeds, which is three

to four weeks after they leave the nest. Nestlings and fledglings cannot eat seeds because the seeds are too hard and are not sufficiently nutritious. Without native host plants there is no food

for insect larvae and therefore no food for baby birds.



Garden Spider Photo by Lindsay Loyd.



Thread-waisted wasp on a button bush flower. Photo by Lindsay Loyd.

Douglas Tallamy has conducted surveys and written books (*Bringing Nature Home* and *Nature's Best Hope*) in which he presents the case that as the percentage of the insect biome has decreased (up to 45 percent by 2020), the number of birds that rely on insects to feed their chicks has decreased by about the same percentage.

How We Can Support Insects

More than 90 percent of insects require specific food sources. Insects have evolved in conjunction with native North American flora. This means insects cannot eat any plants other than the specific native trees, shrubs, and/or vegetation they have evolved to eat. When the required plant is not available, the insect will starve and cannot reproduce. Non-native plants, which have little to no food value for insects, have become staples in many landscapes. We should do our part in removing the bulk of non-native plants and replace them with native species that can be equally attractive and even more interesting. Many non-native plants have escaped into surrounding non-landscaped areas and are outcompeting the native plants, exacerbating the problem.

The best way to support insects, and therefore bats and backyard and migratory birds, is to plant locally native trees, shrubs, and vegetative species that are hosts to insects. Host plants provide food (primarily leaves) to the insect larvae (caterpillar stage), as opposed to the more recognized nectar plants that provide adult insects with food (flowers). Avoid cultivars of native plants as much as possible because they generally do not have the nutritional value of the straight species. Many native plants are both host and nectar providers and therefore are powerhouses for the environment. Some excellent host plants are:

- Trees: oak (best), wild black cherry, tulip, yellow poplar, native maples, hickory, river birch, black willow, American basswood, pawpaw, sweet bay magnolia, sassafras, black walnut, birch, hackberry, serviceberry.
- Shrubs: northern spice bush, silky dogwood, pasture and swamp rose, high and low bush blueberry, American viburnums, native spirea, New Jersey tea.
- Perennials (NOTE: most of these plants are also nectar plants, supporting adult insects as well as larvae): pipevine (Dutchman's pipe), parsley family (parsley, dill, fennel, carrot, Queen Anne's lace, common rue, clovers, sheep sorrel, dock, tick trefoil, white turtlehead, wing stem, native violets, sunflowers, American asters, pussytoes, pearly everlasting, fragrant cudweed, native thistles, plantains, native sedges, big and little bluestem,

butterfly weed, milkweed, baptisia (false and wild indigo), purple top grass, native petunia, tall or garden phlox, golden alexanders (zizia).

Other things to do:

- Leave leaves on the ground, covering as much area as possible. Moths (important as larvae sources and pollinators) over-winter in leaf litter. In addition, leaves break down into humus, providing nutrients for all plants.
- Leave fallen sticks, branches, and tree trunks where they fall whenever possible. Rotting wood is a good source of food and shelter for many insects and also returns nutrients to the soil.
- Leave the stems of dead perennials in place over the winter. If they are too unsightly for an area (your front garden), cut them down to 10 to 12 inches. Insects need these stems to overwinter.



Butterflyweed. Photo by Lindsay Loyd.

Suggestions to Control Insect Pests:

More than 96 percent of insects are beneficial. Landscape professionals if pressed will tell you that trees, shrubs, and vegetative plants can handle up to 10 percent predation (eating) by insects before they appear to have any damage. Even 10 percent is not harmful to the plant, but more than that is less aesthetically pleasing to humans. It is better to resist the impulse to control insect damage as soon as we detect it, as we are told by pesticide services and product makers. If you have diversity in your environment, many perceived problems will likely be controlled by the balance created by beneficial insects feeding on what humans consider as pests.

Only one percent of insects are agricultural or health pests. Here are some ways you can mitigate pest damage.

- Plant native plants that attract lots of insects: insects eat each other, and beneficial and benign insects will keep a balance with the pests. They will not eliminate the pests, but they are nature's way to provide control.
- In the vegetable garden, plant "trap crops" that are more attractive to the pests than your vegetables. Some trap crops: nasturtium, cleome, amaranth, mustard, alfalfa (protects strawberries), marigold, calendula, and clover.



Harlequin Bug, pest to cabbages. Attracted to Cleome trap crop. Photo by Normalee Martin.

Squash bugs

o Check the underside of squash leaves and remove the yellow eggs. If the eggs have hatched, smash the nymphs. Smash the adults. If you spray or use a pesticide dust you run the real risk of killing the bees and flies that pollinate the flowers. Use row covers to keep the pests off your plants. Remove row covers periodically so the pollinators can get to the flowers.

- o Blue Hubbard squash is very attractive to squash bugs and to squash vine borer and spotted and striped cucumber beetles. Transplant two-week-old blue Hubbard seedlings (trap crop) to your vegetable garden three to eight feet from desired squash at the same time you sow the squash seeds. If you grow squash from transplants, then transplant the blue Hubbard seedlings at least two weeks before your squash. Or grow blue Hubbard nearby in pots. Apply pesticides very carefully on blue Hubbard to kill the pests that congregate there.
- **Bean beetles** (Mexican bean beetles): the best way to keep them off your beans is to use row covers. Remove row covers periodically so the pollinators can get to the flowers.
- Tomato hornworms: parasitic braconid wasps will lay eggs on the hornworm. The resulting wasp cocoons look like white rice protruding from the caterpillar's back. If you see this, leave the hornworm on the plant. The wasp larvae will invade the hornworm and ingest it. Let the wasp adults develop and emerge to continue the cycle. Lady beetles and green lacewings prey on the egg stage and young hornworm caterpillars. If you see a hornworm without the wasp's white cocoons, pluck it off and squash it or otherwise dispose of it. Spraying your tomatoes with pesticide is not recommended and will kill the insects required to pollinate the flowers.
- Mosquitoes: patrol your area regularly and eliminate standing water where they breed. Mosquitoes need only a tablespoon of water to breed, so make sure to empty water that collects in saucers under pots. If you have a pond or birdbath, make sure to 1) change the water at least every three days, 2) have something that will keep the water moving such as a fountain or "water wiggler," and/or 3) add fish to a pond, especially those that eat mosquito larvae.
- Japanese beetles: these pests eat our plants only about two weeks of the year. An environmentally friendly way to control them is to get to your garden before 9 a.m.--before the beetles are warmed by the sun--and knock them off your plants into a jar of water mixed with a few drops of detergent. The detergent breaks the surface of the water so the insect cannot float on it. They will sink and drown.
- Slugs (not insects): bury a small plastic tub
 up to the rim and fill with beer. The slugs will
 crawl in and drown. Dispose of the resulting



Double Banded Scoliid Wasp. Photo by Lindsay Loyd.

mess in the bushes and let nature recycle the contents. In the vegetable garden, chervil can protect against slugs.

• Use a natural insect repellant to keep pesky bugs off your skin. There are creams made from aromatic herbs and oils that smell great and are effective without the use of potentially dangerous chemicals.

What to avoid:

We can overdo control of insect pests, thus adding to the problem. Here are some actions to avoid that will help the insect population to stabilize and hopefully recover over time. Each of us can do our part to address this problem.

- Bug zappers: these are indiscriminate killers of any and all insects, meaning on average over 90 percent of insects killed are beneficial.
- Chemical insecticides: indiscriminate killer of any and all insects, meaning on average over 90 percent of insects killed are beneficial.
- If you use a pest management company to keep insects and rodents out of your house, choose a company that is professional, reliable, and has appropriate training and certification. Avoid companies that promise to treat more than the immediate area (a few feet) around your house.
- Do not overly till your soil. Native bees nest in the soil.
- Neonicotinoids, also known as "neonics," are controversial pesticides; however, there is a growing body of evidence that:
 - o These pesticides are absorbed by the plant and are presented in the pollen and nectar. Thus, they affect both larval and adult stages of insects. Studies, both in the lab and in the field, are gathering data that these pesticides remain in the plants, seeds, and soil far longer than originally thought.
 - Neonics are damaging bee populations, which are gradually declining. Some studies show our native bumblebees are two to three times more sensitive to neonics than are honeybees. Neonics are also more lethal to bumblebees than are other pesticides.
 - o It has not been proven that they increase crop yields.
 - Neonics leach into the soil. Slugs have been found with levels of neonics high enough to kill the beetles that feed on them. Neonics are found in neighboring plants and grasses, thus escaping the targeted plants and pests.
 - o It is not easy to know which plants and seeds you buy have been treated. It may be safest to purchase from trusted "native plant" and "organic" sources.

Resources for additional research on this topic:

Bringing Nature Home by Douglas W. Tallamy, published by Timber Press, Portland, OR, 2007.

Nature's Best Hope by Douglas W. Tallamy, published by Timber Press, Portland, OR, 2020.

Alonso Abugattas blog at Capital Naturalist by Alonso Abugattas.

<u>Trap cropping: A simple, effective, and affordable Integrated Pest Management strategy to control squash bugs and squash vine borers // Missouri Environment and Garden News Article // Integrated Pest Management, University of Missouri.</u>

Trap Crops, Intercropping and Companion Planting, w235-f.pdf (tennessee.edu).

Eastern-Temperate-Forests_Plant-List.ashx (nwf.org).

<u>Butterfly Larval Host Plant List — York County Master Gardener Program — Penn State Extension (psu.edu)</u>.

Sharon Perryman, Loudoun County Extension Master Gardener

March 15-March 29

To our loyal readers: We could use your help... Please support the Loudoun County Master Gardener Association in our community outreach and volunteer



activities by participating in our community's largest day of giving all year! Give Choose is a 24-hour day of giving organized by the Community Foundation for Loudoun and Northern Fauquier Counties to benefit local nonprofits serving our community. Give Choose takes place all day March 29, beginning midnight and ending 11:59 p.m. You can make your donations up to two weeks in advance during Early Giving, which begins March 15. We will have a challenge grant to help us reach our goal of \$4500 this year. Please visit our Give Choose page at:

https://www.givechoose.org/nonprofits.cfm?cid=0&kw=master+gardener#top

Grow a Garden Right in Your Kitchen—Try Sprouts!

Did you know that you can grow sprouts all year round with minimal equipment and care? Sprouts are seeds that have been allowed to grow. Some examples of seeds that can be sprouted are alfalfa, mung bean, lentil, chickpea, radish, sesame, sunflower, and broccoli. It is important that you buy seeds especially designated for sprouting. You can find them online or at natural foods stores. Seeds for planting in the garden may have been treated with antifungal coatings.

A sprouter can be made out of a one-quart wide-mouth Mason jar. You need to have a lid that



Photo by Betty Hedges.

allows air to circulate—cheesecloth secured with a rubber band, a metal lid with holes punched in it, or a piece of plastic mesh from a craft store cut to fit the opening. Sprouting jars are also available at natural foods stores or online.

To start the sprouting process, soak the seeds in water for several hours or overnight. You only need a few tablespoons of seeds. Then drain them and let the jar sit in a dark corner of your kitchen. Rinse and drain them twice a day, and let the jar lie on its side to get good air circulation around the seeds. You should start to see sprouts appear in a day. When the sprouts have reached the size you want, place the jar near a window to increase chlorophyll production. Sprouts will keep in the refrigerator for several days.

I started with 2 tablespoons (1 oz.) of alfalfa seeds, costing about \$.75. The finished sprouts weighed 5.3 ounces. A 4-ounce box of sprouts costs about \$2.50 in the store. So you save money and you are assured of freshness and quality.

Alfalfa sprouts are good sources of vitamins C and K and some B vitamins, high in fiber, and low in calories. They can be added to salads, sandwiches, smoothies, soups, and dips.

Many years ago, I used to go to the Golden Temple Restaurant in Washington, D.C. It was the only sit-down vegetarian restaurant in D.C.! They made a delicious sandwich using alfalfa sprouts:

A slice of crusty whole-grain bread
Mashed avocado seasoned to taste with lemon juice, salt, and pepper
Sliced mushrooms
Sliced tomato
Alfalfa sprouts
Cheese

Broil until the cheese starts to melt.

So find a good source for seeds and a jar for sprouting, and you can start your garden in your kitchen all year round!

Betty Hedges, Loudoun County Extension Master Gardener

Green and Gold, a Native Ground Cover

Native groundcovers provide numerous benefits to the home gardener. They act as a green or living mulch, suppressing weeds and eliminating the need for purchased mulch. Unlike purchased mulch, they provide seasonal interest and benefit pollinators.

Green and Gold, (*Chrysogonum virginianum*) is an attractive and easy to grow native ground cover.

Description

This low mounding plant is semi-evergreen and perennial. The plant grows approximately 6 to 12 inches tall with a medium growth rate, spreading to about 18 inches wide. Spreading occurs via basal offsets, which are natural crown divisions.

Green and Gold is known for its beautiful yellow star-shaped flowers that are about one inch in diameter. Its somewhat hairy leaves grow to about one to three inches long.

It blooms in spring (March to June) and may rebloom sporadically in summer and fall. Its flowers support pollinators such as birds and butterflies. Its seeds are a food source for birds.

Green and Gold (*Chrysogonum virginianum*) is native to the eastern United States but is found most commonly in Virginia, West Virginia, North Carolina, and Ohio.



Photo by Stephanie Brundage. https://www.wildflower.org/gallery/result.php?id_image=47677.

plants that can be transplanted as needed.

Growing Conditions

Green and Gold prefers partial shade with as few as two hours of sun or may tolerate more sunny conditions with adequate moisture. It also prefers acidic and rich soil, which is average to moist. It can tolerate occasional dry spells.

Given the right conditions, Green and Gold is considered low maintenance and easy to grow. However, if soil drainage is not adequate, it is susceptible to root rot.

Planting and Propagations

Green and Gold plants should be commercially available. New plantings should be planted about eight inches apart.

Propagation can be accomplished via crown division in late spring. There might also be some self-seeded seedlings near mature

Landscape Use

Green and Gold is an excellent low-growing ground cover for the front of a native bed, in a naturalized area, or in the woodland understory. The plant is considered to be deer resistant. It pairs well with other woodland natives such as native columbine (*Aquilegia canadensis*), native bleeding heart (*Dicentra eximia*), native foamflower (*Tiarella cordifolia*), dwarf crested iris (*Iris cristata*), or ferns. Due to its low growth habit, it may also be suitable for walkway surrounds.



Photo by Stephanie Brundage. https://www.wildflower.org/gallery/result.php?id_image=47676.

Article Reference Sources:

https://hgic.clemson.edu/factsheet/green-gold/.

https://plants.ces.ncsu.edu/plants/chrysogonum-virginianum/. https://www.wildflower.org/plants/result.php?id_plant=chvi5.

Marcee Judd, Loudoun County Extension Master Gardener

32nd Annual Leesburg Flower & Garden Festival

The streets of downtown Leesburg will be in full bloom April 23rd and 24th. Be sure to find the Loudoun County Master Gardener booth to purchase our great garden gloves and tools, decorative planters and native plants. We will also be hosting a garden clinic to answer your gardening questions. (Saturday: 10am - 6pm; Sunday: 10am - 5pm).

Landscape or Xeriscape?

The average American uses 101.5 gallons of water a day. Approximately one-third of all American residential water goes to landscaping and gardening. Keeping our lawns green in the United States requires about 9 billion gallons of water each day. Seems incredible doesn't it? That's a lot of water, a commodity that is becoming scarcer each year. But no matter how advanced our technology becomes, we can't control the weather or how much rainfall we receive each year. However, we do have the means to make informed guesses about what's coming weather-wise, and we can respond accordingly. Of course, we have to have drinking water, take showers, do laundry, etc., and we have little control over how much water is used by farmers. But in years when there is very little rain, homeowners have to prioritize how they will use the available water. Even in years when we get sufficient rain, it's always a good idea to conserve water.

What Is Xeriscaping?

Xeriscaping, or dry gardening, is a landscaping philosophy that uses as many native droughtresistant plants as possible, arranged in efficient, water-saving ways. The term xeriscape ("zeera-scape") is a combination of two Greek words: "xeros" meaning dry and "scape" meaning view. The term and concept were coined and trademarked by the City of Denver's water department during a major drought in the late 1970s and early 1980s. Historically, xeriscaping has been associated with hot, dry climates that receive very little annual rainfall, but it can be practiced in any climate. Climate change is affecting temperatures and rainfall amounts across the country. Every summer our local area goes through a (sometimes) extended period of high heat with no rain. Unless they are watered every few days, many plants will fade and die in these conditions. Watering becomes a nightmare of watering every other day during periods of high heat with no rainfall. All that watering means higher water bills and a lot more work for you, the homeowner, in upkeep. It might be time to rethink your landscaping plan. Consider replacing your traditional water-hungry grass landscape with a xeriscape, which uses far less water so your water bills are lower. A xeriscape requires very little maintenance, giving you more time to enjoy life (at the beach!). And contrary to popular belief, a xeriscape isn't all barren, rocky landscape with a few cacti and yucca planted here and there. It can be as colorful, attractive, and inviting as a traditional landscape while using less water. For example, add color and flair to your xeriscape by planting a few native ornamental grasses and succulents, and fill in with drought-tolerant flowering perennials.



Sedums. Photo by Kristen Hicks, Expertise.com.

But don't confuse xeriscaping with zeroscaping. Zeroscaping is a more extreme kind of waterconserving landscaping that uses almost no plants at all. Rock gardens are an example of zeroscaping.

Shown in this photo, sedums are a great way to bring drought tolerant plants into a landscape without sacrificing color, texture, or interest.

Xeriscaping in Virginia

In Virginia, having enough available water to use in your landscape has not been a problem in the past. In the past, our area received more rain in the spring, more thunderstorms in the summer, and more snow in the winter than we do now. Last year, 2021, was one of the driest years on record for Loudoun County. At one point, during the late summer there was not a drop of rain at my house for almost eight weeks. When it finally rained, it was torrential, and the teenagers next door went outside and danced in it. I was so happy to see rain I wanted to join them! According to the National Integrated Drought Information System (NIDIS) Drought Monitor Map for January, 2022, central Loudoun County is currently in a moderate drought. Areas to the west and south of Leesburg are faring a bit better. The status there is "abnormally dry."

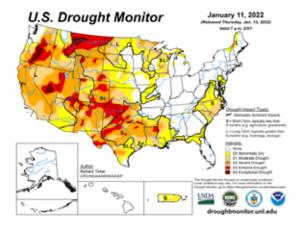


Photo courtesy of National Drought Mitigation Center, University of Nebraska/Lincoln. USDA, NOAA.

During the summer growing season, water usage in Loudoun County goes up 20 percent over what is used during the other months. That extra water is going toward outdoor activities, primarily landscaping. Minimizing water use in your landscape not only saves you money on your water bill, it helps the environment and can make a big difference in our available water supply.

Building a Xeriscape

If you are unfamiliar with drought-tolerant landscaping, it might be a good idea to get some professional advice from a landscaper before you begin, even if you plan to do the actual work yourself. But if professional advice isn't in your budget, it's not difficult to change your traditional landscape into a xeriscape yourself if you follow a few basic guidelines and do your research.

Consider your space. Know your yard. Where is the sun at different times of the day? Where is the shade? When it rains, where does water pool or run off? Is the area flat or are there slopes to consider? Where are the water sources? Knowing this information will help you decide what plants to use and where to put them based on your particular conditions. RIGHT PLANT—RIGHT PLACE!

Out with the old. Before you can create a new drought-tolerant landscape, you have to remove the existing grass (or other landscaping) along with the roots. You can clear the area by hand using a shovel or tiller. This is the hardest but most affordable (and calorie-burning) way. Solarization takes longer but is less work. And herbicides are the fastest and easiest way to kill grass and weeds although they do come with a few unsavory risks.

Prepare the soil. GET A SOIL TEST and amend your soil if necessary. Mix in some compost, which will help the soil retain water. On top of the compost, spread 2 to 4 inches of mulch, depending on the type of mulch you're using. Mulch keeps the roots cool in the summer and helps to conserve moisture. DON'T USE COLORED MULCHES! They aren't good for your plants and they are ugly!

Irrigation. The most efficient form of watering your new landscape is drip irrigation. Use plastic pipes with holes cut out along the length where the water comes out, distributing a low flow of water to the plants over time. This gives the soil more time to soak the moisture in and you prevent water waste from runoff.

When you start looking at your plant and shrub options, you'll probably find that there are hundreds of colorful drought-tolerant plants and shrubs to replace all that expensive, time-consuming, thirsty grass. Consider starting small and building your xeriscape over several growing seasons. Design a rock, stone, or wood chip path through your landscape to add interest. Create a rock or cactus garden. Plant the cacti in pots, though, because many of them might have to be brought indoors during the winter months.

The parking strip xeriscape in this photo below uses a mix of sedums, flowering perennials such as evening primrose, Russian sage, and low-water evergreen trees to create a colorful, layered, water-efficient landscape.



Photo by Kristen Hicks, Expertise.com.

What Does It Cost?

A xeric garden can save you quite a bit of money over time if you're willing to commit to an initial moderate budget outlay and some hard work on your part. Homeowners resist changing their landscape because they worry that the upfront costs will be too high and that xeriscaped yards are not as attractive as their grassy counterparts. You can save money by doing a lot of the work yourself. And because your new xeriscape will be saving you around 20 percent on your water bill, you'll have some extra funds to use when creating it.

DO THE PREP WORK YOURSELF – Having a landscape company remove the existing grass could be a bit expensive. Doing it yourself might save you a few hundred dollars. After you have cleared the area and amended the soil per your soil test, lay out your plan on grid paper and do the planting yourself.

HOW TO GET INEXPENSIVE PLANTS – There are lots of ways to get inexpensive, or even free, plants. Growing your own plants from seed and collecting plant divisions from friends and neighbors are both effective and inexpensive ways to fill your landscape with plants at no cost to you. Check the TLC tables at Meadows Farms and Blue Mount Nurseries for 50 percent off plants that just need a little tender loving care. Starting your plants from seeds will take your garden longer to mature so you might want to grow annuals or biennials in your garden to fill in until the perennials are ready to be transplanted.

USE NON-INVASIVE PLANTS THAT SPREAD – Using plants that spread by self-seeding, runners, or division is an easy way to cut costs. Some examples of local plants that spread this way are sedum, salvia, lupine, coneflower, bearded iris, monarda (bergamot, bee balm), and Russian sage. Ground covers that do well in local low-water environments include various types of speedwell, thyme, low-growing sedum like Angelina stonecrop. Annuals that spread by seed include zinnia, petunia, marigold, and sunflower.

MAKE YOUR OWN MULCH – If you don't have a shredder or mulcher, perhaps you can borrow one from a friend or neighbor. Shredded leaves and small clippings make a great mulch. Some xeric plants don't like to get their feet wet so put a little pea gravel around those plants rather than mulch.

KEEP PURCHASED HARDSCAPE MINIMAL – Where possible, use what you have, such as rocks, flagstones, etc. Keep your expense small by making your own stepping stones with fast-setting concrete and a mold. You can add things to it like small tiles, leaf imprints, or marbles. Let your imagination go wild! Budget-friendly options for pathways include mulch, wood chips, and gravel.

According to www.energy.gov, the upside of installing a xeriscape is that the landscaping can actually pay for itself in as little as eight years due to a combination of lower water requirements (and lower water bills) and less maintenance for the homeowner.

The Demonstration Garden Has a Xeriscape!

The Loudoun County Extension Master Gardener Demonstration Garden at Ida Lee Park in Leesburg is wonderful. In all the things I've done as an EMG volunteer, I've been the happiest working at the Demo Garden. (Although it's not really "work," is it?) If you're not familiar with the Demo Garden, it is a teaching garden, composed of 8 to 10 little gardens, or beds, a compost area, and a large vegetable area. Each bed is dedicated to different types of plants and growing methods. The goal of the Demo Garden is to show Loudoun County residents how to grow plants and vegetables in an environmentally friendly, organic, and sustainable landscape. One of the garden areas is the drought-tolerant garden, which is an excellent example of how to create a beautiful water-efficient xeriscape using plants that are drought-tolerant and conditioned to growing well in the local climate conditions. If you're looking for inspiration on "how to do it," definitely pay a visit to the Demonstration Garden's drought-tolerant bed. It's at the back of the garden between the wedding and shade gardens.



Drought-tolerant bed at the Demonstration Garden during the growing season. Photographs by Normalee Martin, LCEMG.

In early February, I walked through the drought-tolerant bed at the Demonstration Garden with Normalee Martin, Demo Garden co-lead. Although everything was dormant and there was still some snow on the frozen ground, Normalee knew everything that was planted in the beds, plus a little biography of each plant. The garden has all the ingredients for a xeriscape—white gravel paths winding through the bed and some hardscape—a bench for sitting and relaxing and an interesting shovel sculpture. But the plants are the stars of the show. With a couple of exceptions, the plants in the drought-tolerant bed are perennials that need minimal water and maintenance and that have proved they can withstand the hot, dry summers and the sometimes bone-chilling cold, snowy winters that we have in Loudoun County. Some of the plants currently growing in the Demo Garden drought-tolerant bed are noted below. They'd be perfect in your own yard if you decide to think outside the flowerpot and create your own xeriscape.



BAPTISIA (False Indigo, Wild Indigo) – Baptisia is an herbaceous perennial, native to most of central and eastern North America. It tolerates drought and dry soil, attracts butterflies, and likes full sun to part shade.

Baptisia. Photo Courtesy of Missouri Botanical Garden.

LEADWORT - Leadwort is a low-growing, mat-forming perennial ground cover. It has small oval leaves that emerge with a burgundy hue, turn a glossy medium-green texture in summer, then transform into a blazing reddish-brown in fall. Leadwort has moderate moisture needs—roughly one-half inch of water per week. You should water it during prolonged periods of drought to prevent the soil from fully drying out.



VIBURNUM – Prefer full sun. Their hardiness is well suited to our cold winters, and they are adaptable to a variety of soil and moisture conditions. The fruit provides food for small animals and birds, and they attract many kinds of butterflies and moths.

Viburnum. Photo by Susan Martin, Piedmont EMG.

PACIFIC CHRYSANTHEMUM – Plants are herbaceous and sprawling and spread by underground

rhizomes. Pacific chrysanthemum makes an attractive ground cover and requires very little water.



RED HOT POKERS – Can tolerate heat and drought, and deer and rabbits don't like them. Although they are moderately drought tolerant, the plants need to be watered well when setting buds for the best blooms.

Red Hot Pokers. Photo . https://plants.ces.ncsu.edu/plants.



Catmint. Photo Courtesy of Proven Winners.

CATMINT – Easy to grow and perfect for mass plantings and edgings, and if planted near the vegetable garden, they help deter aphids and Japanese beetles. They can be grown in full sun or partial shade and because the plants are drought-tolerant, they work very well in a dry garden.

LAVENDER – Plants need full sun and well-drained soil. Give the plants a good long soaking every so often to promote root growth. Short and frequent watering will rot the roots. Plant lavender with other drought-tolerant plants such as coneflowers, sedums, black-eyed Susan, roses, and Shasta daisies.



CHASTEBERRY (Chaste Tree) – is an unusual shrub with airy spikes of purple flowers that can grow to 15 feet tall and 10 feet wide. Although it can tolerate either dry or moist soil conditions, it is considered drought-tolerant so it is perfect for xeriscapes. Chasteberry also tolerates urban pollution.

Chasteberry. Photo Courtesy of NetPS Plant Finder.

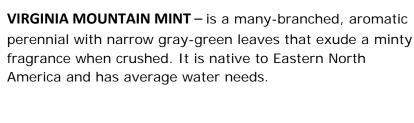


SANTOLINA – is an herbaceous perennial herb, suited to hot, dry summers and full sun. It loves sandy, rocky, infertile soils so it's ideal for xeriscapes. Once established, it requires minimal water. Overwatering will kill it.

Santolina. Image by Jose Pedroso Vallejo.



Virginia Mountain Mint. Photo courtesy VNPS.





WHITE SNAKE ROOT – is a perennial herb that likes full sun and needs minimal water. This plant can be highly toxic in the fall. Never eat it.

White Snake Root. https://plants.ces.ncsu.edu/plants/eupatorium-rugosum.

ARTEMISIA – A full sun, low maintenance plant that looks great when paired with purple coneflowers or deep blue or purple salvia (also drought-tolerant). Artemisia is very drought-tolerant. The plants will need regular watering until established and then they can take care of themselves.

These plants and shrubs also grow well in this region and require little watering or maintenance: low-lying succulents, lavender, monarda/bergamot (bee balm), rosemary, lantana, yarrow, Russian and meadow sage, marigolds, euphorbia, nasturtiums, ascot rainbow spurge, spirea, mugo pine, abelia, and ligustrum. While it's important to choose the right plants, it's equally important to group the plants according to their water or light requirements. In many cases people give backyard plants a lot more water than they need and that's why it's important to group plants with similar needs together, so you don't overwater.

In conclusion, there are advantages and disadvantages to everything, including xeriscaping. The biggest advantages to xeriscaping are that it requires less money and work to provide upkeep (watering weeding, mowing, reseeding) and produces lower water bills. Lawns in the United States use 30 to 60 percent of urban fresh water supplies. Xeriscaping reduces that percentage significantly. What are the disadvantages? The biggest disadvantage is the initial outlay of funds to turn a traditional grass-dominated landscape into a water-conserving xeriscape, which can be costly and time consuming. Spread out the conversion over a couple of years; you don't have to complete the whole project in one year.

I do a lot of walking around my neighborhood. In the past month or so I've paid more attention to the kinds of landscapes my neighbors have. All of them have opted for the traditional grass-dominated landscape that requires a lot of water and a lot of maintenance. People just aren't getting the message. Our supply of available water for ALL uses is finite. If you just can't part with your traditional grassy landscape, at lease don't water your grass all summer. Let it go dormant, it will come back next spring, I promise. What would you rather have—enough water to have a green lawn that's the envy of the neighborhood or enough water to take a shower and to drink? Think about it, you might have to make that choice one day in the not too distant future.

Jayne Collins, Loudoun County Extension Master Gardener

Floriography

The Language of Flowers

For thousands of years, humans have assigned meanings and beliefs to plants and flowers. Plants and flowers have been used to mark life events such as births, marriages, and deaths and used in religious and spiritual ceremonies. They've been used for medicinal purposes, and during the 19th century in particular, flowers were paired or grouped to use as a form of communication because outward signs of emotion were frowned upon. With thousands of flowers from which to choose, here are a few that are likely to be discussed during the warming spring months.

Carnation (Dianthus caryophyllus)

Carnations have been cultivated for at least 2,000 years. The word "carnation" is derived from the Latin *carnis* (flesh). As it was originally cultivated in the Near East, the flesh color (pale or pink) was based on the inhabitants of that region around the Mediterranean Sea. According to Christian legend, the carnation sprang from the Earth where tears of Mary landed and was chosen, for that reason, by Anna Jarvis in 1907 as the symbol of Mother's Day.

Meanings: Mother's Eternal Love

Red--Love, Compassion, Romance

Pink--Mother Love, Encouragement, Gratitude

Striped--Sorry I cannot be with you

White--Good Luck, Purity, Devotion

Yellow--You have disappointed me, Rejection

Possible Powers: Divination

Healing Luck Protection Strength



https://www.publicdomainpictures.net/en/freedownload.php?image=carnation&id=110696.

Folklore: A corsage or nosegay made up of *Dianthus caryophyllus*, a sprig of *Rosmarinus officinalis*, and a *Geranium* flower means Love, Fidelity, and Hope.

Fresh red carnations in the room of a convalescing patient will promote strength and energy.

Wearing a carnation was popular during Elizabethan times. It was believed it would prevent you from being put to death on the scaffold.₁

How to grow in Northern Virginia: Carnations prefer full sun (at least 6 hours), and a well-drained, slightly alkaline soil (pH around 6.7).

Daffodil (Narcissus pseudonarcissus) \$

"The Greek legend of Narcissus, from which the scientific name of this plant derives, tells of a handsome and proud hunter who, upon seeing his reflection in the waters of a spring, falls in love with himself. Unable to part from his own image, he eventually perishes. A daffodil then blooms to mark his grave."2

Meanings: Appreciation

of Honesty Forthrightness Self-Esteem Singular Love

Possible Powers: Aphrodisiac

Fertility Love Luck



https://www.freeimages.com/photo/festival-2-1482140

Folklore:

Narcissus is the flower of the Underworld.

In Maine, there is a superstition that if you point at a daffodil with your index finger it won't bloom.

A vase of fresh daffodils in the bedroom bodes well for fertility.

How to grow in Northern Virginia: Plant bulbs in the fall, two to six weeks before the first freeze. Plant the bulbs with pointy ends up about two to three times as deep as the bulbs are tall and about 2 to 3 inches apart, although they can tolerate crowding. They like relatively well-drained soil (not wet--the bulbs will rot) in full or partial sun.



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Daisy (Bellis perennis) &

The daisy is associated with childhood, purity, and innocence in many folklore traditions. In Norse mythology, the daisy is associated with Freya, goddess of fertility, motherhood, and childbirth. In Celtic tradition, daisies grew for the spirits of children that died in birth, and in ancient Roman mythology, the nymph Beledes, while dancing with other nymphs, attracted the admiration of Vertumnus, god of the seasons who presided over the orchards. To escape his advances, she turned herself into the flower Bellis.

Meanings: Beauty

Childlike Playfulness

Gentleness Innocence Purity Simplicity Strength

Possible Powers: Divination

Heightened Awareness

Inner Strength

Love Lust



https://www.freeimages.com/photo/daisy-2-1397001.

Folklore: If you wrap a daisy chain around a child, it prevents the child from being stolen by fairies.

If you sleep with a daisy root under your pillow, your lost lover may return.

It was once believed that whoever picked the first daisy of the season would become uncontrollably flirtatious.

How to grow in Northern Virginia:

In the spring, sow daisy seeds about 1/8 inch deep in a sunny location when the soil is 70 degrees. They will germinate in 10 to 20 days if the soil is kept moist.



https://www.freeimages.com/photo/butterfly-on-daisy-1560505.

Hyssop (Hyssopus officinalis)

Hyssop can be traced to ancient Greece where it was used to clean and purify temples. During biblical times this purification herb was used to treat

leprosy. Its cleansing aroma in bouquets represents a new beginning.

Meanings:

Cleanliness Holiness

Possible Powers: Healing

Protection Purification

Spiritual Cleansing Wards Away Evil Spirits



https://www.freeimages.com/photo/hyssop-1629693.

Folklore: Hang hyssop in the home to force out evil and negativity.

"The sponge wet with vinegar that was brought to Jesus when he was suffering on the cross, which was held up to his mouth to drink of it, was on a *Hyssopus officianlis* branch." 3

How to grow in Northern Virginia:

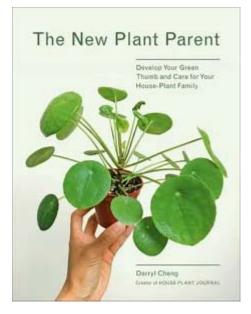
Sow hyssop seeds indoors or directly in the garden in full sun or partial shade 8 to 10 weeks before the last frost. Plant the seeds just beneath the soil surface. Seeds will germinate in two to three weeks. The soil should be well-drained, leaning toward the dry side. If transplanting, place 6 to 12 inches apart.



- 1. DIETZ, S. THERESA. "311." Complete Language of Flowers: A Definitive and Illustrated History, WELLFLEET, S.I., 2020, pp. 75.
- 2. Roux, Jessica. Floriography: An Illustrated Guide to the Victorian Language of Flowers. Kansas City, Missouri, Andrews Mcmeel Publishing, 2020.
- 3. DIETZ, S. THERESA. "311." Complete Language of Flowers: A Definitive and Illustrated History, WELLFLEET, S.I., 2020, pp. 111.

Elizabeth Campanella, Loudoun County Extension Master Gardener

Book Review: The New Plant Parent—Developing Your Green Thumb and Care for Your Plant Family by Darryl Cheng



What? Another book on houseplants! Probably boring, right? Nope, not in the least!

This book will likely present a new way of "relating" to your houseplants or spur an unsuccessful grower to actually enjoy houseplants. I purchased Cheng's book soon after viewing a webinar that featured him and found it to be easy yet thoughtful reading.

Cheng is a home gardener and photographer whose approach to houseplant care is informed by his background as an engineer; he resides in Canada. He is also the creator of the Instagram account @houseplantjournal where he offers help for people to learn to nurture and become more deeply engaged with their houseplants. My own "journey" with indoor plants began when I was a young mother who badly needed a creative outlet while raising two frisky sons (a LONG

time ago). I found bromeliads particularly attractive because they were easy to grow, required little care, and occasionally rewarded me with a bloom. Likewise, succulents proved quite hardy until my jade plant became infested with mealybugs; a battle ensued that I eventually won by persistence and patience! Over the years, my interest has expanded to more "leafy" choices such

ivies, dracaenas, philodendrons, spathiphyllums, sago palms, snake plants, and ponytail palms. So, my love of outdoor plants has quickly grown into love of plants inside as well, such that I'm out of "light space" in which to add more (well, maybe not, as I have my eye on a ZZ plant).

Though I have read a great deal on indoor plants, most often their requirements for a healthy life have focused primarily on a set of basic instructions for light, water, pruning, and fertilizer. Cheng's idea of a plant's healthy life transcends from care like "a baking recipe that advertises guaranteed results" to a shift in one's mindset to appreciation and care of a plant as its "parent." Learning to take the journey with a plant, simply for long-term satisfaction of owning houseplants, involves gaining knowledge while limiting expectations and observing nature's lead. Understanding why a leaf yellows or drops, or why leaves curl and wilt, may just be misinterpreted as something askew with its care when it's actually within the accepted behavior of the plant's natural cycle of life. The demise of a plant may signal exhaustion of its resources and capability to sustain itself, rather than it was

given an incorrect amount of light or water. The difficulty or ease of growing any plant is directly related to one's understanding of its needs and, more



Photo by Pamela McGraw.

importantly, a willingness to OBSERVE and provide for those needs, not unlike a loving parent would do for a child. Cheng suggests with a change in mindset to accepting "what nature has in store, you'll get great enjoyment from your plants for many years."



Photo by Pamela McGraw.

A basic approach Cheng advocates is "holistic houseplant care," which simply means giving a plant a suitable environment in one's home by assessing its needs and understanding its life cycle, rather than blindly following directions. One such example is watering. How often have we been told that regular watering of plants once a week is sufficient? However, perhaps we did not understand that a plant's requirements for water are directly related to how much exposure to the light it receives; consequently, a plant that is content living away from a window, will naturally require less water, often less frequently than the prescribed once a week. Cheng's emphasis on light has spurred me to purchase a light meter (less than \$20 from Amazon) to reassess the actual light my plants receive. I was surprised by some readings and hope to relocate some plants to better suited locations. Another aspect Cheng emphasizes is soil structure, i.e., water retention versus drainage. Simply because water runs out the bottom hole does not necessarily indicate the plant's soil is properly aerated and water evenly distributed throughout the soil. The use of chopsticks is suggested with each watering to loosen soil around a pot's edges and to open pathways through the soil, much like worms do in our gardens. While this may take a bit more time as we tend our plants, its benefit is understandable. Imagine my surprise when the soil of my recently acquired croton was so hard that much effort was required to make new water channels; most likely it is ready

for repotting because its roots may have consumed its soil.

The New Plant Parent provides many photos of Cheng's collection of plants, and while far from inexhaustible, it includes enough examples to promote understanding of his novel approach to being a plant parent. So, best I end this review with encouragement to read his book or at least listen to his You Tube offerings, of which there are many. I think you'll find his approach to houseplant care to be refreshing and inspiring. For me, it's time to go search for that ZZ plant!

Pamela McGraw, Loudoun County Extension Master Gardener