



# Trumpet Vine

*Knowledge for the Community From Loudoun County Extension  
Master Gardeners*

*Winter 2021-22*

Volume XVIII, Issue 1 [www.loudouncountymastergardeners.org](http://www.loudouncountymastergardeners.org)

## LOUDOUN COUNTY EXTENSION MASTER GARDENER LECTURE SERIES

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## How Do Perennials Survive Winter?

Our native perennials can survive the winter because they are cold hardy. But cold hardiness takes a lot of work to maintain, and it's not maintained year round. Plants lose all cold hardiness in the summer and build it back up slowly as winter approaches. Plants native to specific latitudes have tuned their calendars to their location over the eons. Plants that miscalculate the arrival of winter and aren't prepared are quickly dispatched by a hard freeze. Perennials go through three stages of winter dormancy: acclimation, midwinter hardiness, and deacclimation. Do not fertilize and cut back on watering at the end of summer to discourage new growth that will be very vulnerable to freezing. Shorter days and lower temperatures trigger the production of abscisic acid (ABA) and ethylene to prepare the plant for winter. Later in the process, temperatures just above freezing are the important trigger. Carbohydrates are redirected from leaves to roots, plant cells begin to lose water, and sugars, proteins, and alcohol concentrate to form an antifreeze-like solution. This can lower the freezing point to 20°F or even 10°F. A thick layer of snow or mulch will help plants survive lower temperatures. Plants can lose some of their cold tolerance within one or two weeks of unseasonably warm weather; then a sudden hard freeze can be devastating.

Container plants are prone to winterkill because their roots are more exposed to the cold than roots in the ground. Placing insulating blankets around large pots or burying pots in piles of leaf mulch can help protect them. Plant more tender species along the foundation of your house because heat leakage from inside keeps the soil just a bit warmer.

Surviving winter is complicated.

For more information see *Understanding Perennials* by William Cullina.

## 2022 “Let’s Get Growing” Annual Symposium

The Loudoun County Master Gardeners are sponsoring an in-person one-day gardening symposium on Saturday, March 19, 2022. Four expert speakers will provide inspiration, ideas, and information on garden basics that will appeal to all gardeners. Please join us at our new venue-- the Leesburg Community Church, 835 Lee Avenue, SW, Leesburg, VA 20175--to learn more as this year’s outstanding speakers share their expertise.



**Marianne Willburn**, gardening columnist, speaker, and author

***Keep Calm and Garden On: Gardening in the Midst of Climate Change***

Marianne will discuss how we can best adapt to what is, right now, and make our gardens more resilient throughout the seasons. She will focus on key points we should consider when we design our gardens and will provide positive, productive measures for our soils, wildlife, and plants to help ease our concerns over the unknown.

Marianne is the author of *Tropical Plants and How to Love Them* and *Big Dreams, Small Garden*.



**Ian Caton**, landscape designer, owner of Wood Thrush Native Plant Nursery

***Super Tough Wildflowers***

Ian will discuss how to garden in a way that works with difficult soils, harsh climates, and various pests. His lecture is designed as an introduction to wildflowers that have, in his experience, proven to be particularly reliable and tough under the most adverse conditions including drought, flooding, extreme heat, hard-pan soils, deer, and invasive species.

Ian has a BS in horticulture and environmental design. He worked for Larry Weaner Landscape Associates designing and installing native landscapes.



**Elyse Jurgen**, owner of Waxwing EcoWorks Co., ecological landscape designer and educator

***Green Mulch: Using Native Plants as Groundcovers***

Elyse will discuss the role of green mulch and planning your native mulch plantings to provide the best results and the appearance that you require.

Elyse has spent more than 15 years on very hands-on, community-based projects to promote ecologically sound practices and educate students K-12 and homeowners on best practices to support wildlife conservation goals.

Elyse is a certified Chesapeake Bay landscape professional.



**Greg Bradshaw**, arborist with Bartlett Tree Experts, forester

***Things Your Trees Wish You Knew***

Greg will discuss practical guidelines for tree care that he has gleaned from his work as a Northern Virginia arborist. He will cover all aspects of tree care from pruning to soil care to insect and disease management. Greg takes a holistic approach to trees and their relationship to the communities and people around them.

Greg has a BS in forestry and worked for the U.S. Forest Service and the Virginia Department of Forestry before becoming a certified arborist.

Online registration opens February 1, 2022. Tickets are \$50. You will have the opportunity to purchase a Panera box lunch when you register. Buy your tickets early!

See our website for more information and registration beginning on February 1, 2022.

<http://loudouncountymastergardeners.org/events/annual-symposium/>

## Fresh Sprouts for Winter Salads

The wind is blowing, the air is chilled, and those fresh-from-the-garden veggies are only happy memories as we bundle up for the weather. If you find yourself longing for some homegrown goodness in your diet this time of year, growing sprouts may be just the thing for you!

Most people are familiar with alfalfa sprouts as a sandwich addition and bean sprouts that are popular in Asian cuisine, but did you know that you can grow delicious sprouts for your salads, smoothies, and stir-fries right in your kitchen without any fancy equipment? If you have some clean jars and some dried beans, you are ready to embark on a sprouting adventure. This article will explain how to grow three simple types of sprouts: lentils, mung beans, and garbanzo beans.

Assemble:

- Clean glass quart jars

- Sieve or cheesecloth

- Dry beans--mung and lentils are easiest

- (Mung beans are also called Moog Dal or Maash and can be found in any Asian or Middle Eastern grocery store.)

*Do not use seeds purchased for growing in the garden because even organic seeds may be chemically treated and may not be safe to eat as sprouts.*

As with any form of food preparation, good sanitation is important. Start with clean glass jars that will hold about a quart of liquid. To each add 2 to 4 Tbsp. of dry lentils or mung beans, or 4 to 6 Tbsp. of garbanzo beans. Fill the jars with enough water to cover the beans by 2 inches or more. (Fig. 1)



**Figure 1. Soaking the beans.**

Let the beans sit in the water for 6 to 8 hours or overnight, then drain and rinse, leaving as little water as possible with the beans. Cover the jar openings with a cloth or loose lid (do not seal or tightly close the lid because the beans need air). Six to eight hours later, fill the jars with cool water, and swirl gently. As the beans begin to germinate, they give off heat, so you'll want to use this method to cool them in order to prevent them from overheating, which could cause rotting. Smaller beans like mung and lentil will only need rinsing twice a day, while garbanzos will need rinsing more often.

You will see small roots begin to emerge from lentils and mung beans in as little as 36 hours, and after about 4 days with garbanzos. Continue to rinse and swirl the sprouts twice a day for small beans and three to four times a day for larger ones. Once the beans reach the desired length, place them in the refrigerator to retard growth (rinse every other day to keep them fresh). Sprouts grown too long tend to become



**Figure 2. Beans after four days.**





**Figure 3. Drained seeds resting between rinsings.**

bitter and sometimes woody. Tasting them each day will help you decide your preferred size. Lentils will probably be ready to eat in four days.

Sprouted beans are a nutritious and delicious addition to the winter diet. Try them in your salad, toss them into a smoothie, or stir fry them as a crispy topping for soups, an addition to a veggie platter, or even a garnish for cooked vegetables. If you have children in your home, they may enjoy helping grow the sprouts and will likely eat them with relish.



**Figure 4. Serving suggestion.**

[North Carolina State Extension Article on Growing Bean Sprouts](#)  
[Penn State Extension Article on Sprouted Grains](#)

*Freyja Bergthorson, Loudoun County Extension Master Gardener*

## Goldenrod Galls: Thriving life in the seeming “dead” of winter

In the Fall in Loudoun County (as well as the majority of North America), you might have noticed fields or patches of the beautiful yellow Goldenrod flower. The Goldenrod may not be as flashy as others, yet it is a plant that has developed over millions of years to be a bounty to native insects and birds. It is also a plant that holds many fascinating secrets.

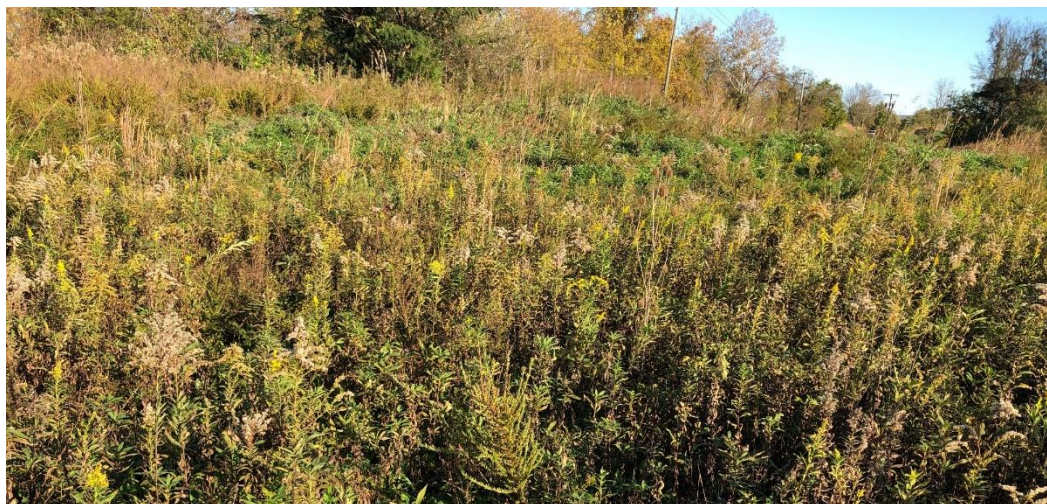


Figure 1: Field of Goldenrod off Evergreen Mills Rd SE, Leesburg (11/1/2021)

Next time you see a field of goldenrod, see if you can spot a goldenrod gall (figure 2). Galls are abnormal growths that appear on leaves, roots, stems, or flowers of plants that are produced by insects. Millions of years ago, a species of fly entered into an irrevocable relationship with this innocuous yellow-flowered plant.



Figure 2: Goldenrod gall (Leesburg, VA)

Through the process of natural selection, the fly developed the ability to produce an auxin mimic hormone in its saliva. Auxin (figure 3) is a plant hormone involved in the regulation of plant tissue growth. Many insects have acquired this strange ability and have

formed relationships with a variety of native plants including oak, rose, and goldenrod. Next time you find a field of goldenrod, try looking for a gall. Goldenrod galls are about 0.5-1 inch in diameter and look like a ball-like swelling in the stem of the goldenrod plant.

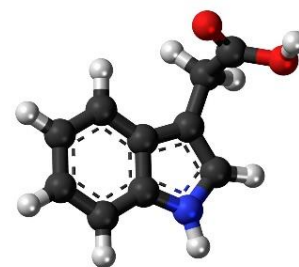


Figure 3: Auxin, a plant hormone that signals plant growth

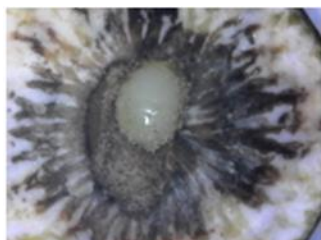


Figure 4: Gall fly larva snoozing in the center of a goldenrod gall



Figure 5: Barrel-shaped gall fly larva with mandibles barely visible (grid is 0.5cm)



If you were to open one of these galls during winter, you might find the slumbering larva of a goldenrod gall fly (*Eurosta solidaginis*) (figures 4 & 5). In the spring, gall flies find a mate, lay eggs on the apical meristem of growing goldenrod plants, and promptly die. The egg hatches into a larva and the larva chews on the plant material releasing the auxin-like hormone. The plant grows extra plant material over a period of weeks and the gall fly larva ends up developing a home. Over time, the gall fly larva has developed the ability to produce antifreeze-like chemicals in its body in order to help it survive the cold temperatures of winter. In early spring the larva will pupate and emerge from the casing in mid-spring. The overspecialized adult fly – unlike the larval form – has no mouthparts and so crawls out a pre-dug tunnel up to the edge of the gall and uses a very strange technique to escape. It inflates its head (figure 6) and explodes out of the winter home leaving a tiny exit hole. Any galls you might find from a previous season will usually have this characteristic exit hole. After emerging the adult fly (figure 7) has only a few days to find a mate and lay eggs on another goldenrod plant before giving up the ghost. Pretty comfortable relationship for the fly right? Maybe except, over those millions of years, several other insect predators have figured out the gall fly's scheme.



**Figure 6: Alien-like adult gall fly exploding out of the overwintered gall using its inflatable head**



**Figure 7: Adult goldenrod gall fly after emerging in mid spring**



**Figure 8: Adult *Mordellistena convicta* tumbling flower beetle.** Photo used with permission from ©Marci Hess.

A species of tumbling flower beetle (*Mordellistena convicta*) figured out long ago that it was beneficial to find goldenrod galls and lay eggs. The beetle (figure 8) is a generalist feeder primarily surviving on plant material – pollen, nectar, and stem material. It has learned to take advantage of the large volume of parenchymal material formed by the gall fly and often lays its eggs

on or near goldenrod galls. Though primarily vegetarian, the beetle larva (figure 9) is an opportunistic predator of the gall fly larva and the growing grub will feed on any gall maggots that it finds among the plant material.



**Figure 9: *Mordellistena convicta* grub eating its way through the gall material. The gall fly larva has already been consumed.**



**Figure 10: Closeup of cylindrical *Mordellistena* grub with head and legs visible.**

If it manages to escape the beetle, the gall fly larva is not yet in the clear. In fact, there are two



Figure 11: *Eurytoma gigantea* parasitoid wasp. Photo used with permission from ©Stephen Luk

other insect predators (parasitoid wasps) that have evolved alongside the gall fly larvae. These parasitoids are usually present wherever populations of the gall fly exist. The first parasitoid is called *Eurytoma gigantea* (figure 11) and is easily identified by its large ovipositor. As the galls

are forming in spring, the gigantea wasp uses its ovipositor to pierce the gall surface and lays its eggs near the developing gall fly larva. The egg hatches and the wasp larva then feeds on the gall fly larva. The wasp emerges in the spring instead of the gall fly.



Figure 12: *Eurytoma gigantea* wasp larva, having already eaten the gall fly larva occupies the former fly's home. Photo used with permission from ©Beatriz Moisset



Figure 13: *Eurytoma obtusiventris* parasitoid wasp emerging from gall fly pupa. Photo used with permission from © [CharleyEiseman.com](http://CharleyEiseman.com)

The last parasitoid, *Eurytoma obtusiventris* (figure 13), has developed perhaps, the most fascinating relationship with the gall fly. This wasp lays its eggs early on in the development of the gall larva, when the gall is just about to form. When the plant tissue is fresh, the smaller obtusiventris wasp is able to penetrate the plant surface and lay eggs directly into the gall fly larva. The wasp larva then induces a hastening of the gall fly larva's metabolism and causes early pupation. The wasp feeds on the gall fly larva, then overwinters in the gall fly pupal case emerging in mid spring to find more fresh gall fly eggs. Nature never ceases to amaze!

Whichever one of these organisms manages to survive to winter, might end up food for some of the many hungry native birds like the Carolina Chickadee or the Downy Woodpecker. In fact, sprawling fields of goldenrod with their galls and various larva in the center are a fine source of nutrition for overwintering birds.

**Michael Tomlinson, Loudoun County Extension Master Gardener**

# The Benefits and Beauty of Native Ground Covers

Ground covers are a must for almost every landscaped area. But we don't often give them much thought, nor do we do much research on the various types. This article will discuss the benefits of native ground covers, both to replace lawn areas and to complement landscaped areas. Your choice of ground covers can enhance your property and benefit the soil, water management, and wildlife.

## Benefits

Grown under trees in a turf setting, ground covers prevent lawnmower damage to trees. Wounds inflicted by lawnmowers and trimmers can leave a tree susceptible to infection by providing a place for fungi and bacteria to penetrate under the bark. These infections are the cause of many hollow trees. Ground covers can be grown where it's too shady for grass. We've all seen areas with trees where grass is scrawny and weeds have invaded. Shade-loving ground covers will thrive in these areas and reduce weeds.

Ground covers provide a visual transition from lawn to shrubs or trees. Aesthetically, it is preferable to have a gradual transition from a flat area like a lawn to an upright tree. Appropriate ground covers and shrubs surrounding the trees are more pleasing to the eye. This is better for the trees because ground covers allow rain to penetrate the ground whereas turf causes rain to run off. Water retention around trees is increasingly important with hotter and drier summers. The larvae of beneficial insects that live in the trees during the warm season, which birds need to feed their young, will drop from the trees and develop into adults among the ground cover and shrubs under leaf litter and in the ground. These insect larvae will feed next year's bird chicks. This is vitally important to the health and well-being of our birds and plants that require insects to pollinate them.



**Native Geranium.** Photo by Normalee Martin.

Ground covers are a living mulch. They protect the soil from compaction by rain and foot traffic. They retain moisture, acting as a living "umbrella" that slows water evaporation from the soil. Their roots feed and support healthy microbial activity, which is beneficial to any plants that grow nearby. When their foliage dies back, they add humus to the soil.

Ground covers can be lovely on slopes that are too steep for grass to grow well and/or for mowers to access. This applies to both sunny and shady slopes. Low growing evergreens are appropriate ground covers for steep slopes as well as herbaceous plants. Ground covers on slopes tend to prevent foot traffic, and foot traffic compacts soil and adds to erosion. Kinnikinnick, a low growing shrub, is a good choice for sunny and part sunny hillsides.

Ground covers can be placed in a bulb bed. Bulbs will grow through a low ground cover in the spring. When the flowers are gone and the bulb foliage withers, a ground cover will fill the space. Most ground covers have their own blooming season, which gardeners and landscapers often ignore. They can be lovely in their own right.



In an area that is too wet, too dry, or too shady for other plants, there is often a ground cover that will fit the bill.

### **The Other Side**

To be fair, ground covers are not a miracle cure and have some issues of their own, as do all types of plantings. Ground covers can harbor snails and slugs, although other forms of wildlife usually discover these pests and can control them. But if you have an area that's susceptible to snails and slugs, choose a ground cover that will not encourage their proliferation.

Ground covers can compete with other plants for food, water, and light. In this case, choose a ground cover that is not aggressive, tolerates dry conditions, and/or will not shade out the other plants you have put in the area.

Ground covers cannot be walked on like grass. This is often a desirable quality. But if you want a setting where you can walk through a landscaped area, make sure you have planned and implemented walkways. Walkways of mulch, grass, landscape stones, crushed stone, or pea gravel are excellent solutions in a design that encourages observers to enter a landscaped area.

Ground covers suppress but do not prevent all weeds. Ground covers are more effective the denser they cover an area. It is best to ensure an area is weed free before putting in a ground cover to keep your weeding chore the first 1 to 3 years to a minimum.

### **Choosing and Planting**

Ground covers are by nature spreading. Some spread slowly; others are aggressive. This is a critical reason why it is very important to plant only native ground covers. Non-native ground covers tend to be more aggressive because they usually have no other plants or insects to keep their spread in check. They often invade natural areas; we've all seen English ivy invade the floor of the woods suppressing the growth of new tree saplings, climbing mature trees and eventually killing them. Non-natives will out-compete natives, depriving beneficial insects (more than 95 percent of our insects are beneficial), birds, and other wildlife of food.



**Moss or creeping phlox**, Photo by Normalee Martin.



**Coreopsis**. Photo by Normalee Martin.

Bed arrangement will help an area look good from the onset. Plant in staggered rows to get faster coverage rather than planting in straight lines. An approximate rule of thumb for planting: spacing 6 inches to 2 feet is frequently used. Example is 100 plants spaced 4 inches apart will cover about 11 square feet.

Many ground covers are available as plugs either at nurseries or online. Plugs are less expensive than plants

in 3-inch or 6-inch pots. If you put a ground cover in a location it likes (light, moisture, soil quality) plugs will

grow well in almost the same time frame as larger plants.

Regarding soil quality, another reason to select native ground covers is they have evolved in our area to do well in our soil and weather conditions. Often it is not necessary to add amendments to an area when planting a native ground cover. If you do add amendments, ensure they are organic, such as leaf mulch. Dig amendments in only a few inches, especially under trees so you do not damage any roots.

Here is a list of many native ground covers by the light conditions they require, and which non-native ground covers they can replace. Once you determine the light in an area you want to plant, read the center column if you know you want native ground covers. Read the right-hand column for a non-native ground cover for which you want to find native alternatives. You can further research all these plants with a simple internet search.

<b>Light Conditions</b>	<b>Native Ground Covers, Alternatives to Non-Native Ground Covers</b>	<b>Non-Native Ground Covers</b>
Sun	<ul style="list-style-type: none"> <li>• Coral honeysuckle (vine)</li> </ul>	<ul style="list-style-type: none"> <li>• Star jasmine</li> <li>• Asian honeysuckle vine</li> </ul>
Sun, dry	<ul style="list-style-type: none"> <li>• Pussy toes</li> <li>• Native geranium</li> <li>• Coreopsis tickseed</li> <li>• Native petunia</li> <li>• Moss or creeping phlox</li> <li>• Native sedums</li> <li>• Eastern prickly pear</li> </ul>	<ul style="list-style-type: none"> <li>• Silver carpet (lambs ears)</li> <li>• Cape weed--can be dangerous to livestock</li> <li>• Ice plant--considered invasive in many states, releases salt into soil, not food source for wildlife, toxic when eaten by some animals</li> <li>• Gazania (African Daisy)--can be aggressive</li> </ul>
Sun, part sun	<ul style="list-style-type: none"> <li>• Little bluestem</li> </ul>	<ul style="list-style-type: none"> <li>• Miscanthus (Chinese silver grass) --invasive, very flammable</li> </ul>
Sun to shade	<ul style="list-style-type: none"> <li>• Virginia creeper</li> <li>• Golden ragwort</li> <li>• Native ferns</li> <li>• Creeping phlox</li> <li>• Pennsylvania and blue wood sedge</li> <li>• Virginia wild rye</li> <li>• Bottlebrush grass</li> <li>• Plantain sedge</li> <li>• Wild pink</li> <li>• Kinnikinnick (red bearberry)--evergreen</li> <li>• Lyre leaf sage</li> <li>• Robins plantain</li> <li>• Harebell (native campanula rotundifolia) (dry)</li> <li>• Native petunia (dry)</li> <li>• Coreopsis tickseed (dry)</li> </ul>	<ul style="list-style-type: none"> <li>• English ivy--invasive, can strangle trees, inhibits growth of tree seedlings, damages buildings</li> <li>• Creeping jenny</li> <li>• Hosta</li> <li>• Ajuga</li> <li>• Liriope</li> <li>• Dianthus (carnation, pinks, Sweet William)</li> <li>• Silver carpet (lambs ears)</li> <li>• Day lilies</li> <li>• Bellflower, campanula</li> </ul>
Shade to part sun	<ul style="list-style-type: none"> <li>• Partridge berry</li> </ul>	<ul style="list-style-type: none"> <li>• Periwinkle/vinca minor/myrtle--invasive, bad infestations around</li> </ul>

	<ul style="list-style-type: none"> <li>• Bunchberry (creeping dogwood)</li> <li>• Robins plantain</li> <li>• Green and Gold</li> <li>• Common/Canadian wild ginger</li> <li>• Jacobs ladder (Greek valerian)</li> <li>• polemonium reptans</li> </ul>	streams can change the ecology of the area, can be poisonous <ul style="list-style-type: none"> <li>• English ivy</li> <li>• Creeping jenny</li> <li>• Liriope</li> <li>• Japanese pachysandra</li> </ul>
Shade	<ul style="list-style-type: none"> <li>• Allegheny Sedge (pachysandra procumbens)</li> </ul>	<ul style="list-style-type: none"> <li>• Japanese pachysandra</li> <li>• English ivy</li> <li>• Hosta</li> <li>• Liriope</li> </ul>

***Sharon Perryman, Loudoun County Extension Master Gardener***

Below are some references for your continued study of native ground covers:

Web addresses:

[Groundcovers | Virginia, USA | Plant NOVA Natives](#)

[Ground cover plants \(pfaf.org\)](#)

[GARDENING BENEFITS FROM USE OF GROUND COVERS--The New York Times \(nytimes.com\)](#)

[VT ground cover pub VCE426 609 2001.pdf](#)

Publications:

"Native Plants for Northern Virginia," published by Virginia Witmer, *Coastal Zone Management Program*, and Corey Miles, *Northern Virginia Regional Commission*. Can be downloaded for free or purchased from online vendors or at many native plant nurseries.

"Native Plants for Wildlife Habitat and Conservation Landscaping, Chesapeake Bay Watershed," published by US Fish and Wildlife Service. This is downloadable for free, or hardcopy can be purchased from online vendors. Due to the amount of information, hardcopy is more practical.



## Who Can Hügelskultur? YOU Can Hügelskultur!



**My well-rotted ash logs destined for a someday hügelkultur bed beyond my fence.**

For at least four years now, my patio has overlooked logs neatly stacked against my fence. Long story short--the two ash trees that steadfastly shaded my backyard for at least 40 years (probably longer) fell victim to emerald ash borer (EAB). A tree service was dispatched to fell the sick trees. Apparently the service lacked a chipper, loader, and large truck, and not wanting to tear out and rebuild a section of the fence, the service stacked the logs neatly against the fence. (Logs infested with EAB can be chipped or used for firewood, but should not be moved more than 50 miles away from where they were cut.)

I had done a bit of simple lasagna gardening, by outlining a bed, cutting the grass super-short, and laying down cardboard and newspapers. I then layered green materials (fruit and vegetable scraps, fresh grass clippings and fresh leaves, fresh garden trimmings, etc.) with brown materials (dried leaves, shredded newspaper, peat, pine needles, etc.). The work was less back-breaking, and the results were good

Searching for landscaping ideas that utilize logs, I found many websites, blogs, vlogs, articles, pictures, and videos that talked about a technique for building raised beds using logs, branches, and tree clippings. This technique has a name--Hügelskultur, which rhymes with "Google-culture," and translates from German as hill-mound or hill-garden. Simply put, it is wood covered with soil, or the practice of creating no-dig raised beds using rotting logs. (Lucky me, with my surplus of rotting logs.) Simply put, hügelkultur is the concept of building soil and fungal communities through the slow decomposition of multiple layers of woody plants. (I'm thinking lasagna gardening on steroids.)

The origins of hügelkultur are not clear. Some say that it is a centuries-old practice; others say it is a modern permaculture method. Permaculture, simply put, is an agricultural ecosystem intended to be sustainable and self-sufficient. "Bill Mollison, the Tasmanian son of a fisherman who first coined the term in 1978, defined permaculture as the conscious design and maintenance of agriculturally productive systems which have the diversity, stability, and resilience of natural ecosystems. It is the harmonious integration of the landscape with people providing their food, energy, shelter and other material and non-material needs in a sustainable way."<sup>1</sup> A good local example of permaculture would be the 180,000 square foot green roof installed atop the Howard Hughes Medical Institute (HHMI) in 2006 in eastern Loudoun County.

Hügelkultur was first documented in a German brochure written in 1962 by an avid gardener named Herrman Andrä. Andrä is said to have taken special notice of the diversity

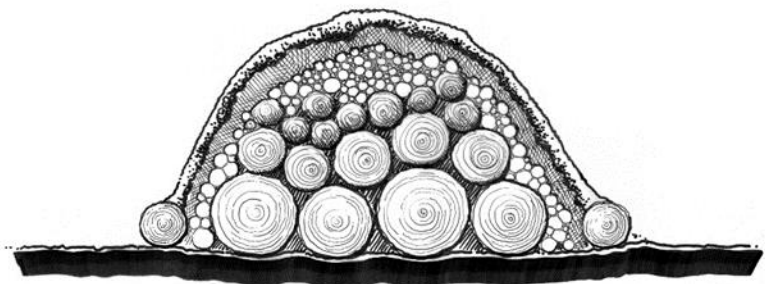
of plants happily growing in a pile of woody debris in the corner of his grandmother's garden.

Today, Sepp Holzer, an Austrian farmer and permaculture enthusiast, is widely credited with starting the modern hügelkultur movement and has been coined the "Dalai Lama of Permaculture." Full disclosure at this point: "There are no peer-reviewed, scientific studies on Hügelkultur. A few university students have conducted projects (Adams 2013; Laffoon 2016), but these have not been published in scientific journals. Thus, gardeners rely on popular books and websites for hügelkultur information."<sup>2</sup>

If the origins of Hügelkultur are murky, the benefits to the home or backyard gardener, even if attempted on a small scale, are clearer<sup>3</sup>:

1. The beds create different microclimates and conditions suitable for the varied needs of different plants. The side facing the sun can be used for heat and sun loving plants for example.
2. The soil warms up quicker in the spring allowing for an earlier start of growth.
3. They retain water better, reducing the need for watering. The wood acts like a sponge and balances moisture levels.
4. The soil is loose and well aerated. This slows freezing of the soil in cold areas.
5. The decomposition of the wood inside creates heat, which helps the growth and germination of seeds, particularly in the spring.
6. The nutrients locked up in the wood get released slowly over a period of several years. Even vegetables with a high demand of nutrients can be grown without the use of additional fertilizer.
7. The method of hilling or sloping the raised bed increases the surface area, allowing more area for growing. This is particularly in small gardens with limited space.

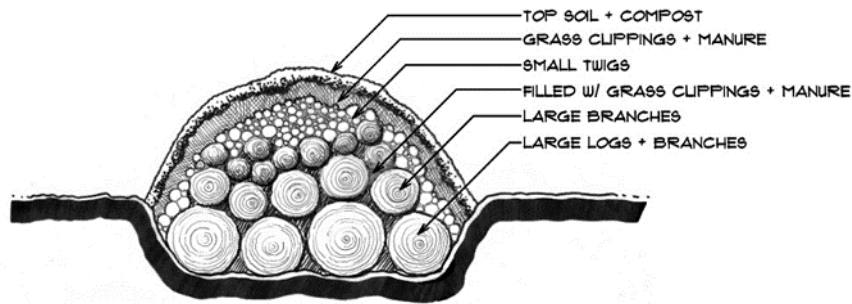
Some may be swayed from starting a hügelkultur by thinking that you need to dig a long, wide, deep trench and fill it with large logs until you have a long, wide, high serpentine mound. (And if you have an HOA, what will they have to say about THAT?) The good news is that a hügelkultur can take many forms.



You can start with a mound of logs, or rows of logs, and layer branches, leaves, grass clippings, straw, cardboard, newspapers, manure, compost, or any other biomass you may have on hand. Top with soil, plant your veggies, and voila. hügelkultur.

**My preference: Above-ground hügelkultur bed with wood border.**

Photo: Oklahoma State University Extension.



**Cross-section of an in-ground hügelkultur bed.** Photo: Oklahoma State University Extension.

You can dig a trench and lay the logs in the trench or create borders of large logs and lay smaller logs inside. The trick is to try to fill the gaps as tightly as you can with biomass before topping off with soil. Also, locate your hügelkultur beds at least 30 feet from any

structures to avoid termite problems.

The beds will compact over time, so you will initially want to build them at least 2 feet high, and if you are so inclined, building them 6 feet high is even better. To encourage compaction, you can whack them down with a shovel or some other compaction tool.

To get your hügelkultur bed off to a good start, follow these principles:

1. Gather materials for the project: Find a sunny location at least 30 feet away from any structures (to cut down on potential termite and rodent problems) and select an area measuring approximately 6 feet by 3 feet. Remember, these dimensions are approximate. A high hügelkultur bed, say 6 feet or so, should be oriented north-south to take full advantage of the sun on both sides.
2. Gather materials for the project (essentially any materials you would put into a compost pile):
  - Fallen logs, branches, twigs, fallen leaves, grass clippings, shredded newspaper. The best wood to use is any wood that you have available, EXCEPT for woods that are alleopathic or rot resistant like black walnut, black locust, or cedar.
  - Nitrogen-rich material; kitchen waste works well, as does manure, if you have access to it. These materials will help to maintain a proper carbon to nitrogen ratio.
  - Top soil (enough to cover the other layers of the bed with a depth of 1 to 2") and some mulching material (straw works well).
3. Lay the largest logs down as the first layer of the hügelkultur bed. Next, add a layer of branches, and then add layers of small sticks and twigs. The best hügelkultur beds are approximately 3 feet high, but there is no hard and fast rule for height. Hügelkultur is very forgiving, and beds can range from 2 feet to 6 feet. Remember that they will compact over time.
4. Water all these layers well.
5. Begin filling in the spaces between the logs by scattering twigs and branches, leaf litter, kitchen scraps, and manure. Remember that you want to leave as few air pockets as possible.



6. Finally, top off the bed with 1 to 2" of top soil and a layer of mulch. The top soil could be sod that you have stripped from another area and placed upside down, and the mulch could be arborist mulch.



**Fill in the gaps between the logs to keep the area moist and prevent rodent problems.** Photo Daron Williams, [Permies.com](https://permies.com).

The bed is best left to cure for a bit, so fall is a great time to start a hügelkultur bed and leave it to over-winter for spring planting. Luckily, we have enough mild winter days here in Zone 7 that the project can be stretched out through early winter. That said, a hügelkultur bed can also be planted immediately.



**Raised garden bed hugelkultur after one month**  
<https://richsoil.com/hugelkultur/>.



**Raised garden bed hugelkultur after one year.**



**Raised garden bed hugelkultur after two years.**



**Raised garden bed hugelkultur after 20 years.**

You can either plant seeds or place transplants in the hügelkultur bed, just as you would in any other garden bed. The hügelkultur bed will benefit from “curing” a bit, so it is best to prepare the bed several months prior to planting time (prepare the bed in the fall for a spring planting, for example, in temperate northern climates), but hügelkultur beds can be planted immediately. The “three sisters” (squash or pumpkins, corn, and beans) do especially well in a hügelkultur environment. If the location is sunny enough, tomatoes will grow well, too.

Have a Happy Hügelkultur!

*Jeanette Gandhi, Loudoun County Extension Master Gardener*

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## Hidden Gems

We've all been to the nearby well-known gardens—Longwood, Lewis P. Ginter, Winterthur, the U.S. Botanical Gardens. They're all beautiful and definitely worth visiting more than once. But there are also many smaller gardens in the local area and beyond—gardens that are not so well known, hidden enclaves that perhaps you didn't know existed. Winter will be gone before you know it. Think ahead to spring on these cold, frosty days and plan a few trips to check out these not so famous gems. To get you started, here is a list of just a few of these interesting, smaller gardens in Virginia. But don't stop with this list; there are many more wonderful small gardens to visit. Most of them are free and all of them are located in Virginia, within a day's drive from Leesburg. For a comprehensive list of public and private gardens that you can visit, go to [www.ILoveGardens.com](http://www.ILoveGardens.com). Their list includes gardens for all 50 states.

### THE LOCAL AREA:

**BEN LOMOND HISTORIC SITE AND OLD ROSE GARDEN** in Manassas consists of a Federal style red sandstone house and the elegant "Old Rose Garden," which displays 200 rose bushes and 160 antique cultivars in a geometric design. The 6-acre site is open for tours Friday through Monday at 11 a.m., 1 p.m., and 3 p.m. The grounds are open from dawn to dusk.

**RIVER FARM** is located in Alexandria, dating back to land grants in 1653. It is now the home of the American Horticultural Society. The beautiful gardens include America's Front Yard Garden, the George Harding Memorial Azalea Garden, the Dogwood Collection, the Wildlife Garden (a pond and plants that are attractive to birds), the Long Border (shade plants), the Rose Garden, the Herb Garden, the Display Garden, the Children's Garden, the American Hemerocallis Society collection (100 daylily cultivars), the Garden Calm (shrubs, trees, and perennials that prefer full or part shade), the Perennial Border, and the Orchard. River Farm is again open to the public Monday through Friday from 10 to 4. Masks are required to tour the house. Private tours are also available.

**BON AIR PARK** in Arlington is a county park that features a beautiful memorial rose garden with more than 2,400 rose bushes and 120 different varieties of roses. The Arlington Rose Foundation serves as a partner to advise and to help with planting. Enjoy the azalea, shade, sun, and ornamental tree gardens. Extension Master Gardeners of Arlington maintain the sun and shade gardens to use as teaching tools for local gardeners. This expansive 24-acre park also includes playgrounds, picnic areas with charcoal grills, an azalea garden, an ornamental tree garden, and a wildflower area.



**The Flowers Courtyard.**



**The Flowers Gazebo.**

Photographs courtesy of the Arlington County Bon Air Park website.

THE NATIONAL BOTANIC GARDEN (not to be confused with the National Botanical Garden in Washington, DC) is located in Chantilly. This wonderful garden opened in 2015 and is definitely a hidden beauty right in the heart of Northern Virginia. It contains the East Coast's largest xeric garden. According to Lifescape Colorado, a xeric garden (also known as xeriscaping) "relies on the art of plant placement, water conservation, and other management strategies for water-wise gardening that also creates a haven for the humans and other living creatures that enjoy it." The park is home to the nation's largest bamboo garden (the bamboo is located on 50 small islands in a large lake—each island is growing a different kind of bamboo)—to soaring groves of bamboo climbing the sides of The Mountain. The lakes also provide a home for many varieties of fish and birds—bald eagles, cormorants, great blue herons, many smaller songbirds, geese, and ducks.



**Examples of Xeriscaping.** Photographs courtesy of Lifescape Colorado.

### **THE LYNCHBURG AREA:**

ANNE SPENCER HOUSE AND GARDEN in Lynchburg was the home of Anne Bethel Spencer from 1903, when it was built, until 1975. She was a Harlem Renaissance poet, a civil rights activist, a teacher, a librarian, a wife and mother, and a gardener. The garden served as the inspiration for much of her poetry. The restoration of the garden was adopted as a project by the Hillside Garden Club in 1983. Many of the bulbs, flowers, and shrubs and all the roses are Anne Spencer's own plants. In 2007, the Garden Club undertook additional restoration of the arbor, the pergola, and the pond. The garden is open every day from dawn to dusk and is free.

OLD CITY CEMETERY in Lynchburg is home to the largest public collection of heirloom roses in Virginia. There are more than 425 different varieties planted throughout the grounds, representing all classes, habits, colors, and fragrances of antique roses, or "Old Garden Roses." The rose collection is composed mostly of these Old Garden Roses but also includes roses introduced and popularized in the 1920s and 1930s. The original antique rose collection was planted in 1986 along the 800-foot remains of the old 1860's brick boundary wall. Since 1986, many other varieties of antique roses have been planted throughout the 27-acre cemetery. The peak of rose bloom is usually in May and from mid-April until mid-May the Antique Rose Festival is held. Visitors will also find other flowers throughout the summer up until the late fall frosts. The sculpture-like silhouettes of the trees and plants make the garden interesting even in the winter months.

OAK RIDGE ESTATE is located in Arrington, south of Lynchburg. The house, circa 1802, and the grounds encompass 4,800 acres that include farmland, open fields, and historic buildings. It was acquired at the turn of the 20th century by Thomas Fortune Ryan, a Nelson County native who had become one of the 10 wealthiest men in the nation. He made impressive alterations to the building and grounds—adding a train station, a formal Italian Garden, a Rose Garden, a Cut Flower Garden, and a rare Crystal Palace rotunda-style greenhouse. Oak Ridge Estate remains an active farm, growing pumpkins, corn, soybeans, and hay.

#### **THE RICHMOND AREA:**

MAYMONT HOUSE in Richmond's Byrd Park is a Victorian country estate that is surrounded by rolling lawns in the English park style. The lawns form a natural backdrop to a series of gardens, including an Italian Garden with terraces, parterres, fountains, and statuary; a Japanese Garden with a 45-foot waterfall, pools, raked gravel beds, stones, and a grotto; an arboretum with several state-champion trees. Take the children for a hike on Marie's Butterfly Trail. There are plenty of butterfly-attracting plants and signage describing a butterfly's life cycle. The Carriage House Garden is filled with bulbs, shrubs, and colorful annuals and perennials. Other gardens include Jack's Vegetable Garden, the Herb Garden, the Ornamental Lawn, Virginia Native Landscape, a Via Flora Garden, and a wetland habitat. Visit the mansion and other historic buildings. The 12,000 square foot, 33-room house was finished in 1893—the beginning of the Gilded Age.

AGECROFT HALL AND GARDENS is located not far from MAYMONT in Richmond. It's a step back in time for visitors. The Tudor estate originally stood in Lancashire, England, and was shipped to America and reconstructed on the banks of the James River. The grounds include a fragrance garden and a sunken garden that's modeled after the pod garden at Hampton Court Palace in England.



**Spring Sunken Garden.**



**The Knot.**

Photographs courtesy of Agecroft Hall and Gardens.

VIRGINIA HOUSE is next door to AGECROFT HALL in Richmond. It is a reconstructed 12th century priory that was also dismantled and shipped to America from England in 1925. Its terraced gardens, designed by Charles Gillette, overlook the James River. Formal terraced gardens are side by side with a natural environment that showcases views of the river. The property also features pools, canals, and statuary and was awarded a medallion commendation by the Virginia Chapter of the American Society of Landscape Architects in 2000, one of very few properties in Virginia to receive the award.

TUCKAHOE PLANTATION is located about 10 miles west of Richmond and is the boyhood home of Thomas Jefferson. The rambling gardens are beautiful from March through October and visitors



are welcome to enjoy them from 9 a.m. to 5 p.m. daily. Note that the mansion is only available for tours by appointment and during special events.

MACCALLUM-MORE MUSEUM AND GARDENS are located in Chase City and feature treasures from all over the world, collected by three generations. The house and gardens are 6 acres hidden away in an ordinary neighborhood. The gardens include more than 200 botanical species; 8,000 boxwood, dogwood, and azaleas; eight fountains; and a wildflower and herb garden. Stroll along hand-laid stone paths, and enjoy the Spanish Cloister, the Italian sculptures, and one of the largest collections of Native American artifacts.

### **CENTRAL VIRGINIA:**

CHATHAM MANOR in Fredericksburg was built by William Fitzhugh between 1768 and 1771. During the Civil War it was at various times the Union Headquarters, a soup kitchen, and a hospital. Today the property is the headquarters of the Fredericksburg and Spotsylvania National Military Park. The gardens are cared for by the Stafford County Extension Master Gardeners.



**Gardens at Chatham Manor.** National Park Service Photo by Mary O'Neill.

HISTORIC KENMORE PLANTATION AND GARDENS in Fredericksburg is a beautiful Georgian-style brick mansion built by George Washington's sister Betty Washington Lewis and her husband, Fredericksburg merchant Fielding Lewis. The house and gardens reflect their pre-Revolutionary War wealth and status. In 1929 the Garden Club of Virginia voted to raise funds to restore the gardens, starting the annual tradition of Historic Garden Week in Virginia. Kenmore is open from March to December. Tickets are \$12.00. A ticket will reserve your time for a guided tour of the house. You may tour the grounds on your own before or after the house tour.

### **TIDEWATER AND SOUTHEASTERN VIRGINIA:**

TIDEWATER (HAMPTON ROADS) ARBORETUM (HAMPTON ROADS AREC) is located on about 5 acres in the middle of an urban industrial park in the City of Virginia Beach. It is maintained by Virginia Tech's Hampton Roads Agricultural Research and Extension Center (AREC) and the Virginia Beach Extension Master Gardeners. The Arboretum emphasizes the kind of plant material suitable for the climate of Southeastern Virginia and which plants are best for use in smaller urban gardens. There are 12 themed gardens within the arboretum, as well as collections of trees, shrubs, and herbaceous plants that are "grown for display, research, and educational



purposes.” Many of the plants show characteristics that vary with the seasons so there’s always something new to see. The gardens are free and open daily.

HERMITAGE MUSEUM AND GARDENS are located at 7637 North Shore Road in Norfolk—between Old Dominion University and the Norfolk Naval Base. The Hermitage is known for its beautiful grounds, which include 12 acres of semi-formal gardens, forest, and wetlands. The Lafayette River wraps around the property on three sides. Both the wetlands and the woodlands provide a natural habitat for hundreds of plants and animals, including a variety of waterfowl and migrating birds. The Hermitage is open Tuesday through Sunday, 10 to 5.

CHESAPEAKE ABORETUM is located in the City of Chesapeake and is a 48-acre “nature’s classroom,” which “promotes horticultural and environmental awareness through displays, education, and research.” It has a great trail system with trails that wander through a mature hardwood forest with many varieties of trees and plants. Amenities include eight bridges, three miles (+/-) of walking trails, Lake Hughes, the Caleb Williamson Farmhouse (c. 1830’s), Camellia Cove (part of the American Camellia Trail), a gazebo and picnic area, a propagation nursery, and an Extension Master Gardener area with a greenhouse.



Photos Courtesy of Chesapeake Parks, Recreation, and Tourism.

HOLLY POINT NATURE PARK in Deltaville is a 30-acre nature park co-located with the Deltaville Maritime Museum. The park offers walking paths, a kayak landing, a waterfront pier, and picnic areas. It features a Wildflower Garden, a Children’s Garden, a Woodland Garden with azaleas and statuary, a Camellia Garden that also includes hydrangeas, hostas, ice plants, and annuals, the Wildlife Sculpture Garden, and a Wildflower Meadow. If you get tired, you can sit and rest on one of the benches donated by patrons. Every year the Middlesex Elementary School first graders help plant an edible garden on their field trip to Holly Point. Plants include bee balm, black-eyed Susans, banana plant, squash, tomatoes, strawberries, blueberries, and herbs. The park is accessible by water and is the portal to the John Smith National Historic Water Trail.

#### THE VALLEY AND SOUTHWESTERN VIRGINIA:

BOXERWOOD NATURE CENTER AND WOODLAND GARDEN in Lexington, Va., sits on 15 acres and includes more than 1,300 cultivars and 163 different varieties of plants and trees so there’s always something new to see. There are five ecosystems at Boxerwood. The Pioneer Forest is a great place to view forest succession. It’s also the location of the Fairy Forest. Other ecosystems include the Wetlands, the Field, which has a picnic area, and The Big Chair, which is made from tree limbs and branches; an established woodlands area with trails for identifying the trees; and

finally, the Hedgerow, a transition between field and forest and a natural cover and travel corridor for wildlife.



**The Big Chair.** Photograph by Jay Sullivan/Boxerwood Nature Center and Woodland Gardens.

EDITH J. CARRIER ARBORETUM AND BOTANICAL GARDENS is a tree and wildlife preserve located on the campus of James Madison University in Harrisonburg. This 125-acre arboretum features a number of beautiful gardens, including the Herb Garden (culinary, medicinal, fragrance/touch, and ancient medieval); the Sinclair Garden, which is terraced with shrubs and perennials; the Bog Garden with acid-loving plants; the Rock Garden; the Viette Perennial Garden (18 varieties of daylilies and 8 varieties of Siberian iris); the Drury Planting (shrubs); the Mid-Atlantic Azalea Garden; the Ballard Planting with maidenhair and other plants; the Andrew Wood Memorial Garden; the McDonald Azalea and Rhododendron Garden with 500 plants; Fern Valley, a ravine garden; and the new Rose Garden with 30 varieties of heirloom roses. The grounds and trails are free and open every day, dawn to dusk.

THE MUSEUM OF THE SHENANDOAH VALLEY is located in Winchester. The Shenandoah Valley is considered one of Virginia's natural treasures and the museum celebrates that. The Glen Burnie Historic House was built in the late 1700s and is surrounded by seven acres of gardens. Boxwood plantings create the Parterre Garden and the Knot Garden. The Rose Garden has hundreds of plants, and the Perennial Garden features flowers in a rainbow of colors. The Vegetable Garden is planted in a formal pattern that changes annually. Bordering the northern edge of the property, Kathie's Spring Garden has a pond and a variety of trees, shrubs, bulbs, and spring flowers.

This should get you started on many interesting trips in Virginia.

*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 19<sup>th</sup> 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 cold winter months.

### Crocus (*Crocus vernus*) ☘

Crocuses are some of the earliest flowers to emerge and bloom while the ground is still covered with frost and snow. Their green foliage and bright petals of purple, yellow, and white are a harbinger of the spring to follow.

<b>Meanings:</b>	Abuse Not	Impatience
	Attachment	Heavenly Bliss
	Cheerfulness	Resurrection
	Gladness	Youthful Glee

**Possible Powers:** Love  
Visions

**Folklore:** Some believe that you can attract love by planting *Crocus vernus*.



<https://www.publicdomainpictures.net/en/view-image.php?image=74412&picture=crocus-flowers-purple>

According to one Greek myth, the crocus was named after a beautiful young man of the same name who pined for a shepherdess in the hills by the name of Smilax. As his love for her was unrequited, he died of a broken heart. The gods then turned him into the flower that bears his name.

Legend says that when returning Crusaders returned with the saffron crocus (a fall-blooming variety), King Henry I (1068-1135) became very fond of it as a spice, and when the ladies of the court discovered that it could be used as a dye for their hair, they started to use up his entire supply. King Henry then forbade the use of his favorite spice as a dye and proposed severe punishment for anyone who used it.

**How to grow in Northern Virginia:** Plant bulbs in the fall in a sunny location, about 3 to 5 inches deep with the root base facing down and the dried stem facing up. Bulbs can be planted 3 to 5 inches apart in well-drained soil. They usually take a year or so to begin sending up blooms. As squirrels find crocus bulbs to be a tasty treat, you may need to put down chicken wire to prevent them from being gobbled up by critters. Do not remove the foliage until it has turned brown so the leaves can continue to harvest energy from the sun that will translate into beautiful blooms next year.

## Holly (*ilex aquifolium*) ☞

Holly is considered to be one of the quintessential Christmas season plants. Its dark green foliage and red berries contribute to the red and green coloring associated with the holiday. It can be found at nearly every nursery and garden center this time of year.

### Meanings:

Am I Forgotten  
Defense  
Domestic  
Happiness  
Good Luck  
Protection

### Meaning of Berries:

Christmas Joy



<https://www.publicdomainpictures.net/en/view->

### Possible Powers:

Anti-Lightening  
Attract and Repel Energies  
Protection Against Harm in Dreams  
Protection Against Witchcraft

**Folklore:** A weather divination is that if a holly bush is loaded with berries, it portends a harsh winter.

Holly has been used for winter decoration since the time of the Druids who used to bring it into the home to keep evil spirits away. The Druids also brought boughs inside to provide shelter to the elves and fairies who would come indoors to escape the bitter cold.

Medieval Europeans would plant holly near their homes to protect both the homes and themselves from lightening and to bring good fortune.

A divination using holly is to take leaves to a body of water and place tiny candles on the leaves. The candles are then lit and floated upon the water. If the leaves stay afloat, the idea in the person's mind will be a good one that should be followed. If the leaves sink, it is a sign that the idea is not good and the person should not proceed.



<https://www.publicdomainpictures.net/en/view->

**How to grow in Northern Virginia:** Holly should be planted in well-drained, although not dry, soil with a pH between 5 and 6 in full sun. The female plants are the ones that produce berries. Both a male and a female plant are needed for berry production, and one large male plant can fertilize multiple female plants within a range of about 200 feet.



## Mistletoe (*Viscum album*) ☿

Mistletoe is another classic of the Christmas season today, although historically it was banned in most churches because of its association with paganism, "but as early as 604 Pope St. Gregory I advised St. Augustine of Canterbury to permit and encourage popular customs so long as they found their roots in nature rather than paganism."<sup>1</sup>

**Meanings:** Affection  
Kiss Me  
Love  
Overcoming Difficulties

**Possible Powers:** Exorcism  
Fertility  
Healing  
Protection



<https://www.publicdomainpictures.net/en/view-image.php?image=310307&picture=birds-under-mistletoe>.

**Folklore:** One of the most magical plants of Medieval Europe, mistletoe was believed to be able to cure disease, to make poisons harmless, to protect against witchcraft and ghosts, and to make ghosts speak upon command.

"In Norse mythology, the beloved god Balder was haunted by dreams of his impending death, so his devoted mother, Frigga, made everything in nature promise not to hurt him. Sadly, she overlooked the mistletoe plant. Loki, god of mischief, created an arrow from the plant and tricked Balder's brother into killing him with it. In her grief, Frigga begged the other gods to bring Balder back, which they did, proving he could surmount all difficulties, even death itself."<sup>2</sup>

### How to grow in Northern Virginia:

Although mistletoe is spread naturally by birds, it is possible to grow it yourself.

1. Harvest berries from a tree in March or April. Make sure you choose a tree that is similar to the type of tree in your own garden on which you want to establish the mistletoe.
2. Discard any crushed berries and do not use berries from sprigs used as Christmas decorations. These will not germinate because they are generally harvested when immature.
3. Choose a branch 10 cm. (4 in.) or more in girth on a tree that is 15 years old or more. Ideally this should be fairly high up, so the developing plant receives plenty of light.
4. Find a natural crevice in the bark or make a shallow cut to create a small flap.
5. Remove the seeds from the fleshy berries and insert them into the crevice or under the flap.
6. Finish by covering with hessian (burlap) to protect the seeds from birds.
7. To ensure greater success, sow quite a few seeds at each site because only one in ten seeds germinate, and both male and female plants are needed for berries to form.

The branch will swell as the mistletoe develops, but don't expect quick results; plants can take five years or more to reach berrying size.<sup>3</sup>

**American Mistletoe** (*Phoradendron serotinum*), also called Oak Mistletoe, is the variety that is native and will grow in Virginia, but there are few, if any, sites that sell the seeds, so purchasing a plant and harvesting the berries appears to be the best way to obtain them.



<https://www.publicdomainpictures.net/en/view-image.php?image=233886&picture=a-mistletoe-heart>.



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## Snowdrop (*Galanthus nivalis*) ☘

Snowdrops flower from January to March. Long associated with winter, the literal translation from the Latin means "milk flower of the snow."

**Meanings:**

- Consolation
- Hope
- I Am Here For You
- Hope in Sorrow
- Purity



<https://www.publicdomainpictures.net/en/view-image.php?image=12170&picture=spring->

**Possible Powers:** Contains the alkaloid galantamine, which is approved in over 70 countries as a treatment for Alzheimer's disease.

**Folklore:** It is said that in the beginning, the snow was looking to borrow a color from the flowers. All the flowers except the snowdrop refused to lend their color, so the snow became forever white.

In Victorian England, the superstition was to never bring a snowdrop into the house because it would bring ill-fortune or death within the year. Bringing a snowdrop into the house will cause milk to turn sour and eggs to spoil.



[www.publicdomainpictures.net/en/view-image.php?image=281408&picture=snowdrop-galanthus-flower-spring](http://www.publicdomainpictures.net/en/view-image.php?image=281408&picture=snowdrop-galanthus-flower-spring).

*Elizabeth Campanella, Loudoun County Extension Master Gardener*

## Recipes Featuring Honey

Honey is an amazing ingredient to eat raw, to cook with, or to bake with in recipes. Its primary sweetness balances sour flavors and masks bitterness while its viscous texture thickens or adds smoothness to recipes. Here are some tips for cooking or baking with honey:

- Store honey at room temperature, ideally between 64°F and 75°F. Honey stored at cooler temperatures--such as in the refrigerator--may crystallize.
- To liquify crystallized or solid honey, place the jar in hot water or and stir occasionally. It is not recommended to heat honey in a microwave.
- If unopened in a sealed container, honey will last indefinitely whether it is raw or pasteurized. Over time, honey may darken. Once a jar is opened, keep tightly sealed at room temperature.
- The darker the honey, the stronger the taste. Pale honey stored in the sunlight may darken and subtly change flavor.
- Because honey is so dense, one cup of honey weighs 12 ounces. A 16-ounce jar of honey measures 1 1/3 cups.
- For easy measuring, lightly grease the inside of a measuring cup with oil, cooking spray, or butter. The honey won't stick to the sides and will slide right out.
- Honey has a sweeter taste than table sugar, so less is needed.
- Honey is hygroscopic, meaning it attracts or retains moisture. Using honey as a sweetener in cakes and cookies helps keep them soft and tender.
- To substitute honey for granulated sugar, use  $\frac{3}{4}$  cup for every one cup of sugar. For amounts up to 1 cup sugar, substitute equal amounts of honey.
- Since honey is made up of about 20 percent water, you may need to reduce another liquid in a baked recipe, such as milk or juice, by  $\frac{1}{4}$  cup for every  $\frac{3}{4}$  to 1 cup honey used. For cookie dough or other batter without added liquid, increase flour by a tablespoon to reach an ideal texture.
- Honey is acidic and can affect a baked recipe. If the recipe doesn't already contain baking soda, add about  $\frac{1}{4}$  to  $\frac{1}{2}$  teaspoon of baking soda per 1 cup honey.

### Blue Cheese, Bacon, and Honey Cheese Ball

Makes 10 to 12 servings

Cheese balls are one of my favorite appetizers to serve at parties since they are easy, crowd-pleasing, and even taste better made the day ahead. The honey in this recipe offsets the tang of the blue cheese and helps create a softer texture that's easy to serve.

- 1 (8-ounce) package cream cheese
- 1 cup (4 ounces) shredded cheddar cheese
- 1 (4-ounce) package crumbled blue cheese
- $\frac{1}{4}$  cup honey
- 1 tablespoon minced onion
- 1 teaspoons Worcestershire sauce
- 5 strips bacon, cooked and crumbled





1 cup toasted walnuts, finely chopped

Combine cream cheese, cheddar, blue cheese, and honey in a mixing bowl. Beat at low speed until mixed, then increase speed to high and beat until smooth and well blended. Beat in onion, Worcestershire, and bacon. Cover and refrigerate until firm.

Roll out a large piece of plastic wrap on a work surface. Place walnuts in center. Place cheese on walnuts and roll around to shape into a ball and cover with nuts. Cover and chill until ready to serve.

### **Banana-Honey-Flax Waffles**

Makes 4 servings

Softer texture and deep pockets for holding butter and syrup make Belgian waffles a decadent breakfast. In this recipe, flax is added to provide heart-healthy omega-3s, fiber, and protein. If you adore bananas, add another if you wish. I've made the gluten-free version next to the wheat flour version, and I can't tell the difference in flavor or texture.

1¼ cups all-purpose flour  
¾ cup ground flax  
2 teaspoons baking powder  
1 teaspoon ground cinnamon  
½ teaspoon salt  
1 ripe banana  
2 large eggs  
¾ cup milk or almond milk  
¼ cup melted butter or vegetable oil  
¼ cup honey  
1 teaspoon vanilla extract  
Honey and/or melted butter, for drizzling  
Sliced bananas  
Toasted sliced almonds



Preheat Belgian or traditional waffle iron.

Combine flour, flax, baking powder, cinnamon, and salt in a large bowl.

Mash banana in a medium bowl. Stir in eggs, milk, butter, honey, and vanilla. Add egg mixture to the flour mixture and stir until just moistened.

Pour ½ cup batter into each square of a Belgian waffle iron or the recommended amount of batter into a thin waffle iron. Cook 5 minutes or until golden brown and cooked through. Serve with additional honey, butter, sliced bananas, and sliced almonds, if desired.

Gluten-Free Variation: Instead of flour, substitute ¾ cup gluten-free baking mix and ½ cup almond flour. Increase almond milk to 1 cup.

## Honey Pecan Pie Bars

Makes 2 ½ dozen

Here's a recipe that has all the delicious sweetness of pecan pie, but in small portions you can easily take to school or work. Freeze for up to 3 months and you've got an instant dessert for spontaneous guests or late-night cravings.

- 3 sticks (1 1/2 cups) unsalted butter, softened and divided
- 1 cup firmly packed light brown sugar, divided
- 2 cups all-purpose flour
- ¾ teaspoon salt, divided
- 1 stick (1/2 cup) unsalted butter
- ½ cup honey
- 2 tablespoons heavy cream
- 2 teaspoons vanilla extract
- 2 ½ cups coarsely chopped pecans
- 4 eggs beaten

Preheat oven to 350°. Line a 13-inch x 9-inch baking pan with nonstick or greased foil.

Beat 2 sticks butter and ½ cup light brown sugar in a mixing bowl with an electric mixer until light and fluffy. Beat in flour and ½ teaspoon salt. Press evenly into prepared pan. Bake 15 minutes until very pale golden brown.

Combine remaining 1 stick butter, honey, remaining ½ cup light brown sugar, cream, and salt in a saucepan over medium heat. Cook, stirring frequently, just until butter melts and mixture is well blended (brown sugar doesn't have to completely dissolve). If the mixture boils, allow to cool to room temperature before adding eggs.

Stir in vanilla, pecans, and eggs. Pour over crust. Bake 25 minutes until golden brown and set.

Cool on wire rack; remove from pan and cut into squares, diamonds, or rectangles.



Recipes and photos from *Honey: 50 Tried & True Recipes* (2021 Adventure Publications) by Julia Rutland

*Julia Rutland, Loudoun County Extension Master Gardener*

## Bobcats in Virginia

Here kitty, kitty!? Definitely not! Bobcats have been spotted over the last couple of years in Fairfax, Prince William, and Loudoun Counties in Virginia, as well as within the borders of Washington, D.C. While they don't pose a danger, it's good to be aware that they exist in our area. You probably have never seen a bobcat because they are solitary; move only during dusk, darkness, and dawn; and shun populated areas. But, if you do see a bobcat in your area, or capture one on your motion sensor camera, the sighting can be reported to the Department of Wildlife Resources for Virginia on their Wildlife Conflict Helpline: 855-571-9003.

Bobcats are one of the most successful and elusive wild cat species in North America. The bobcat is believed to have evolved from the Eurasian lynx, which crossed into North America as early as 2.6 million years ago. Bobcats are the most widely distributed native cat in North America and have been found in each of the contiguous states except Delaware. They are not found in the northern latitudes where deep snow restricts their movements. They prefer mountainous forests and swamps, favoring low and mid elevations. They can also inhabit farmlands, open woodlands, and the wooded suburban areas of Northern Virginia, only avoiding areas with dense human populations.

Bobcats are very adaptable and can survive almost anywhere. For this reason, populations of



**Bobcat** Photo by CG Hoyt from [Maymont website](#)

bobcats are thought to be increasing in North America; however little information exists on their current population status. Virginia is thought to have one cat for every four-square-mile area. They have an average life span of 7 to 10 years but can live for 15 to 33 years in captivity.

The name "bobcat" comes from the appearance of the bobcat's tail, which appears to be cut short or "bobbed." Bobcats are a muscular, medium-sized cat usually 12 to 24 inches in height and weighing 19 to 30 pounds, approximately twice as big as a large domestic cat. With long, muscular hind legs, they can

reach a top speed of 34 mph. They have keen eyesight and hearing, both of which help them locate enemies and prey. Bobcats rarely meow, but they do chortle and emit birdlike chirps like our house cats do.

Bobcats are opportunistic carnivores. This means they will eat most any small bird, mammal, or reptile available, but they prefer rodents, rabbits, squirrels, and raccoons. However, they can kill prey up to 8 to 10 times their own weight. A bobcat can be an effective predator of small white-tailed deer and fawns. If they do take a deer, they are most likely to kill sick, injured, young, or old animals. They are ambush predators, stalking and hunting their prey with an element of surprise. They are secretive, cantankerous, and solitary. Bobcats hunt and travel in areas of thick cover, living on the ground, but they can climb trees with ease and are excellent swimmers.

Males and females associate only for breeding. After mating, they return to their separate territories. They establish their main den or maternity den in a cave or hollow tree. Breeding is from winter into the spring, January to March, with a gestation period of 60 days. While males

may breed with several females, the females typically mate with only one male. Females reach sexual maturity after one year, while males mature after two years.

Females give birth to a litter that she cares for by herself in a secluded den. Only cats with established territories raise litters. Two to four furred, blind kittens are born in the spring, usually April or May, and are weaned by 8 weeks of age. The kittens open their eyes after about 9 days. The female defends her kittens, even against the male, until the kittens are about 2 months old. Young bobcats stay with their mother for 8 to 10 months and then leave their mother's territory. Kittens venture from the den after about 5 weeks. When the kittens are about five months of age, the mother takes them out hunting. By 9 months old, they begin to establish their own territories, although they may remain near their mother until the following spring. Foxes, coyotes, and large owls prey upon bobcat kittens.

Along with loss of habitat and automobiles, humans are the only major threat to adult bobcats. They do not usually carry disease and do not contract the mid-Atlantic strain of rabies, but they are susceptible to mange. Bobcats are legally harvested for the fur trade in 38 states, and in 7 Canadian provinces. In the Commonwealth of Virginia, all hunters and trappers are required to report killing a bobcat within 24 hours through Virginia's electronic harvest reporting system.

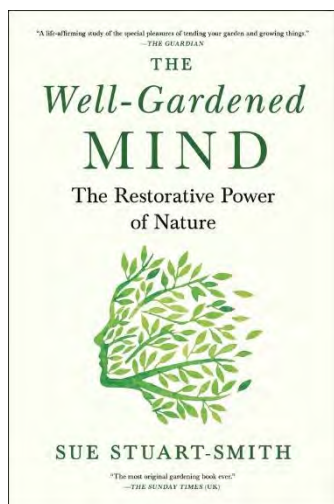
Problems caused by bobcats are very infrequent and are individual problems as opposed to a species problem. Common-sense precautions used for raccoons and bears also apply to bobcats. Do not feed wildlife, secure your garbage cans and your birdfeeders, keep pet food inside, and seal up openings under buildings. It is illegal in the Commonwealth of Virginia to trap and relocate an animal to another area. Contact your local Animal Control with any bobcat problems.

A live female bobcat is on display at the Virginia Living Museum located in Newport News, Va. This cat was once a pet living in the Midwest and was raised by a wildlife rehabilitator in North Carolina. This bobcat is a solitary animal and prefers being alone even though there have been attempts to introduce her to other cats. Also a rehabilitated bobcat lives in the animal preserve at Maymont in Richmond, Va.

*Heather Keith Swanson, Loudoun County Extension Master Gardener*



## Book Review: *The Well-Gardened MIND--The Restorative Power of Nature* by Sue Stuart-Smith



*"When we sow a seed, we plant a narrative of future possibility. It is an action of hope. Not all the seeds we sow will germinate, but there is a sense of security that comes from knowing you have seeds in the ground."*

Since the start of the pandemic almost two years ago, there has been a dramatic resurgence of interest in gardening and reconnecting with nature. People have been drawn to the outdoors and the joy of planting and harvesting--be it on large plots of land or in containers on their patios. In this thoughtful and timely book, Sue Stuart-Smith explores the science behind how engaging in nature can improve our health and well-being.

As a psychotherapist, Stuart-Smith delves into the neuroscience and psychology of how working in a garden can be a "...vital place for cultivating the mind." As she succinctly writes: *"A garden gives you a protected physical space, which helps increase your sense of mental space, and it gives you quiet, so you can hear your own thoughts. The more you immerse yourself in working with your hands, the more free you are to internally sort things out and work them through."*

The book opens with the powerful example of how gardening helped restore her grandfather to both physical and mental health after imprisonment in Turkey during World War I. He escaped after several years, returning to England after a harrowing trek "...barely recognizable, weighing, as he did, little more than eighty pounds and having lost all of his hair." He suffered mentally as well, with "night terrors" and lack of sleep. Yet his "...long and healthy life...is attributed in our family mythology to the restorative effects of gardening and working the land."

From this mythology, Stuart-Smith goes on to effectively build the scientific case of gardening and connection with nature as effective healing forces in a variety of settings. Chapters follow the seasons, starting with spring and how gardening encourages new growth in individuals experiencing depression, reconnecting them with life-giving experiences. Later chapters focus on the role of gardening in helping people to age well by spending time in "creative play." Most enjoyable were her chapters on the significant impact that the addition of small green spaces, pocket gardens, and community gardens can have on reducing urban environmental stress and be a "radical solution" to reduce isolation by fostering community engagement. However, the book bogged down a bit for me in the chapter "*Roots*" and discussions of gardens in the hunter-gatherer era.

I don't want to leave you with the impression that this book is a dry scientific read. It is a book that gardeners will enjoy given the author's poetic writing as she shares her own gardening experiences. Along with her husband Tom Stuart-Smith, a noted garden designer, they have created the Barn Garden in Serge Hill, Hertfordshire. Delightful descriptions of the garden's creation and growth throughout the year are woven into the more scientific discussions in the

book, often as a way of bringing concepts alive for those of us who garden. Take a tour of this beautiful garden by visiting: [The Barn Garden--Sue Stuart-Smith \(suestuartsmith.com\)](http://suestuartsmith.com).

Her poem, *Garden and Growth*, captures the essence of the garden:

The garden represents a kind of timeline in our lives.

It has grown and changed alongside the growing up of children and family  
It started out with stone picking the fields,  
hand sowing the meadow, and planting embryonic hedges and trees.

In the beginning it was an idea of a garden  
And over time it has formed a place with a unique sense of being, like a baby becoming a person.  
While you look away from it, it silently gets on with growing  
and then surprises you when on looking back you see how far it has come on.  
The trees that were once saplings are suddenly strong enough to hold a hammock and create a place within a place to retreat to.

The garden is peopled by memories as well as by plants:  
The water fights, the Easter egg hunts, the long summer lunches, the games of partridges.  
Layers of memory are grafted onto the place in our minds.

Just as memories are resource, so the garden is a resource.  
It is a repository of beauty--something to turn to when tired and empty.  
It gives back much more than it takes.



As we enter the winter season and have more time to curl up with an enjoyable book, I highly recommend that this one be well toward the top of your reading list.

*Jan Lane, Loudoun County Extension Master Gardener*