



Trumpet Vine

Knowledge for the Community From Loudoun County Extension
Master Gardeners

Summer 2023

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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.

July 13, 7-8 p.m. Nuisance or
Nonsense? What's the Harm
With Invasive Plants? With
Joanne Royaltey,
Horticulturalist, Frederick
County VCE

August 3, 7-8 p.m.
Sizzling Ideas for Cool Season
Vegetables in the Fall by
Denise Palmer, Master
Gardener

September 7, 7-8 p.m. Building
a Backyard Bird Oasis by Eileen
Boyle, Horticulturalist

October 5, 7-8 p.m.,
Cemeteries as Gardens by
Maria Stewart

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

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

What Will Summer Bring This Year?

Unlike last year when we had generous rain, this year's rain has been sparse, and we are officially in a drought. You are probably already watering. This is a good time to review water-wise strategies to deliver precious water to your plants with minimum waste.

When and how much? Annuals, perennials, vegetables, and turf all are best watered in the early morning and require one to two inches per week with turf requiring one to one-and-a-half inches per week. The best time to water woody plants is evening or night requiring one to three inches per week. A square foot of soil watered one inch deep requires 0.62 gallons of water. Ideally you should water less frequently and more deeply.

Set your mower to a higher setting to provide grass roots greater shade and reduce watering needs.

Choose plants that are "drought tolerant," and group plants together that have similar watering needs. Remember plants are not drought tolerant until their roots are well established (two years). Plants native to our area are generally more resilient.

When it does rain, collect and save rainwater. Rain barrels save amounts of water useful for light watering. Rain gardens are attractive basins for collecting stormwater runoff.

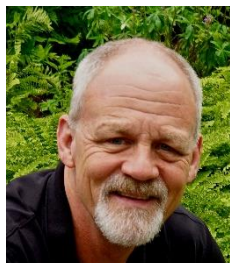
Hand water in small areas and target specific plants that need watering. To cover a lot of ground, use a sprinkler. Avoid watering in the afternoon to minimize the loss of water from evaporation. Adjust your sprinkler and the duration of the watering to get the right amount in the right place.

Remember the four rules of water-wise irrigation:

- *Placement* of your watering device for the best coverage.
- *Timing*--Early morning or late afternoon and evening.
- *Frequency*--Rule of thumb is two to three times weekly.
- *Duration*--Depends on weather conditions. Brief, low volume watering encourages shallow rooting.

2023 Annual Symposium

The Loudoun County Master Gardeners are sponsoring a one-day gardening symposium, Saturday, October 14, 2023. Four prominent speakers will provide inspiration, ideas, and information as we prepare our gardens for the winter and the subsequent growing season. Please join us at the **Academies of Loudoun in Leesburg, Virginia**, for this educational event.



Bryce Lane: teacher, speaker, horticulturist, and TV show host.

Bryce Lane is a semi-retired, award-winning horticulture teacher at NC State University. He has taught more than 23,000 students during the past 42 years. He continues to teach at NCSU and at the JC Raulston Arboretum. Bryce produced and hosted a three-time Emmy-winning PBS NC television show called "In the Garden With Bryce Lane" from 2003 to 2013.

His lecture, ***Understanding Garden Soils: What LeBron James, Jack Nicklaus, and Julia Child Have in Common***, will explore basic soil principles and how we can use them to create soils in which all our plants thrive.



Ian Caton: landscape designer, speaker, and owner of Wood Thrush Native Plant Nursery in Floyd, Virginia.

Ian Caton has been the owner/operator of Wood Thrush Native Plant Nursery (formerly Enchanters Garden) in Floyd, Virginia, since March 2013. Wood Thrush Native Plants is a nursery specializing in native plants of the Appalachian region including West Virginia, Virginia, Pennsylvania, Tennessee, and North Carolina. While gardening, our five senses are engaged. In his talk, Ian will get us thinking about ***Textures: Ferns and Grasses***.



Peggy Riccio: gardener, writer, speaker, community leader.

Peggy Riccio is a horticulturist and garden communicator in Northern Virginia. Her website, pegplant.com, is an online resource for gardeners in the DC metro area. She publishes a local gardening newsletter, [Pegplant's Post Gardening Newsletter](#). Peggy's passion is herbs--plants that have multiple uses. Currently, Peggy serves as the mid-Atlantic district delegate for the Herb Society of America. For this event, Peggy will broaden our herbal horizons with her session, ***Beyond Parsley, Sage, Rosemary, and Thyme: A Dozen Other Culinary Herbs to Grow***.

TBD

Our fourth speaker is currently being finalized. Please check back on <https://loudouncountymastergardeners.org/events/annual-symposium/> for updates.

REGISTRATION

Online registration opens September 1, 2023, on our website:

<http://loudouncountymastergardeners.org/events/annual-symposium/> (mail-in payment available). Tickets are \$65. Participants have the option to purchase a box lunch or bring their own lunch. We look forward to learning and socializing with you in Leesburg. **Buy your tickets early.**

Flower Shop in Your Backyard: Design a Cutting Garden

Creating floral arrangements is something that many of us enjoy doing throughout the year. Blooms are a source of fascination when viewed up close and bring a feeling of the outdoors inside our homes. While grocery stores and florists have lovely blooms to choose from, it can be costly to purchase the flowers, foliage, and fillers needed to create an arrangement. By designing a cutting garden filled with your personal preference of flowers and colors, all the materials needed to make beautiful arrangements are available right in your backyard!

Think about the flowers from perennials or shrubs already growing in your yard from spring through fall. These may include peonies, lilacs, daisies, Black-Eyed Susans, asters, and early spring bulbs such as daffodils and tulips. These flowers are a good source of material for arrangements; however, cutting them in the quantity needed for arrangements means we can't enjoy viewing them in the landscape. Instead, create bouquets throughout the year by growing a cutting garden of annual (live for one growing season) flowering plants and supplementing them with blooms that may be growing elsewhere in your yard. Cutting stems from annual plants on a regular basis promotes new blooms throughout the summer. It's called a cutting garden for a reason—the more you cut the more you have!

Getting started:

One of the first considerations in developing a cut flower garden is the space available to dedicate to planting. This can vary significantly depending upon the number of flowers and foliage you want to grow. A residential cutting garden can range from the size of a three-foot by six-foot raised planter to a portion of an acre or more depending upon the size of the property. Be realistic when determining the size of the garden. What time do you have available to maintain the garden--weeding, watering, deadheading, and fertilizing? How much floral material is really needed?

Location is critical to the success of growing annuals and perennials, many of which require full sun. Make sure that wherever your growing space is located gets a minimum of six hours a day of full sunlight. Is it located close to a water source where you can reach the area with a hose? You don't want to waste time lugging watering containers back and forth!

Establishing a successful garden requires an understanding of the soil and making sure it meets the requirements for successful plant growth. Once you have decided on the location of the garden, getting a soil test is a must!¹ With this information in hand, the soil can be amended to create an environment best suited to effective plant growth. Soil that effectively retains water, while also providing for drainage, will likely require organic matter such as compost or leaf mold before planting.

Flowers, Filler, and Foliage:

Now for the fun part: what types of flowers do you want to grow in your cutting garden? Consider what elements go into a successful arrangement: blooms that serve as focal points; flowers and foliage that act as "filler;" and interesting foliage to hide the mechanics of the arrangement (ex: rim of the vase or container). Because these flowers are being used in arrangements, they need

¹ For more information on how to take a soil test: [vcedigitalpubs - 452-129 \(SPES-176P\)-Soil Sampling for the Home Gardener \(vt.edu\)](https://www.vt.edu/extension/publications/452-129-SPES-176P-Soil-Sampling-for-the-Home-Gardener). Test kits are available for \$10 at the Virginia Cooperative Extension Office, 750 Miller Dr. SE, Suite F-3, Leesburg, Va.

to have stems long enough to achieve the various heights desired for the bouquet or arrangement.

As you choose your flower and foliage plants, give thought to what shapes, colors, and textures you want to use in the type(s) of arrangement(s) you like to create. Consider not only what's needed for summer bouquets, but plant flowers that can be dried and used in arrangements during the fall and winter. For example, strawflowers come in bright colors that last once the flower is dried. To ensure a steady succession of blooming flowers you may want to consult a bloom time chart ([Bloom Time Planning Guide for Spring and Summer Flower Bulbs \(longfield-gardens.com\)](#)) to help with planning.

Recommended flowers (focal and filler) for your cutting garden can be tender annuals, perennials (lives more than two years), or flowering bulbs. Possibilities include:

- Annuals: Zinnias, marigolds, celosia, cosmos, ageratum, strawflowers, and salvia (varieties can also be perennial)
- Bulbs and Tubers: Dahlias, gladiolas, tulips, and daffodils
- Perennials: asters, Black-Eyed Susans, shasta daisies, pin cushion flower, peonies, irises, yarrow

Interesting foliage and filler options include dusty miller, lamb's ear, coleus, bupleurum, and heuchera.

A list of annuals and flowering bulbs that are considered easy to grow--along with information on growing requirements and recommended varieties--can be found in this publication from Virginia Cooperative Extension ([Adding Cut Flowers May Increase Profits Mullins Hankins 2906-1331 \(vt.edu\)](#)).



Dahlias.

The Layout of the Garden:



Cutting garden grown by Melanie Sisson of Sisson Landscapes, Great Falls.

After determining the space available and getting the results of the soil test, it is time to design the layout of the garden plot. It may be helpful to use graph paper to create a diagram of the layout and organization of the plants.

In general, cutting gardens are laid out in narrow rectangles and rows to make it easy to tend and harvest the flowers and foliage. A 48-inch-wide plot allows for easy access from either side of the row to cut the flowers without stepping into the space and risking compacted roots. After creating the layout, figure out how many plants can be fit into the available space. For example, plants that have a single stem (such as celosia) need an approximately six-inch by six-inch

space. Most flowering tender annuals need about a nine-inch by nine-inch space. If the plot is 48 inches wide, then five rows of plants can be accommodated. The goal is to grow as many plants in

the space as possible to increase the number of blooms available to cut. By planting them closer than what may be recommended by the producer or on the seed packet, you can encourage more vertical growth. This lengthens the stems making the flowers easier to use in arrangements.

Another consideration in the placement of plants is what each needs to grow successfully and produce blooms. Group plants with similar watering needs together, so that plants that thrive in relatively dry conditions don't die due to "wet feet." Take into consideration the height and width of the plants at maturity. Don't place shorter plants next to their taller neighbors in a way that blocks the sunlight from reaching them.



Raised planters at INOVA Mt. Vernon.

Once you have the diagram completed, it is easy to figure out how many plants are needed to fill the space. According to Erin Benzakein, author of *Floret Farm's Cut Flower Garden*, if the bed is 48 inches wide and 10 feet long "and you're planting with nine-inch (22-cm) square spacing, you can fit 65 plants. You can grow an enormous number of flowers in even the tiniest plot this way."² Even if you are using a three-foot by 6-foot raised planter, estimates are that you can incorporate 20 plants. This is the spacing I use in raised planters at INOVA Mt. Vernon Hospital, and it provides enough flowers for about ten patients each week to take small bouquets back to their rooms.

No matter if you are creating a cutting garden in the ground or a raised planter, you will need a significant number of plants. Many of the tender annual flowers recommended for cutting gardens can be grown from seed, saving significant money. In addition, by perusing seed catalogs, you may be able to purchase more interesting varieties than those available at local nurseries or big box stores.

Garden Maintenance:

A challenge in any garden is keeping the weeds to a minimum. One of the benefits of planting so densely in the cutting garden is that it crowds out weeds. Commercial specialty cut flower producers will often cover the bed with black plastic and cut holes in the plastic for each plant. For a backyard garden, this probably is not necessary.

Regular cutting will keep your plants blooming throughout the summer. This includes deadheading any spent flowers, which may draw pests and diseases as they decay. Another reason to deadhead is so that plants don't take it as a sign that the season is over and stop producing flowers!

Consistent watering, so that the soil is moist but not soggy, is an important part of maintaining your garden. When plants are seedlings or with seeds that may have been directly sown into the soil, you can water from above. However, once the buds and blooms appear on the plant, overhead watering can cause damage. Investing in a soaker hose or other type of drip system can ensure that the plants are watered in an effective way.

² Benzakein, *Floret Farm's Cut Flower Garden*, p.22.

Plants differ as to their fertilization needs. After you have amended the soil according to the soil test results, an application of a slow-release fertilizer or compost on top of the soil will give young plants a boost. Apply a water-soluble fertilizer every few weeks throughout the growing season.³

Resources:

For more in-depth reading on how to design a cutting garden, especially for those interested in flower production on a large scale, check out the following resources:

- VCE Cut Flower Productions [SPES-171.pdf \(vt.edu\)](#) Information on commercial aspects of specialty cut flower production.
- *Floret Farm's Cut Flower Garden* by Erin Benzakein with Julie Chai. This book received the American Horticulture Society's 2018 Book Award and is a feast for the eyes as it shares how-tos on growing flowers throughout the year and beautiful floral designs. Benzakein can also be found on Instagram (floretflower).

Get growing and soon you'll be sharing your abundance. Your friends and neighbors may find it's more fun to receive floral bouquets than excess zucchini!

Jan Lane, Loudoun County Extension Master Gardener

All photos by Jan Lane.



Zinnias, snapdragons, and strawflowers in planter at INOVA Mt. Vernon Hospital.

³ [Grow a Cutting Garden | Home & Garden Information Center \(clemson.edu\)](#).

Ever Heard of the Chelsea Chop?

What is the Chelsea chop?

The Chelsea chop is a pruning technique that is so named because it is often done at the end of May around when the Chelsea Flower Show takes place in London. In Virginia, many people use the Memorial Day and Fourth of July holidays as reminders for when to cut plants back. You won't want to use this technique later than the Fourth of July because plants need time to recover and blooming can be delayed by as much as four to six weeks.

How do you do it?

The Chelsea chop is simple to do, and you can go about it in several different ways depending on your objective and the look you want. You could cut all stems of the plant back by one third to one half, making a slanted cut at a roughly 45-degree angle just above a leaf joint. If you don't want a uniform look, you can leave some stems untouched and cut some back by one third or one half, or create a mix of all three heights.

What does it do?

Cutting all stems to the same height will delay blooming, and mixing the heights to any extent will extend the bloom season. If the idea of chopping back your plants by that much makes you nervous, you may want to prune only some--maybe one third--of the stems on a plant to give it a try and see how you like the results. In my garden, the deer often decide to prune for me, though they don't seem to know they are supposed to trim back to a leaf joint and they leave stems that I have to go back and trim. The deer sometimes create a two-tier look for my Joe Pye weed, eating as far as they can reach into the bed but leaving the back section its original height. Some humans purposely go for that look. So, all that to say that if you have deer, you may have already been doing the Chelsea chop and didn't even know it!

Why would I chop off the top of my plants?

This pruning method is intended to limit the size of the plant and cause it to bush out, which can help avoid the need for staking by creating fuller and more compact plants. It also delays flowering. For some plants, the flowers will be smaller, but they are frequently more abundant. The Chelsea chop is most typically used for summer- and fall-blooming flowers, particularly those that can become leggy, flop, get too tall for the space, or get knocked over by windy days or strong summer storms. This technique can also make some of the larger native plants more accessible for smaller-size suburban gardens. As a bonus, cuttings from some species, e.g., asters and phlox, can be rooted in water to create new plants.

Why does it work?

There is science behind the Chelsea chop. When we prune stems back, we are removing the apical (also called terminal) buds at the top of the stems. Those topmost shoots normally prevent the side shoots (known as axillary or lateral buds) from emerging by producing hormones called auxins that repress their growth (this phenomenon is called apical dominance). Removal of the top bud removes the auxins that the apical/terminal buds contain, which otherwise inhibit growth of the lateral/axillary buds. Once that growth-repressing hormone is gone, the axillary/lateral buds are no longer held back and often grow rapidly, resulting in the bushing out of the plant stems.

What plants can be pruned with the Chelsea chop?

The Chelsea chop can be used with a wide range of later blooming plants, and I encourage you to give it a try! Some examples include:

Achillea (yarrow)

Agastache (giant hyssop)

Chrysanthemum (mum)

Coreopsis tripteris (tall coreopsis)

Echinacea purpurea (purple cone flower)

Eupatorium (Joe Pye weed)

Helenium (sneeze weed)

perennial Heliopsis (e.g., Heliopsis
helianthoides (oxeye sunflower))

Monarda (bee balm)

Phlox paniculata (garden phlox)

Rudbeckia (black-eyed Susan)

Sedum (upright forms)

Silene stellata (starry campion)

Solidago (goldenrod)

Symphyotrichum (American aster)

Vernonia (ironweed)

Veronicastrum (culver's root)



Coreopsis before the chop.



Coreopsis after the chop.



Close-up of trimming just above a leaf joint.



Regrowth of Silene stellata after the chop.

All photos by Barbara DeRosa-Joynt

Barbara DeRosa-Joynt, Loudoun Count Extension Master Gardener, Intern

LANTANA

Lantana, with bright, colorful, happy flowers, has non-stop color from late spring to the first frost in late fall. In warmer climates, lantanas are grown as a perennial broadleaf evergreen shrub. However, in our area they're grown as an annual. Once the temperature goes below 28 degrees F, your beautiful lantanas will go to that big garden in the sky. Lantanas are easy to grow and pollinator friendly. They thrive with very little moisture in the full, hot, unyielding sun. There are over 150 species of lantanas with flowers in a rainbow of colors. It's not unusual to see butterflies, bees and hummingbirds flitting around lantanas drinking the nectar produced in the plant's small, tubular blooms.



The Basics

Hardiness zones: Annual in Zones 1-8, Perennial in Zones 9-11.

Height/Spread: In warmer climates, where they are perennials, lantanas are more shrub-like and can reach 2-6 feet tall and 3-10 feet wide. Where they grow as annuals, lantanas can grow to 3-4 feet in height and 1-3 feet wide when planted directly in the ground and 6-12 inches tall and 16-48 inches wide when planted in a container.

Exposure: Full sun for at least 6-8 hours a day.



Bloom Time: Late spring through first frost when treated as an annual and nearly year-round in frost-free areas.

Flowers: Flower clusters are composed of many smaller blossoms arranged in a sphere about 1-2 inches across. Each blossom head frequently has more than 1 shade which creates an unusually colorful flower. Blossom shades include yellow, orange, red, purple, white, coral, and pink.

Foliage: Lantanas have oval-shaped leaves with a pungent, sage-like scent that grow up to 4 inches long.

Toxicity: Lantanas can be harmful to children, pets and livestock. The leaves can cause a brief skin irritation or rash. All parts of the plant are poisonous but the berries are the most toxic and can be fatal if ingested.

Companion Plants: Angelonia, Salvia, Pentas

Pests and Problems: Lace bugs, aphids, and caterpillars can cause leaf damage. Watch for mites if the plants are very dry. Alternatively, powdery mildew and root rot are more likely if the soil is too moist.

Soil and Water: Lantanas are drought-tolerant once established but if they go without water for too long, they will produce fewer



blooms. Unless you receive an inch of rain, water thoroughly once a week until the plants are established.

Growing and Caring for Lantana

Lantanas love the warm sun and grow best if you plant them in mid to late spring when the danger of frost is past and the soil has warmed up. Pick a sunny spot with fertile, well-drained soil that will stay evenly moist until the plants are established. Although lantanas can tolerate part shade they



will have fewer blooms and will be more susceptible to disease. Lantanas can be grown from seed or cuttings. Seedlings take a long time to bloom though, so where they grow as annuals, it's best to start with small plants purchased at the nursery. Water regularly until the plants are established. After they mature, lantanas are drought tolerant. Give the plants a light dose of all-purpose fertilizer in the spring. Lantanas are deer resistant; deer don't like the sandpapery feel and pungent scent of the leaves. Rabbits, on the other hand, love flowers and if you plant your lantanas in the ground where they can reach them, I guarantee you'll come out to get the newspaper one morning and

all those lovely blooms will be gone. I've learned to grow lantana in containers on the deck or front porch. Rabbits apparently don't do steps.

On the negative side, lantanas are toxic to children and pets, as well as any animal that might wander into your yard and start chewing on them. The plants are poisonous, and the berries are fatal. Touching the leaves might give you a rash and create an uncomfortable skin irritation. Consider planting your lantanas where curious children and pets can't get to them. Lantanas are also considered invasive in Florida, Texas and Hawai'i.

Lantanas are excellent container plants. The size of the container will control the size of the plant. If you want to try and overwinter your lantana plants, bring the containers inside before the first frost and put them in a cool room place with indirect light. Water them when you think about it (infrequently). Move the containers back outside after the last frost in the spring, give the plants a shot of all-purpose fertilizer and they're good to go.

Lantana plants are easy to find locally at most garden centers and nurseries.



Jayne Collins, Loudoun County Extension Master Gardener

All photographs by Jayne Collins

Opossums: Welcome Them in Your Garden

Possum or opossum? This is not like “to-mā-to” and “to-mah-to.” They are different animals. Possums are tree-dwelling marsupials native to Australia and New Guinea. Opossums are members of a marsupial order found throughout the Americas. The Virginia opossum is the only marsupial found in the United States and Canada.

The early explorer, John Smith, in 1608 used the word “opassum” to describe the animal. It comes from the Algonquian word apasum, which means “white dog or beast.” Smith further wrote in letters to England that the opossum had a head like a pig, had the tail of a rat, and was about the size of a cat.



Opossum face. Photo [Humane Society of the United States](#).

Opossums are mammals with long, thin tails and long, pointed, and piglike noses. They have hairless prehensile or grasping tails. They use their tails as an extra limb to help them move around in the treetops. They also have a thumblike toe on each of their back feet that they use to grip trees when they climb. They vary in color and can be found with white, gray, or brown fur. An adult opossum weighs between four and eleven pounds and measures two to three feet long from nose to tail tip.

Male opossums may roam an area or range of about four tenths square miles in size. A female’s range is only half that size. In cold weather, opossums do not hibernate. Instead, they stay in their dens and do not move. Every few days, they will come out to search for food. Opossums have very little body fat and do not store food, so they have to forage constantly. Opossums are usually solitary and stay in one area as long as food and water are easily available.

Some people fear opossums because their first line of defense is an open-mouthed hiss displaying its 50 teeth, which is more than any other mammal in North America. But opossums are ancient; they existed with the dinosaurs. They are slow-moving animals that are not aggressive and generally avoid confrontation with humans and other animals. In fact, there are reasons to rejoice if you have an opossum in your yard.

They are beneficial to your garden because they eat snails, slugs, insects including cockroaches, and sometimes small rodents and snakes.

Opossums groom themselves constantly and, in the process, eat thousands of ticks, including deer ticks, every year. They are also scavengers and will eat fallen fruit, clean up your spilled trash, and even eat roadkill. They have an extremely high need for calcium, which provokes them to eat the skeletons of the dead animals they consume. Opossums are nicknamed “nature’s little sanitation engineers.”

While opossums can carry the same diseases as many wild and domesticated animals, due to their lower-than-normal body temperatures, they generally stay healthy. Opossums rarely get rabies.

Opossums begin to mate in mid-January and February. Mating continues into August. To attract a female, the male makes a clicking sound with his mouth. Most female opossums have up to two litters a year. A litter may have as few as four or as many as 24 babies. The female opossum can nurse only 13 babies.



Hissing opossum. Photo courtesy of [PAWS](#).

There are usually about 110 days between litters.

As with all marsupials, baby opossums are born in an embryonic stage before they are fully developed. Baby opossums are blind and about the size of honeybees. They must find their way to their mother's pouch where they can continue to grow. The baby pulls itself along its mother's body using only its front claws. The mother opossum licks her belly fur to create a moist path for her



Babies riding on the mother's back. Photo courtesy of [Porter County Parks and Recreation](#).

babies to follow. The baby opossums, or joeys, climb along the path to their mother's pouch. The newborns crawl into their mother's pouch, where they remain firmly attached to a nipple until they are about 50 days old.

At three months old, the joeys leave their mother's pouch to explore. When the babies are four or five months of age, and are too big for their mother's pouch, they ride on her back. The five-month-old baby is usually independent from its mother and does not stay with her. These young opossums can now find food and take care of themselves.

Opossums are considered to be omnivores, eating both plants and animals, but they will eat almost anything. They prefer snails, nuts, eggs, berries, plants, insects, crickets, beetles, butterflies, worms, grubs, and small animals including mice and birds. The main part of their diet is insects. They will also eat pet food that has been left outside. They have a very keen sense of smell and will use this sense of smell to search for food. They often will look for scraps of food in an available trash can. They will also eat dead animals. Many opossums get hit by cars while looking for food on roads.

Opossums will den nearly anywhere that is dry, sheltered, and safe. This includes burrows dug by other mammals, rock crevices, hollow stumps, wood piles, and spaces under buildings. They fill their dens with dried leaves, grass, and other insulating materials. Opossums have several active dens they move between to avoid predators.

Opossums bluff their way out of dangerous situations first by open-mouth hissing and if that fails, then by playing dead, which often confuses the predator. An opossum doesn't decide to play dead. When the animal is in danger, its body automatically shuts down. Then the opossum falls into a deathlike state for a short period of time, up to four hours. Its heartbeat slows down. This behavior fools its enemies into thinking the opossum is dead. It lies completely still, with its tongue hanging out of its mouth. Then it releases feces and super smelly slime. If the opossum is lucky, the predator will lose interest and go away. Many predators give up the hunt if their prey stops moving. Also, the oozing, smelly slime tells enemies that the opossum is bad to eat.

Most opossums do not live longer than two years. The majority are killed by cars, but they are also killed by predators such as owls, bobcats, coyotes, foxes, and hawks. When an opossum is hit by a car, babies in a mother's pouch could survive. They will not live long however unless they are taken to an animal hospital where they can be treated.

Remember that opossums are important for the environment and are usually not aggressive or dangerous. Their presence can be enjoyed in your yard without undue worry.

Heather Keith, Loudoun County Extension Master Gardener

Patience

There's a saying among gardeners: the first year it sleeps, the second year it creeps, and the third year it leaps. So, your expectations won't be fulfilled until the third year. But wait, what about native plant seeds that take two or three years or more to just germinate? How about the native shrub that takes ten years to bloom?

These two Jack in the Pulpit seedlings came up this spring after the seeds were planted two or three years ago. I covered the planter with row cover to keep the weeds out and with screening to keep the critters out. In late spring, I'd peek in to see if anything had emerged. My patience, and a little benign neglect, paid off this year. It will be another four or five years before these little guys bloom.



Then there's mayapple. Once the seed germinates, it will not form a rhizome until it is more than five years old, and the plant may not bloom until it's 12 years old. Blooming takes up so much energy that the plant will not bloom again for several years. Thankfully it also spreads via rhizomes.



Some years ago, I bought three Pennsylvania spurge, *Pachysandra procumbens*, and planted them in a naturalized area. I left them alone for about ten years and watched them form a dense colony. About three years ago I transplanted some to form a border along a sidewalk. They sat there looking sparse and pitiful. They were along a neighborhood sidewalk, and I started to feel embarrassed for them and for my silly expectations. I started to give up on them and thought I needed to transplant dozens more plants. But this year, they've taken off, filled in, and look great. The spurge and I are vindicated!

In February 2018, my neighborhood undertook an erosion control project with partial funding from the Commonwealth of Virginia. The plan involved installing two tiers of biologs with native plants in between. A number of white wood aster, Christmas ferns, and green and gold were installed with Appalachian sedge planted behind the top tier. Then the plants sat there. Residents asked if that was the way it was supposed to look. Deer ate many of the wood asters and the green and gold, and in a couple years the sedge appeared to have mostly died. Then they all came roaring back. The sedge has risen from the dead, and the wood aster and green and gold have become so numerous that the deer can't keep up with them. In fact, I'm delighted to report that the wood aster has spread all over the area, way beyond the confines of the erosion project.



The reappearing sedge. Note the errant wood aster on the left.

As gardeners we all know examples of the rewards of patience and the delightful surprises that plants can provide. Enjoy the journey and savor the results when you reach the destination.

Carol Ivory, Loudoun County Extension Master Gardener

GOT A GARDEN FULL OF SHADE? WELL, HAVE WE GOT THE PLANTS FOR YOU!

I often hear gardeners lament their lack of sun, inferring they are left with few choices in their 'shade ridden' gardens. I may have even been one of them as, over the years, I saw my garden transform itself from mostly sunny to fully shaded as the woodland common area along my rear property developed and grew in height. Consequently, my choices had to change, but this transformation also offered a great opportunity to broaden my knowledge about the 'world' of shade plants – and there are many! Two of my favorites are Wild Ginger and Foam Flower.

Wild Ginger

Asarum Canadense, Wild Ginger, is a popular shade-loving groundcover plant; and, more importantly, a host for the Pipevine Swallowtail Butterfly.

As seen in the photo from the LCMG shade garden, this ginger grows low and has heart-shaped leaves. When relocating a part of this patch last fall, we unintentionally planted it such that it developed a delightful curve, enhancing the design of its location. It tolerates deep shade, is not popular with deer, and will hold the soil well to prevent erosion. Look closely and small, maroon-colored flowers are to be found beneath the foliage in early spring. This is a tough little plant that, although it starts slowly, will nicely spread by rhizomes to fill in around the base of trees where it's difficult to grow most plants. Its moisture needs are average, but after its established, it can tolerate drier conditions, even in part-shade. Wild ginger likes a rich, moist, slightly-acidic soil, rich with humus, similar to many other shade loving woodland plants.

Wild Ginger is often sold bare root but is frequently available as a plant. It bears no relation to culinary ginger, so it is best not to eat it! This perennial ranges from 6-12" in height and 6-18" in spread. Early spring is the best time to plant ginger. It requires no fertilization but will appreciate a topping compost annually. It is best propagated by division. Astilbes, hostas and ferns make attractive companion plants to wild ginger.



***Asarum Canadense*, Wild Ginger**
Photo by Pam McGraw

If you have shade, you will find this plant a delightful addition in your garden.

Foam Flower

***Tiarella Cordifolia*, Foam Flower**

Photo by Pam McGraw

A second favorite plant for my shade garden is *Tiarella Cordifolia*, Foam Flower, one I consider a “star!” This perennial is reliable and easy to grow. In the spring, it’s full of airy ‘bottle-brush’ white flowers accompanied by leaves with distinct crimson markings similar in shape to a maple leaf. It returns year after year, slowly increasing in clump size, and it prefers moist soil. In my garden, *Tiarella* is used to stabilize a moderate slope that tends to erode from my neighbor’s stormwater runoff in a side border. In our Demo Garden, *Tiarella* has adapted nicely to a drier location without complaint! This plant makes a showy addition to the garden border as its height is only 10”. It may be divided in spring, but as a low maintenance plant, it can go undivided for years without losing its vigor. It is most attractive in a group of several.

Many cultivars are currently available.

Good companions for *Tiarella* are hostas, caladiums, and coleus. Eastern foam flower is native to the East coast and is closely related to *Heuchera*; they are bred together to form great hybrids called *Heucherella*.

If you want more suggestions for plants that love the shade, find time to visit the Demonstration Garden at Ida Lee Park in Leesburg, VA. It is open to the


public 24/7, 7 days a week. Master Gardeners who work at the garden on Tuesday and Thursday mornings would be happy to share further information and give you a tour of the shade garden.

Pamela McGraw, Loudoun County Extension Master Gardener

Backyard Birds

Do you feed birds in your backyard? More than 52 million Americans feed birds around their homes, according to *Bird Watching Daily*. Millikin University in Decatur, Illinois, surveyed 1,300 people and discovered that 80 percent fed birds to bring “nature, beauty, and bird sounds” to their yards. Birds are most active in the morning and least active around midday. Take your morning coffee outside and sit and listen to all the birds singing you into your day. Feeding wild birds has been an American pastime for more than 100 years. During the recent pandemic, with so many people staying at home, the number of people feeding birds soared. Birdfeeders and birdseed flew off the shelves, and people found that watching birds is really interesting!

Hundreds of species of birds can be found in Northern Virginia. To cover them all in this article would be impossible. The list below includes some of the more commonly seen, and most interesting, birds in our local area.

1. **NORTHERN CARDINAL** – One of America’s favorite backyard birds, the northern cardinal is the official state bird of seven states, including Virginia. Cardinals are moderately sized finch-like songsters, approximately six inches long and weighing about an ounce. Male cardinal feathers are bright red whereas the female’s are a dull reddish brown. Males have a black mask and both have a pronounced crest and a heavy bill. Cardinals (both male and female) sing year round. Listen for their “cheer cheer cheer,” “whit-chew whit-chew,” and “purty purty purty” whistles. Cardinals will eat just about anything—berries, seeds, snails, slugs, and worms. They can be found in many habitats but prefer thick shrubs in which to build their nests, breeding two to three times a year.
- 
- Male Cardinal.** Photo by John Eppler.
John Eppler Photography.
2. **AMERICAN ROBIN** – Robins are comfortable being around people and activity and are one of the most familiar backyard birds in Virginia. Male robins and female robins look alike. They do not eat seeds, so you won’t find any hanging out at your bird feeders. You will, however, find them walking all over your newly turned-over garden or aerated lawn looking for worms and insects to eat. They also eat fruit and snails. Robins frequently nest near people. Their nest is cup-shaped and usually contains three to five sky blue eggs.
 3. **WOODPECKERS**
 - a. *Hairy woodpeckers* are black and white with a long, chisel-like bill. Males have a red patch at the back of their heads. They can be found anywhere there are large trees—mature forests, suburban backyards, urban parks, and swamps.
 - b. *Pileated woodpeckers* are large birds—adults can be up to 19 inches long with a wingspan of 30 inches. They are mostly black with white stripes on their face and neck and a large triangular red crest on the top of their heads. Males have a red stripe on their cheeks, and females have a black stripe. They are most often seen in mature forests with a lot of dead and fallen trees. The rotting wood provides food—ants, wood-boring beetles, and termites. Pileated woodpeckers are very vocal. Listen for a loud “cuk-cuk-cuk-cuk-cuk.” Want to attract them to your yard? Hang up a suet feeder.

- c. *Red-bellied woodpeckers* have black and white barred backs and an indistinct red wash on their bellies. Most of their red coloring is on their heads, and this is the only way to tell males from females. Males have bright red plumage from their beaks to the backs of their necks. Females only have red on the backs of their necks. They are common visitors at backyard birdfeeders and love to eat peanuts, sunflower seeds, and suet.
4. **AMERICAN GOLDFINCH** – Males are a bright vivid yellow with a black cap and black wings. Females are a duller yellow and have no black cap. Goldfinches are very common in local backyards and very easy to attract to your birdfeeder. They like to eat Nyjer seed (which most other birds don't like) and sunflower seeds. Goldfinches are strict vegetarians; they do not eat insects, which is unusual in the bird world. They love seeds from asters, thistles, sunflowers, grasses, and many kinds of trees.
5. **HOUSE FINCH** – The adult male is bright red around its head and upper breast with brown streaks on its back, tail, and belly. Finches like being around people, so look for them around buildings, backyards, and parks. They are very curious and don't like to travel alone, so they frequently lead the way to your feeders. Their favorite food is seeds—sunflower, Nyjer, and safflower. Their song is pleasant and enjoyable and can be heard year around.
6. **AMERICAN CROW** – Crows are large birds that are entirely black with an iridescent sheen and a long black bill, black legs, and black feet. They love to eat peanuts--either in or out of the shell, whole kernel corn, and suet. They are very adaptable birds and can be found in just about every habitat in Virginia. They are also one of the smartest birds and can use tools, solve problems, and recognize human faces. Their most common sound is "caw caw," but, if you listen, you can also hear rattles, cackles, and clicks as well.
7. **NUT HATCHES** – Nut hatches are small birds with no neck, a short tail, and a long, pointy bill. They have distinctive white cheeks and chest and a blue-gray back. Males have a black cap on the top of their heads, and females have a lighter, grayer crown, but otherwise males and females look similar. Nut hatches are frequently found in deciduous forests, but they adapt well to humans and are often seen in parks, cemeteries, and bird feeders in wooded backyards. If you want to attract nut hatches, fill the feeders with high quality sunflower and safflower seeds, peanuts, suet, and mealworms.
8. **HOUSE WREN** – Although they rarely visit bird feeders, house wrens are often seen zipping through backyards searching for insects. If you want to draw house wrens to your property, create brush piles that provide cover for the birds and a place for insects to gather. Male and female house wrens look alike. They are small brown birds with short tails, thin bills, and dark barring on their wings and tails. House wrens like to build their nests in unusual places—such as clothespin bags, boots, cans, and boxes.
9. **MOURNING DOVE** – Mourning doves like to perch high up in trees or on high electrical wires. They enjoy millet, shelled sunflower seeds, Nyjer seeds, cracked corn, and safflower seeds. Mourning doves need a flat place to feed such as a tray or platform, and their favorite place to dine is on the ground. Their sound is very distinctive and mournful (thus their name). Listen for a low "coo-ah, coo, coo, coo," which sounds like



Photo by Jayne Collins.

an owl. Here's a photo of two mourning doves who have visited our backyard fence several times in the past few weeks.

10. BLUE JAY – Blue jays have very bold personalities and beautiful plumage. They are highly intelligent, which makes them very interesting to watch. Typically, at the feeder, they will fit as much food as possible into their throat sacks and then hurry away to hide their bounty. They like to eat whole peanuts (one of few birds that can crack the shells open), sunflower seeds, and corn. Blue jays are very noisy and excellent mimics, often mimicking hawks very convincingly—perhaps to scare other birds away and keep the birdfeeders for themselves! The most common sound they make is their alarm call, which sounds like “jeer.”
11. EASTERN BLUEBIRD – the eastern bluebird is one of the prettiest and most cheerful birds in Virginia (or anywhere). They've been spotted in Loudoun County in a variety of habitats—meadows, fields, cemeteries, golf courses, parks, backyards, and even Christmas tree farms! Attract them to your bird feeder by filling it with mealworms and berries. Males are a vibrant blue with a rust-colored chest and throat. Colors are a bit more subdued on the female. Bluebirds have a lovely call--a “liquid sounding warbling song” composed of one to three notes typically sung several times in a row.
12. GRAY CATBIRD – Catbirds are completely gray in color with a black cap. Their call is a raspy cat-like “meow.” If you hear sounds like a cat is in the bushes, it's probably a catbird. And here's something really interesting. They love grape jelly! Grape jelly will also attract Baltimore Orioles.
13. ROSE-BREASTED GROSBEAK – Stocky birds with big triangular beaks, rose-breasted grosbeaks are about the size of a robin. Males have black backs and wings with a red mark on their white breasts. Females have a white eyebrow and a pale bill. Interestingly, males sing to establish their territories and attract females; however, when a female arrives, the male will sometimes reject her initially before finally accepting her as a mate. Then, ultimately, he helps incubate the eggs, giving the female a break.
14. DARK-EYED JUNCO – Juncos are one of the most common birds in Virginia. They are easy to identify because of how smooth their feathers look. Juncos are a soft-looking gray with a white belly. They have small bills and a long tail with white outer feathers, and they prefer to eat fallen seed off the ground. Their color patterns differ depending on the region. They like to breed in pine and mixed-coniferous forests, but in the winter, you can find them in fields, parks, woodlands, and backyards.




Photo by Scott Martin, Macaulay Library, Cornell Ornithology Lab.
15. RUBY-THROATED HUMMINGBIRD – The ruby-throated hummingbird is the smallest, and Virginia's only, breeding hummingbird. They migrate in the fall to tropical areas, returning to Loudoun in early to mid-April. They like native flowers such as cardinal flower, coral honeysuckle, and trumpet vine. Unfortunately, they are often victims of a collision with a window, and they are easy prey for outdoor cats.
16. Some less-than-desirable backyard birds include:
 - a. HOUSE SPARROW – Originally from the Middle East, invasive house sparrows are one of the most abundant and widespread birds in the world. Males have gray heads, a

black bib, white cheeks, and chestnut coloring on the sides of their faces and necks. Females are dull brown with streaks of black on their backs. Highly adaptable, they should not be encouraged as they compete with native birds (especially bluebirds) for nesting spots. NOTE: They should not be confused with NATIVE sparrows, which also frequent birdfeeders, including the song sparrow and the white-throated sparrow.

- b. EUROPEAN STARLING – First brought from Europe, starlings are also invasive and have spread across the continent due to their adaptability and aggressiveness. Discourage their presence by switching to feeding only safflower when they are near.
- c. COMMON GRACKLE – Grackles are large, aggressive birds who can completely take over a birdfeeder. Because of their athletic ability and willingness to eat just about anything, they are one of the hardest birds to deter. Avoid feeding their favorite foods (corn and rice) and instead offer safflower.

Attracting Backyard Birds in Every Season

Attracting birds to your backyard is very easy--simply provide what they need: food, water, and shelter.

Planting native, seed-bearing flowers will encourage birds to come to your yard by providing food. Choose perennials of different heights and colors so you have a beautiful and bird-friendly backyard. Birds love sunflowers, coneflowers, cosmos, butterfly weed, and zinnias to name a few. Trees that offer food for birds include crabapple, black cherry, oak, and dogwood. Finally, minimize the use of pesticides so your feathered friends can feed on the insects, grubs, and aphids in your yard. Birds can be a much more effective and environmentally friendly pest control measure.

During the spring, summer, and fall there is usually plenty of food in nature to feed the birds, but providing bird food in feeders will encourage them to stay in your yard. In addition to the food ideas given above, you can offer fruit for the songbirds or rinsed and baked eggshells, a good source of calcium. Springtime is also nesting time, and, in addition to food, you can provide natural materials like twigs, small sticks, straw, leaves, stems, cottontail fluff, down, moss, and bark strips. Make sure that your offerings are pesticide-free and natural, not synthetic.

Inexperienced bird watchers sometimes assume that there aren't any birds around during our coldest months and put away feeders to wait for spring. However, winter is the time birds need the most energy and natural food sources are often depleted (or buried in snow) so bird feeders can really help. Provide higher calorie foods like suet, peanut butter, nuts, and black-oil sunflower seeds. The seeds are small and thin shelled so even smaller birds can eat them.

For general feeding, you might try Morning Song Birdwatchers Blend Wild Bird Food, which contains black oil sunflower seed, millet, and safflower, which are supposed to keep the squirrels away. During every season, be sure to stay away from feeding any human food, including bread, which provides no nutritional value and can actually be harmful.

Birds are attracted to water, so consider providing a bird bath or fountain in your yard and be sure to keep it full and clean. Not only do birds need fresh water in our hot and dry summers, they also need access to water in the winter. A heated bird bath or bird bath heater will keep the water from freezing and provide birds much-needed water.

Finally, birds need to have shelter. They are most likely to eat where they feel safe from predators (including cats), so place bird feeders 12 feet from a brush pile, evergreen tree, or shrub, where they can retreat if needed. If you can, provide nesting options such as roost boxes or birdhouses. Although backyard birds don't breed in winter, they usually remain in the same areas year after year and will return to their usual spots if these spots are kept clean and safe.

BIRD WATCHING 101

To get to know the birds in your backyard better, invest in a small and inexpensive bird guide that has pictures of birds, along with basic information such as size and habitat. Two to try are the Sibley Guide to Birds and the Pocket Naturalist Guide to Virginia Birds. There are also free digital bird identification apps for your phone. One that is pretty good is Merlin Bird ID from the Cornell Lab of Ornithology. Also, check out BirdNET, which identifies birds by sound. BirdNET has twice as many identified birds as Merlin and includes birds in both North America and Europe. Also consider investing in a pair of binoculars. While you don't NEED them for bird watching, they sure make the birds easier to find in the trees and you can get a nice pair for under \$200. Finally, you may want to keep a "life list" permanent record of the birds you see and when and where you see them.

Every year birders and nature lovers combine their efforts to identify as many bird species as they can over a four-day period during the *Great Backyard Bird Count (GBBC)*. Approximately 385,000 people participated in this year's 26th annual event (held in February) and reported more than 7,000 species from 192 countries, providing "the big picture" with regard to shifting bird populations. Chad Wilsey, chief scientist and vice president of the National Audubon Society, encouraged people to "take a moment ... to observe, listen to, and count birds and improve your health, too." He went on to say that "bird watching and being in nature can reduce stress and improve your mood."

So, take a little time during your day—morning, noon, or night--to sit and listen to the birds singing to each other. Try to find them in the trees; try to identify them by their song. You won't regret it!

Jayne Collins, Loudoun County Extension Master Gardener

TOO MANY INVASIVES?

They're everywhere! From a potted plant containing an errant dandelion to acres of woods covered in honeysuckle and multiflora rose. If you own land or do any gardening at all, you're undoubtedly confronting unwanted plants, a/k/a weeds, mostly invasives. Invasive plants are those that evolved to thrive in an ecosystem somewhere else, but not here in Loudoun County. They're unwelcome and out of control.

There's increasing public awareness of the environmental threat posed by invasive plants that disrupt our native ecosystems. A lot of good information is available online about species specific methods for control-- biological, mechanical, and chemical. Yet gardeners are often overwhelmed by the sheer volume and variety of invasive plants present on their property and don't know where to begin.

There's no one-size-fits-all solution to the invasives challenge. What to do? It depends. There is no right answer. The best solution depends on your priorities and resources. Here are some things to consider:

Be realistic: Invasives aren't going away. They're here to stay. Removal of any invasive plant is a good thing.

Invasive control is a marathon not a sprint: While you may succeed at removing a species from your site and sight temporarily, it will probably be back and/or replaced by other unwanted plants. You may achieve a measure of control that's sufficiently rewarding for you, but long-lasting seed reserves, spread via rhizomes, and seeds distributed by wind and animals ensure that invasives are a perennial challenge.

Do your research: It's important to identify invasive plants on your property. Learn how each species spreads and familiarize yourself with recommended methods of control. It's important to understand that:

- For many invasive plants, simply cutting the plant down can stimulate the plant to spread more aggressively via plant parts that survive underground.
- Seeds can be viable for years, even decades. Don't be surprised to see an invasive you thought you'd eliminated return year after year. Depleting seed banks takes a long time.
- Seasons matter. Garlic mustard, for example, can be uprooted easily by hand in the spring. Stiltgrass control includes mowing just prior to seeding but not earlier or later. Vines, especially those with thorns, are easier to tackle after leaves have dropped in the fall. Herbicides may be quite ineffective in the spring, but more useful later in the summer, even into fall and winter.

Consider lot size and invasive cover: If you have a small garden, controlling Creeping Charlie, mugwort, or mock strawberry may be feasible. If, however, you have a large grassy area or multiple acres, there are some plants you may have to learn to live with. Prioritize.

What plants are most destructive? Deciding what's most harmful to the environment is somewhat subjective. Monitor your property. Some plants appear suddenly and dominate swiftly. A small patch of stiltgrass, Canada thistle, or lesser celandine can quickly overtake large areas. You

may want to undertake the task of controlling even a small number of these plants before they become an insurmountable problem. Invasive vines can kill large, valuable shrubs and trees. Removing vines that are harming trees should be a high priority. Monitor encroachment and be flexible as the situation evolves.

Understand mechanical methods: Pulling and cutting can be effective for some plants (but not others). In addition, smothering, directed heat (usually via propane burner) and controlled burns for larger areas may also be useful.

How do you feel about herbicides? Use of herbicides can be controversial. While mechanical means may be sufficient for a small area, it is unlikely that large trees, like Tree of Heaven, or significant areas covered by invasive vines can be managed with mechanical means alone. Weigh the pros and cons of herbicide use against the damage caused by invasives. There are three types of herbicides: 1) broad spectrum 2) kills grasses only 3) kills broad leafed plants, but not grasses. It is important to understand the safe use of all of these herbicides and use them judiciously and only as necessary. Costs among the types and brands will vary. You may decide it's not acceptable to use any herbicides at all or that stump application is okay but not foliar spraying. Herbicide use is an individual decision. Use caution with "natural" herbicides, such as vinegar—these can be harmful, too.

What are your resources? Consider how much time and money you have to devote to invasive removal. Is it feasible and cost effective to hire outside help? Do you have access to and knowledge of how to use a chain saw, weed whacker, mower, and other garden tools? Do you, for example, have time to repeatedly mow down Johnson grass until rhizomes are too depleted to sprout or does it make more sense to spray less frequently with a broad-spectrum herbicide or one intended for grasses only (which is more costly).

Don't leave a vacuum: Remember, when you remove invasives, a sunny open patch of soil is a welcome mat for the introduction of more. Leaving open space also allows for native plants to re-appear, but the invasives will need to be removed on an ongoing basis. Consider planting non-invasive plants, especially native plants. Some native plants are more aggressive than others and may compete well against invasives. Ferns or golden groundsel, for example, may help to reduce if not eliminate stiltgrass.

What bothers you the most? Given all the factors to consider, there just may be one or more invasive plant that annoys you above all the others. Although mugwort is among the most difficult of plants to eliminate, if it satisfies you to spend countless hours pulling or smothering it, heed your feelings. Attacking invasives can be rewarding even if it's not entirely rational. Removal of any quantity of invasive plants is doing good.

In summary, evaluate as well as you can your individual situation. There's no ultimate victory. It's all about realistic expectation and triage. It helps to have a plan. Be focused.

Resist the urge to be overwhelmed and give up in despair. Do what you can and try to enjoy the process and any successes!

Ellen Ruina, Loudoun County Extension Master Gardener

The Value of Deadwood: Snags and Logs

A **snag**, also called a wildlife tree, is a dead tree that is left upright to decompose naturally. The tree may have died from old age, insect infestation, disease, lightning, drought, root competition, or by humans taking part of it down. Snags can be entire trees, including the limbs and branches, or a part of the trunk that is left standing. The trunk can be a tall stump or up to 20 or more feet.

Logs are snags, or part of a snag, that have fallen on the ground. Logs can be the size of large branches or large tree trunks.



Stump with woodpecker holes

Photo by Sharon Perryman

Dead trees, both snags and logs, provide vital habitat for more than 1,000 species of wildlife in the US. Approximately 20 percent of the entire forest fauna rely on dead and dying wood habitat essentials. Snags and logs are sources of food, provide cover, spots to survey the surroundings, places for wildlife to raise their young, and soil refreshers. Even though snags and logs are crucial to the ecosystem, many forestry practices encourage removing deadwood from the forest floor, thinking this can control pests and fungi and for aesthetic reasons. This practice robs wildlife and depletes the forest of essential nutrients.



Man-made snags or spars

Photo by Sharon Perryman

Snags

It is true that in some circumstances snags and logs are best removed. Those reasons should focus on safety of structures in the vicinity of the snag or log.

Dead wood should never rest on a structure or home. A fallen tree touching a structure should be removed promptly. Likewise for a dead or dying tree. If the tree poses a hazard, it should be removed. Many good arborists will know how to create a snag when removing the tree, where several feet of the trunk are left standing. Even tall snags are little danger to nearby structures because they do not have enough height nor a branch system that would cause them to fall in heavy winds.

Termites in logs or snags are not a problem if the wood is a reasonable distance away, 10 to 30 feet is the recommended range.

Habitats provided by dead trees can exceed those provided by live trees. Small mammals and birds use cavities in snags for nests and nurseries as well as food storage. Loose bark provides bats and butterflies a safe place to sleep. Nuthatches, wrens and brown creepers roost and search for food under loose bark.



Osprey

Photo by Lindsay Loyd



Northern Flicker

Photo by Lindsay Loyd

During the winter months, birds will eat insects that are found in snags. Hollow trees are refuges for birds and small mammals in the cold.

Woodpeckers create cavities in snags. They are called “primary cavity nesters”. They rarely use nest boxes because their instinct is to create their own cavities, which stimulates reproduction. Woodpeckers rarely nest in the same hole in following years, so other birds, “secondary cavity nesters”, such as chickadees, swallows, nuthatches, wrens, bluebirds, and larger birds will use the cavity created by woodpeckers when the latter have abandoned it.



Redbellied Woodpecker

Photo by Lindsay Loyd

Large snags provide hunting perches for hawks, osprey, eagles, and owls. They provide resting perches and song perches for smaller birds. They are food storage opportunities for mice, squirrels, woodpeckers, and jays. Woodpeckers use them to announce their presence during courtship by hammering their bills against the resonating surface.

Snags harbor insects and are a rich source of food. The outer surface bark is where brown creepers, nuthatches and woodpeckers find bark beetles, spiders, and ants. Inner bark is where woodpeckers find larvae and pupae of insects; mammals may also tear into the inner bark to find protein rich insects. Strong excavators like the pileated woodpecker dig into the heartwood to find carpenter ants and termites.



Bluebird

Photo by Lindsay Loyd



Pileated Woodpecker

Photo by Lindsay Loyd

When examining trees on your property or neighborhood, probable future snags will show running sap, split trunk, dead main limbs, fungi on the bark, and/or heavy animal use such as woodpecker holes. If you see such a tree, and determine safety requires that it be dealt with, contact a certified arborist who is licensed, bonded, insured, and understands your intention to create a snag. They may offer several choices, depending on where the tree is located. If the tree is on the front of the property and aesthetics are important, you may need to remove the tree entirely. In that case, consider whether some of the wood can be relocated as logs in a less

conspicuous area. If the tree is in an area where leaving a snag would not be a problem, the arborist will assess the safest height of the snag. Limbs that are removed to create the snag can be left near the snag, preferably in shady spots, to decompose and provide additional food and shelter for wildlife.

Logs

When a snag falls and becomes a log, a new ecosystem is created. Tiny organisms, bacteria, fungi, and moss begin to decompose the log. They become food for other organisms and insects, which in turn become food for many reptiles, amphibians, small mammals, birds, and invertebrates.



Skink

Photo by Lindsay Loyd

For the most benefit from logs, place them in shady areas with good contact with the soil. This will speed the decomposition. Logs, as well as snags, can be improved by letting native vines grow on them such as Virginia creeper, greenbrier, and native trumpet vine.



Spotted Turtle

Photo by Lindsay Loyd



Green Heron

Photo by Lindsay Loyd

Holes in the wood collect water that become a place to drink or bathe. The rotting wood, damp from chemical changes, attracts salamanders and tree frogs. Logs that have fallen in rivers and ponds provide resting places for birds and turtles, and safe havens for fish. As logs decay, they create nutrient rich soil in which ferns, forest plants, and trees can grow.



Fence Lizard

Photo by Lindsay Loyd

Sharon Perryman, Loudoun County Extension Master Gardener

Two Interesting Sedges for Your Garden

Sedges are gaining popularity as native groundcovers and interesting clumping plants to use in any ornamental bed. Some popular sedges that are not mowed and that can be used in place of turf grass are Pennsylvania sedge and Appalachian sedge.

But two strikingly ornamental sedges have become favorites of mine. They are very different, and I will discuss the smaller one first. It is *Carex plantaginea* or **Seersucker sedge**, also called carex plantain, or plantainleaf sedge. I've always called it seersucker sedge because that is most descriptive of its appearance.

This is a shade and moisture loving, low growing sedge that is evergreen. Its leaves are up to an inch wide and while articles say it grows up to two feet, my mature plants only reach about six inches. Each long leaf has three veins and between the veins, the leaves appear to be puckered.



In the spring, the plant sends up showy flower spikes on purple stems (showy compared to other grasses). This is a clumping grass that, with maturity, may form a one-foot-wide clump. The clumps can be divided. Plants slowly colonize via short rhizomes and by producing occasional

seedlings. I purchased my first seersucker sedges about ten years ago. They spread nicely in their original spot and about six years ago I moved several to an area behind my house. They are reproducing nicely there, allowing me to slowly line a long walk with them.



This sedge makes a nice edging plant and doesn't mind morning sun; nor does it seem to mind being crowded by other taller natives. I'm the one who doesn't like it to be hidden from view. Seersucker sedge is unique in appearance, attractive, and well behaved. Deer won't touch it.

Consider adding it to your native garden. It is available at native plant nurseries and from online sellers.

My other favorite sedge is tall and reseeds freely, creating offspring that pop up everywhere. **Gray's sedge, *Carex grayi***, is named after Asa Gray, a notable American biologist. It is also called bur sedge, Morningstar sedge, or mace sedge because its one-to-one-and-a-half-inch seed head resembles a medieval spiked club. The immature seed heads are light green, but they later become yellowish brown to dark brown as they mature. Its seedheads can be used in fresh or dried arrangements.



Gray's sedge grows to about two-and-one-half feet tall. Its leaves are about a half inch wide and 14 inches long. The effect is a graceful arching plant that adds color and texture to the landscape. With enough moisture they can do well in full sun but otherwise they thrive in the morning sun.

In the wild, this sedge grows in wet deciduous forests, along streams, in swamps, and in boggy areas. I found it growing along the Potomac River just above an active flood plain. Its seed heads can float allowing it to move to another damp location.

This sedge is outstanding on the edge of a pond or around a water feature. It can help control erosion, and it is useful in the lower zones of bioretention sites and bioswales. It requires very little attention. You can cut it back in the late fall or early spring as part of your garden clean up, or you can just let it go. It's not messy. And a huge plus is that the deer do not bother it.



Because this plant is airy, it seems to play well with others. It does well with the delicate annual jewelweed and moves around without crowding the other plants. It's one of the better players in my little native experiment. These plants are volunteers from my original two. Others are growing down the hill closer to the woods. Because it doesn't seem to be a bully, I welcome it wherever it wants to go. We'll see if that continues to be the case! If you want to control

reseeding, remove the seedheads before they mature.

Gray's sedge can be purchased at native plant nurseries.

All photos taken by Carol Ivory in her garden.

Carol Ivory, Loudoun County Extension Master Gardener

Uncommon Fruits: Pawpaw

Background

The pawpaw (*Asimina triloba*) is a unique fruit tree, as it is a cold-hardy member of the custard apple family (*Annonacea*) that is native to the eastern United States and Canada. Pawpaw fruits have a delightfully tropical flavor that is somewhere between banana, vanilla, and mango. Inside, the fruits are the consistency of custard. Historical writings highlight the value of the pawpaw in sustaining Native Americans and early American settlers in times of crop failure. Because of its small window of ripeness, limited storage life, and thin skin, it is unlikely you will see this fruit in most grocery stores. While there are some nearby pawpaw festivals in the autumn, planting your own pawpaw patch can be a worthwhile endeavor! The trees are beautiful additions to any landscape whether or not they produce fruit.

Description

Tree: Pawpaw trees tend to be small (between 10 and 25 feet tall) and thrive in the shade of larger trees. They are often found in patches amidst the forest understory, as they produce prolific suckers from horizontal roots. As a result, each tree in the patch is genetically identical.

A pawpaw tree can be dioecious, meaning that it can bear either male or female flowers, or it can be monoecious, meaning that it can bear both male and female flower parts. However, in the case of a monoecious pawpaw tree, the pollen produced by the plant is released when the stigma is not receptive to the pollen. Ultimately this means that all pawpaw trees must be pollinated by another (called a pollinizer) to produce fruit. The purplish-red blooms attract beetles and flies to carry out the cross-pollination.



Photo by Barbara Eppler.

Fruit and Foliage: Pawpaw trees begin to bear fruit between five and seven years of age, at which point the tree will be approximately five feet tall or more. Pawpaw trees are hardy in temperatures down to between -20- and -30-degrees Fahrenheit, although the fruit needs enough summer warmth and time to ripen--about 150 days. Typically, the fruit begins to ripen in late summer, peaking around September or October. The pawpaw fruits tend to appear in clusters on the tree, each one resembling a small green potato. The leaves of the pawpaw tree turn a beautiful gold at the start of autumn. Deer and other animals do not tend to browse pawpaw foliage.



Photo by Erin McAuley.

Importantly, the pawpaw is the host plant to the larval stage of the native zebra swallowtail butterfly. In Virginia and throughout most other states, the pawpaw tree is the only host plant species of this caterpillar.

Cultivation

In general, the pawpaw is relatively straight-forward to grow and does exceptionally well in woodland, riparian, and naturalized areas. It requires very little maintenance and is not selective about soil type or pH (a pH between 5.0 and 7.0 is adequate). While the tree prefers well-draining soil, it can tolerate heavy clay. Pawpaw pruning is done largely for aesthetics and is not required for optimal fruit production. The pawpaw is not plagued by many pests or diseases in this region, so spraying is unnecessary. The main exceptions include the following:

When planting: First, even on tiny two-inch seedlings, the pawpaw has a long taproot that requires care and attention when transplanting. Seedlings can be raised in deep pots for a season or so to ensure that the root system is less fragile when transplanting into the field. Alternatively, transplanting can be avoided altogether by sowing pawpaw seeds straight into their terminal planting location.

When growing: Second, as mentioned, the pawpaw tree is an understory tree, and young plants must be shaded accordingly. Many growers, myself included, will shade seedlings for the first two or three years of their growth, after which they are more likely to tolerate full sunlight. It can be tricky to decide how to shade the young trees. I elected to make tree cages that I wrapped in shade cloth and staked into the ground.

When harvesting: A third consideration for growing pawpaw trees is whether your goal includes optimal fruit production. Subpar pollination may frequently limit the fruit yield, so it may be beneficial to hand-pollinate. Hand pollination for the pawpaw (and many other plants) is a delicate procedure that requires practice. The central style of the pawpaw bloom is fragile and prone to breakage.

Propagation

To ensure continuation of fruit-specific traits like fruit flavor, size, and texture, pawpaw trees can be propagated by root cuttings or suckers. Plants grown from seeds will make excellent additions to your landscape, but do not grow “true to type.” This means that each individual seed will be different than the parent tree, with different attributes. Seeds must not be allowed to dry out and require 90 to 120 days of cold stratification before they will germinate. Pawpaw seed germination and emergence is slow. The root emerges about 30+ days after the seed is sown, and the first shoot may appear 30+ days after that.

Harvesting and Uses

A “good” yield from a pawpaw tree could be between 25 and 50 pounds of fruit. Larger fruits tend to fall off the tree when they are almost fully ripe. Fully ripe fruit keeps for a short amount of time, approximately two to three days at room temperature. The fruit will keep for longer if it is picked firm-ripe and then refrigerated. Fresh pawpaw fruit is delicious. The pulp should be creamy and smooth and can be eaten with a spoon. High heat tends to diminish the pawpaw flavor, but pawpaw puddings and custards are still possible.



Photo by Erin McAuley.

Even if your pawpaw tree did not produce any fruit, it would be an excellent addition to your landscape. To summarize, it has a small stature, is tolerant of different types of soil, and does well in sun or shade. The leaves of the pawpaw tree are gorgeous throughout the growing season and remain that way into the start of autumn. It is an excellent understory tree in areas with heavy deer browse.

Additional Reading and References

- Virginia Cooperative Extension [Trees Edible Landscape Species](#) series.
- *Uncommon Fruits Worthy of Attention: A Gardener's Guide* by Lee Reich.

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