

Photo by Brittany Ketcham

# **SOW YOU KNOW 2024**

**Goochland-Powhatan Master Gardener Association**Weekly Facebook Tips



www.gpmga.org

### Happy New Year!

2024 was the FOURTH year of

#### SOW YOU KNOW

weekly gardening tips written by Goochland Powhatan Master Gardeners for our gardening friends and neighbors. Please enjoy this Year in Review.



For information about these and other gardening subjects, please contact our help desk: gpmastergardener@gmail.com

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## Gardening Resolutions for 2024

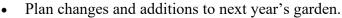
by Martie Parch and other Goochland-Powhatan Master Gardener Volunteers

1/1/2024 - Happy New Year!

When you're thinking about your resolutions for the coming new year, remember to consider your garden. What will you resolve to do? Anything different? I know I'll make some changes!

#### Here are some suggestions:

- Resolve to take time to appreciate your garden. We all should "stop and smell the roses" more often.
- Share the joy by inviting your friends over to delight in the sights and sounds of your garden!
- Keep a calendar of your gardening activities with notes and photos about seed sowing, planting, pruning, feeding, mulching, weeding, deadheading.



of color, texture, growth habit and needs. Review what worked and what didn't.

Consider the topography, the exposure, and the structures. When choosing plants, think

- Plan to transplant or remove plants if necessary. Right plant, right place.
- Look at the seed catalogs and try something new.
- Add more natives!
- Clean and organize your garden shed (the mess can build up over a busy gardening season!)
- Add compost to your soil to enhance the nutrients and keep weeds at bay.
- Turn your compost pile more often (maybe twice a month?)
- If you haven't had your soil tested in 3 years, now is a great time to do that so you can amend before planting in the spring.
- Check out the USDA website to find your plant hardiness zone.

#### There is a lot of interesting information!

https://www.usda.gov/about-usda/news/press-releases/2012/01/25/usda-unveils-new-planthardiness-zone-map



Photo by Kitty Williams

### Garden Entertainment

by Rebecca Crow, Master Gardener Volunteer

1/8/2024

During the cold winter months while I wait for the warmth of spring, I watch several gardening shows on YouTube. Although these shows are British, they provide inspiration and good information.

One of my favorites is Gardeners' World with famed host Monty Don. First airing in 1968, this is the longest running British gardening show. This show is interesting because Monty shows you how he gardens at his own home of over 20 years, Longmeadow. He and other hosts visit other homeowner's yards and famous public gardens. It also gives a very thorough and multi day review of the annual RHS Chelsea Flower Show.

Another neat weekly gardening show on YouTube is The Middle-Sized Garden. The host, Alexandra Campbell, interviews knowledgeable gardeners and landscapers in Great Britain. Alexandra focuses on landscapes that are bigger than a courtyard but smaller than an acre. She is known for giving out gardening ideas, tips and inspiration that "save you time, effort and money".

Let us know in the comments if there are gardening shows that you enjoy watching!

#### **Resources:**

Gardeners' World:

https://www.youtube.com/watch?v=BLp7YEHPMU0

#### The Middle Sized Garden:

https://www.youtube.com/c/themiddlesizedgardencouk



Alexandra Campbell, The Middle-Sized Garden Host

### A Winter Wonder Weed

by George Schuette, Master Gardener Volunteer

1/15/2024

As fall turns toward winter our gardens are visited by new seasonal annuals. A beautiful green groundcover recently sprang up – uninvited – in my landscape.

Groundcovers have important benefits: they prevent soil erosion, retard weed growth, and shade the soil to conserve moisture during the summer. But my hopes for this verdant groundcover were soon dashed. Turns out it is not technically a "ground cover." Yes, it does cover the ground, but it is Hairy bittercress (*Cardamine hirsute Linnaeus*) and recognized as a weed, unlike our Common Blue Violet (*Viola sororia*), Green-and-gold (*Chrysogonum virginianum*), or Common Wild Ginger (*Asarum cadadense*).

Hairy bittercress is a member of the mustard (Brassicaceae) family. A native of Eurasia, it has spread to every continent except Antarctica. In the fall, the plant forms a low-growing rosette like that of a dandelion. After flowering the following spring, it develops long upright narrow seedpods (siliques) on petioles. When disturbed, the seedpods split open "explosively," propelling seeds as far away as 15 feet (a mechanism botanists call *ballochory*: ballistic seed dispersal).



Figure 1: Late fall groundcover

A single plant may produce 600 to 1000 seeds -- never let it go to seed! It is easy to control in the fall and early spring by hand.

Despite its aggressive seeding, Hairy bittercress has redeeming qualities. Its flowers are an early spring food source for pollinators. Its leaves are tasty and nutritious. They add a mild peppery flavor to soups and salads, and are a source of antioxidants, calcium, magnesium, vitamin C, and beta-carotene. When confined to its proper place in your garden, Hairy bittercress might be worth a try. Just harvest its leaves and cut it back... *before* it goes "ballochory."



Figure 2: Hairy bittercress flower & siliques

#### References

https://www.canr.msu.edu/news/hairy\_bittercress\_a\_weed\_to\_watch\_out\_for

https://plants.ces.ncsu.edu/plants/cardamine-hirsuta/

https://extension.psu.edu/hairy-bittercress-a-winter-annual-weed-to-watch

https://blogs.cornell.edu/weedid/hairy-bittercress/

### **Beneficial Nematodes**

by Audrey Hirsch, Master Gardener Volunteer

1/22/2024

Beneficial nematodes are naturally occurring, microscopic organisms found in soils throughout the world. They parasitize insect pests that have soil-dwelling larval or pupal stages; however, they have been known to parasitize above ground stages of certain pests. Their wide range of prey makes them exceptional for general pest control in chemical-free growing environments.

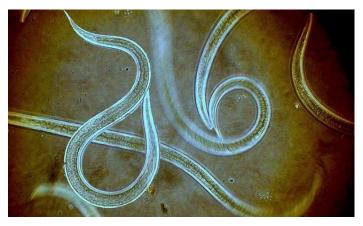
Beneficial nematodes can be used in gardens, lawns, orchards, vineyards, greenhouses, row crops, pastures and more. Target insects include weevils, borers, white grubs, cutworms, and webworms.

They do not affect humans, animals, or plants. They are completely compatible with beneficial insects such as ladybugs, lacewings and praying mantids, and do not harm earthworms.

The life cycle of beneficial nematodes consists of eggs, four larval stages and adults. The third larval stage is the infective form of the nematode. They search out susceptible hosts, primarily insect larvae, by detecting the carbon dioxide the host excretes. Juvenile nematodes then enter the insect hosts, carrying within them bacteria that will usually kill the host in 24 to 48 hours.

Nematodes stay viable for months and can tolerate various insecticides, herbicides, and fertilizers.

While beneficial nematodes are a natural and effective for getting rid of target pests, they will only work for pests in the soil. They will not harm pests that live and feed on plant leaves (unless those pests have a soil-dwelling stage in their life cycle).



Nematode (Steinernema scapterisci), entomopathogen of scarab larvae. Photo by David Cappaert

For more information about Beneficial Nematodes:

https://homegarden.cahnr.uconn.edu/factsheets/beneficial-nematodes/

https://extension.umd.edu/resource/beneficial-nematodes

### **Root-knot Nematodes**

by Audrey Hirsch, Master Gardener Volunteer

1/29/2024

Root-knot nematodes attack a wide variety of plants and can become serious pests in the home garden. These microscopic roundworms live in the soil and on plant roots and injure plants by feeding on root cells with their needle-like mouthparts (stylets).

In response to the attack, plants will form large, grotesque galls throughout their root systems. Below ground, the root-knot nematodes feed on the enlarged roots. Above the ground, the plant wilts and eventually dies.

Plant-parasitic nematodes like the root-knot nematode are estimated to cause billions in damage to root crops every year.

Though all root vegetables can host root-knot nematodes, carrots are particularly sensitive to them. Celery, lettuce, onions, and parsnips can also suffer significant losses due to root-knot nematodes. Some root crops such as rutabagas, radishes, and beets may tolerate a light infestation while maintaining the root-knot nematode population. When the gardener plants carrots, parsnips and other sensitive root crops, the nematodes strike, and the crop will be severely affected.

Good cultural management of the soil can help control infestations. This includes:

- \* rotating crops,
- planting cover crops and grasses,
- using French Marigolds and other trap crops,
- planting resistant varieties of root vegetables,
- allowing plots to remain fallow for a season (with repeated tilling during summer months), solarizing the soil.
- \* removing of plants post-harvest,
- working the soil several times throughout the winter, and increasing organic matter in the soil. Planting non-host crops like corn, wheat, barley, oats, or sorghum, along with cover crops like sudangrass, tall fescue or rye may also help. Research suggests that for every year a non-host crop is planted; the population density of northern root-knot nematodes is reduced by 50-90 percent.

#### For more information about harmful nematodes:

https://hgic.clemson.edu/factsheet/root-knot-nematodes-in-the-vegetable-garden/https://onlineentomology.ifas.ufl.edu/about/entomology-articles/sharing-the-planet-with-good-and-badnematodes/#:~:text=Root%2DKnot%20Nematodes,and%20feed%20from%20within%20rootshttps://www.canr.msu.edu/news/when it comes to carrots want not root knot

**Photo:** extension.umd.edu/resource/root-knot-nematodes-vegetables



### **Plant Fasciation**

by Audrey Hirsch, Master Gardener Volunteer

2/5/2024

Fasciation is an odd growth pattern which crops up occasionally in plants, causing malformed stems, flowers, roots, or fruit. It may appear that multiple plant stalks have merged to form one distorted structure. Plants may appear to have flattened, elongated or misshapen flower heads along with numerous flowers. Fasciation may also cause plants to increase in weight and volume.

Although fasciation is uncommon, it has been recorded in over one hundred vascular plant families.

Causes of fasciation are believed to be a random genetic mutation or disruption, a bacterium (*Rhodococcus fascians*), a viral infection, damage to the plants from frost, insects or animals, chemical injury, even mechanical injury from gardening.

While genetic fasciation is not contagious, infectious fasciation can be spread from infected plants to others from contact with wounds on infected plants, and from water that carries the bacteria to other plants.

Some flowers are bred for fasciation, such as some varieties of Celosia, called cockscomb.

If you encounter fasciation in plants, prune away the affected parts. There is no treatment for fasciation. Bacterial or viral fasciation can be controlled by not planting fasciated plants and disposing of fasciated material.



#### For more information about plant fasciation:

https://www.canr.msu.edu/news/plants\_with\_abnormal\_growths\_the\_interesting\_phenomenon\_of\_plant\_fasciation

https://hgic.clemson.edu/what-is-it-wednesday-fasciation/

❖ Image: Wisconsin Horticulture Division of Extension https://hort.extension.wisc.edu/articles/fascinating-fasciation/

### 'Tis The Season to Test Your Soil

by Andrew Cushing, Master Gardener Volunteer

2/12/2024

Did you resolve to start a garden? Or do you just want greener and healthier plants or lawn? Soil testing will provide valuable information to help. If it's been three or more year since your soil was tested, winter is a good time to do it.

Soil testing is easy and inexpensive.

A soil test will indicate the pH (acidity/alkalinity) of the soil as well as its nutrient composition and deficiencies. Adding amendments now allows time for nutrients to become active and available to plants before the late winter or spring planting season begins.

For a small additional fee, you can also determine the amount of organic material in your soil.

If the organic content is found to be low, winter is also a good time to add compost. During the cool months, compost will bind with nutrients, increasing their availability to plants, while enhancing beneficial microbial activity. In the case of phosphates, which can become insoluble in certain poor soils, this can be particularly useful.

When adding nutrients to your soil, follow the instructions in the test report, and on the label of the product you intend to use. Work nutrients and compost into the soil as best you can either through cultivation or aeration.

Soil test kits are available at your local Extension office. A routine test costs \$10.00 in-state, and \$16 for an out of state sample.

Goochland County Extension Office: https://goochland.ext.vt.edu/

Powhatan County Extension Office: <a href="https://powhatan.ext.vt.edu/">https://powhatan.ext.vt.edu/</a>

Virginia Tech Soil Testing Lab: https://www.soiltest.vt.edu/



Photo: SOILTEST.VT.EDU / Virginia Tech Soil Testing Lab

## Spring Bulbs are Blooming! Now What?

by Connie Sorrell, Master Gardener Volunteer

2/19/2024

What a joy it is to see the first crocus and daffodil blooms in February! Take good care of spring bulbs and they'll rebloom and spread year after year.

Spring blooming bulbs like crocus, muscari, and scilla spread by reseeding as well as from bulb offsets. To encourage naturalization, don't pick the flowers so the seeds can ripen. Allium also can reseed; remove the flower heads if you don't want them to naturalize.

As the blooms fade on perennial bulbs, the leaves continue to grow and store food for about six weeks – then the bulbs go dormant. Resist the urge to remove the foliage too soon or your bulbs may not bloom again, or the flowers may be much smaller. Even some tulips can rebloom if you cut the faded flowers and allow the leaves to ripen.

Interplant ferns, ground covers, early growing perennials, or summer annuals to hide the dying foliage.

If your perennial bulbs don't bloom in the spring or even come up at all, several things could be the cause. Daffodils that are planted too shallowly may bloom only sparingly. If their leaves are cut off too soon, they may not store enough food to bloom again. Heavy soil may hold too much water, causing the bulbs to rot. Bulbs that are overwatered during the summer (when they are

dormant) might also rot.

When you are ready to thin out your bulbs, wait until the foliage has died back, then dig them. They can be replanted immediately, or they can be stored in a dry, cool area for planting in the fall. Discard diseased bulbs.



Image by Connie Sorrell, daffodils in her garden

#### Resources

"The Gardeners Guide to Bulbs" by Kathy Brown https://hgic.clemson.edu/caring-for-spring-blooming-bulbs/

### American Sycamore Tree (Platanus occidentalis)

by Nancy Stephenson, Master Gardener Volunteer

2/26/2024

The American Sycamore Tree is a magnificent native shade tree found in Canada and central/eastern United States. One of our largest native trees, it can grow up to 100 feet tall with a crown spread of 65-80 feet, and a single truck or many. Although it grows fast, it is strong and long-lived. Its thin bark provides great winter interest, as it sheds to reveal a white layer on the

upper trunk and branches.

Some common names are: American plane tree, buttonwood, and buttonball tree (maybe from the dry, hairy, one-inch balls that hang in groups of two to four). Native Americans made canoes from the wood, and it is now used for furniture and chopping blocks.

This tree is *monoecious*, with both male and female flowers. Flowers appear in April through May and earlier in southern areas. Fruit ripens in the fall and hangs on the tree during the winter months. In the early spring, seeds are dispersed to germinate in new areas. If you collect the seeds, soak them in warm water for 24 hours, then keep below 32 degrees for several months (stratification) before planting. A sycamore will flower in six to seven years and produce seeds in ten. Purple finches, juncos, American goldfinches, and Carolina chickadees enjoy these seeds.



Sycamores grow around creeks and rivers, often leaning out over rivers at odd angles. They prefer full sun, moist and loamy soils with good drainage. They can tolerate weeks of flooding when dormant but will die if flooding lasts long during the growing season. They are adaptable to drought and pollutants. Anthracnose, a fungal disease, can affect leaf production and is usually cosmetic in nature.

https://plants.ces.ncsu.edu https://nfs.unl.edu https://srs.fs.usda.gov https://plants.usda.gov

❖ Image by Nancy Stephenson, Sycamore tree in her flood plain beside the James River

### **Dutchman's Breeches**

by Nancy Stephenson, Master Gardener Volunteer

3/4/2024

Dutchman's Breeches (*Dicentra cucullaria* (*L.*) *Bernh.*) is a native herbaceous perennial wildflower in the Fumariaceae family, and a close relative of the Bleeding-Heart. A relative of poppies, it's commonly called "Little Blue Staggers" because it contains a narcotic and toxic substance that can cause cattle or horses to stagger drunkenly when they graze on it.

These delicate plants bloom in the early spring, usually March through April before leaves began to appear on the trees. Their blooms are white or pink and, sadly, will wilt quickly when picked. Each bloom has four petals, two of which are fused together to give the appearance of breeches or pantaloons. These breeches actually protect the stamen and pollen from the elements. Their green leaves are soft, well divided and fern like in appearance. They are typically found in woodland forests and grow well in moist, well-drained soils that contain organic matter.



Image by Nancy Stephenson

These plants sprout from underground tubers. Their rice-shaped seeds have elaiosomes, small oil-containing appendages which attract ants. Ants collect the seeds and carry them underground. After the ants eat the elaiosomes, the discarded seeds remain underground until they germinate.

Bumblebees are attracted to this perennial as a very early source of nectar. They collect the nectar as they pollinate. The queen bumblebee is the only bee that has a long enough tongue to be able to reach past the spurs to sip on the nectar. The other bumbles will actually chew holes in the spurs to reach the nectar.

These hardy plants are deer resistant, non-invasive, and non-aggressive. They are native to North America, Eastern U.S., and Canada. They are hardy to zones 3-8. I am so very fortunate to be able to enjoy them in my woodland area.

#### **Sources:**

U.S. Forest Service <a href="https://www.fs.usda.gov/wildflowers/plant-of-the-week/dicentra">https://www.fs.usda.gov/wildflowers/plant-of-the-week/dicentra</a> cucullaria.shtml

National Park Service <a href="https://www.nps.gov/shen/learn/nature/dutchmans\_breeches.htm">https://www.nps.gov/shen/learn/nature/dutchmans\_breeches.htm</a>
Duke Farms <a href="https://www.dukefarms.org/education/forgotten-flowers-dutchmans-breeches/">https://www.dukefarms.org/education/forgotten-flowers-dutchmans-breeches/</a>
Cornell University Growing Guide

http://www.gardening.cornell.edu/homegardening/scene8548.html

### **Woodland Phlox**

by Nancy Stephenson, Master Gardener Volunteer 3/11/2024

Woodland Phlox (*Phlox divaricata*) is native to Virginia and much of eastern North American, from Quebec south to Florida and west to the Rockies. It grows on the forest floors throughout the mountains to the Piedmont and hardy in zones 3-8. Phlox, from the Greek word for "flame," describes the thick mounds of sweet-smelling bluish or light lavender flowers that usually appear in early April. Each flower has five flat petals.

An herbaceous perennial, Woodland Phlox grows well in moist, well-drained soils that contain organic matter. It prefers shady woodland and stream banks. The common names include Blue Phlox, Louisiana Phlox, Wild Blue Phlox and Wild Sweet William. Woodland Phlox is taller than the sun loving creeping Phlox.



Image by Nancy Stephenson

These plants are not invasive and spread slowly from a very shallow root system. The root system produces stolons which in turn produce non-flowering shoots to form a mat of foliage. Their two-inches leaves grow on opposite sides of a hairy, sticky stem. They spread either from seeds or when a stem falls to the ground and takes root from a leaf node. After the seeds are produced and scattered, the foliage will continue to produce energy for the next year's blooms.

The fragrant flowers attract numerous insects including bumble bees, moths, flies, butterflies, and even hummingbirds. When all other food sources are scarce, these early blooming plants are a beneficial food source to insects, birds, rabbits, deer and livestock.

The flowers are pollinated by butterflies, especially swallowtails, skippers, hummingbirds, sphinx moths and bumblebees whose long tongues can extend deep into the base of the flower's long tube to reach the nectar. As they feed, they brush against the stamens and collect pollen which they carry one bloom to the next, distributing the pollen as they go.

#### **Resources:**

https://hort.extension.wisc.edu/articles/woodland-phlox-phlox-divaricata/ https://www.lakeforest.edu/academics/majors-and-minors/environmental-studies/phlox-

divaricata-(woodland-phlox)-polemoniaceae

https://extension.unl.edu/statewide/dodge/woodland-phlox/

https://plants.ces.ncsu.edu/plants/phlox-divaricata/

## Geraniums and Japanese Beetles

by Karen Woodring, Master Gardener Volunteer

3/18/2024

A few years ago, I became frustrated with Japanese beetles destroying my ornamentals plants. I've always grown a few zonal geraniums (*Pelargonium x hortorum*) in containers, and I noticed Japanese Beetles would be literally 'hanging out' on them.

Japanese Beetles are attracted to the 'geranium' smell, I learned. They chew on the flowers rich in quisqualic acid and fall into a paralyzed state. They are then quite easy to remove by hand. If you don't get around to collect them, the birds often will.



Image by Karen Woodring

Now I grow many varieties of Zonal Geranium Maverick Series by seed (I start them indoors in late January). The 'J beets' prefer white and pink shades to coral, fuchsia and red (although I continue to grow all colors). If you haven't grown zonal geraniums before, I highly encourage you to do so. They are very easy to germinate. I will harden them off in my garage before setting them outside in June.

Position them around the sunny yard and garden as 'trap plants' both in-ground and in containers and enjoy the pops of color and pesticide-free way to lessen damage to your other plants.

#### **Resources:**

May 17, 2016, Laidback Gardener

 $\underline{https://www.usda.gov/media/blog/2011/02/15/japanese-beetles-send-me-no-flowers-least-not-geraniums}$ 

### Last Predicted Frost Date & Planting Guide

by Rebecca Crow, Master Gardener Volunteer

3/25/2024

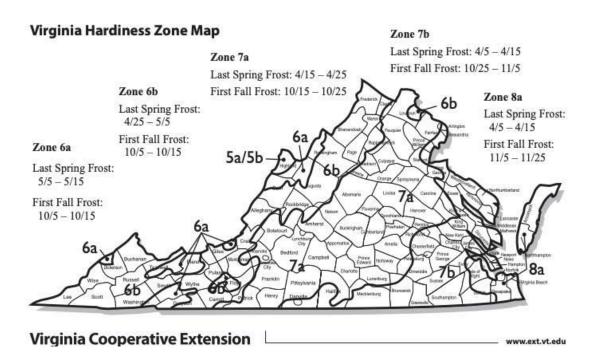
Weather in Virginia can be fickle, especially in the spring. In Powhatan, I have seen snow and below freezing temperatures in early April!

Setting out vegetables before the last frost date would probably kill the young plants. So, when can the home gardener safely start planting?

Let Virginia Tech's Extension Office take the guess work out of deciding when to plant your vegetables. At the following link, the Extension Office provides a document showing the cold hardiness zone in your area and the last predicted frost date.

This practical document contains charts with the recommended planting dates for a multitude of vegetables by specific hardiness zone. And if that weren't enough, you can also find how much of each you should plant depending on the size of your family, your garden, and the time available to gardening among other things.

https://www.pubs.ext.vt.edu/content/dam/pubs ext vt edu/426/426-331/SPES-170.pdf



### **Trilliums**

by Nancy Stephenson, Master Gardener Volunteer

4/1/2024

Trilliums, commonly known as birthwort, Indian balm, or wood lily, are found in the southeastern Appalachian Mountains and Piedmont areas. Members of the Liliaceae (lily) family, they grow well in moist, well-drained woodland soil that is rich in humus.

Of the 43 known species of trilliums, 38 are found in North America. All have three petals and three sepals, but they come in many shapes and colors. The leaves, actually bracts, can be solid green or mottled. An herbaceous perennial, they are hardy in zones 5-8 and will bloom in late April or early June.

Trilliums are categorized as pedicellate and sessile, based on how the flower blooms on the plant. Flowers of the pedicellate type are set up on a pedicel (small stalk) above the bracts, while sessile flowers arise directly from the bracts.

Some trilliums contain sapogenins, a chemical compound that has been used medicinally over the years in astringents, coagulants, expectorants, and stimulants. The roots and berries are poisonous to humans and pets.

Trilliums spread by rhizomes and do not transplant easily. Although long-lived, they take up to 10 years to bloom. Like Dutchman's Breeches in my March 4 GPMGA Facebook post, Trilliums depend on ants to help spread their seeds. Elaiosomes, small structures attached to the seed, attract ants, who feed them to their larvae. The discarded seeds will then germinate within two years. For best results, acquire dormant bulbs in late summer, and plant them in loamy soil in a shady area, two to three inches deep.



Photo by Nancy Stephenson

#### Resources

https://plants.ces.ncsu.edu/plants/trillium/

https://www.fs.usda.gov/wildflowers/beauty/trilliums/

## Is a Potager Garden a Fancy Name for a Vegetable Garden?

by Michelle Kaufman, Master Gardener Volunteer 4/8/2024

Well, yes and no. Yes, it's a garden with vegetables, but it also includes herbs, flowers, and fruits. Potager gardens have also been referred to as kitchen gardens because they are usually located near the kitchen to make it easy to pick fresh ingredients while preparing meals.

The origin of potager, (pronounced *pow-tuh-JAY*) is from the French for soup garden. The idea was the garden contained all the fresh ingredients needed to make a soup. For centuries, these gardens were found at country homes and historic estates. Today, potager gardens are spreading around the globe as more people begin to grow food and flowers they love.



Photo by Michelle Kaufman

A highly functional and artistically designed potager garden is within reach whether you're new to gardening or a seasoned pro.

#### To begin:

- 1. Select a location that gets plenty of sunlight, has access to water, and is easily maintainable.
- 2. Use containers/pots, raised beds, a small plot of land, or a combination of all three.
- 3. Think about what you regularly use and eat when determining what to grow.
- 4. Consider the benefits of companion planting to aid in plant growth, protect from non-beneficial pests, and control weeds.
- 5. Be creative when designing your garden layout to make it both visually pleasing and functional. Defined pathways make for easy access. Garden features such as bird baths, trellises, obelisks, or a small seating space can be used as focal points to create interest.
- 6. And lastly, traditional potager gardens produce throughout the year so consider succession planting to enjoy the "fruits of your labor" year-round.

#### **Resources:**

Washington State University – Creating a Potager Garden
<a href="https://s3.wp.wsu.edu/uploads/sites/2083/2022/12/12-4-Creating-a-Potager-Garden.pdf">https://s3.wp.wsu.edu/uploads/sites/2083/2022/12/12-4-Creating-a-Potager-Garden.pdf</a>
Colorado State University – Design a Potager
<a href="https://arapahoe.extension.colostate.edu/2023/07/02/design-a-potager-kitchen-garden/">https://arapahoe.extension.colostate.edu/2023/07/02/design-a-potager-kitchen-garden/</a>
University of California Agriculture and Natural Resources- The Potager
<a href="https://ucanr.edu/blogs/dirt/index.cfm?tagname=potager">https://ucanr.edu/blogs/dirt/index.cfm?tagname=potager</a>

### **Growing Re-blooming Bearded Irises**

by Dennis Kassner, Master Gardener 4/15/2024

About 280 iris species exist worldwide with 28 species native to the United States. Re-blooming irises are the easiest irises to grow in your garden.

Bearded irises (*Iris germanica*) prefer a sunny (6-8 hours/day) location and 6" of well-drained soil with a pH of 6.5 - 7.0. Well-drained soil minimizes bacterial soft rot. A soil test for pH is recommended, as the correct pH enables a plant to efficiently absorb nutrients from the soil.

Space plants 18" apart. Every 3-4 years, in July to early September when soil is warm enough and there is time to develop anchoring roots, divide large clumps and transplant. Cut the clump into single pieces with a sharp knife, remove all clinging dirt and cut off the top half of each fan at a 45-degree angle. Submerge the cutting in a chlorine solution of 2.8 oz. chlorine bleach to a gallon of water for 10 minutes. Allow the wet rhizomes to completely dry in a shaded area.

Water deeply during dry periods to ensure summer and fall re-blooming flowers. If you use the following highly recommended Planting Amendment you won't need to fertilize. Otherwise, apply an Espoma product in the spring and fall according to the package directions.

#### **Planting Amendment**

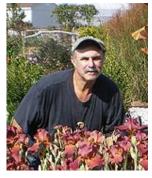
In a 6 cubic foot wheelbarrow mix:

- 2 cubic feet existing garden soil,
- 2 cubic feet leaf compost ("Leaf Grow"- about 1 bag),
- a 5- gallon bucket of mushroom compost
- 2 quarts Espoma Holly Tone OR Plant Tone OR Garden Tone
- 2 quarts rock phosphate,
- 1 cup greensand,
- 6 pounds calcitic lime and
- Course builder's sand giving a gritty feel to the touch
- CAUTION: DO NOT use "play sand" which tends to compact the soil.

Thanks to Mike Lockatell - Horticulturalist & Hybridizer for this information. Visit his trial plantings at J. Sargeant Reynolds Community College in Goochland Court House. More information is available on the internet. Search "How to Grow Irises."

https://rootsandblooms.us/wordpress/mikes-bio/





Mike Lockatell

## Consider a Bug Snug

by Laura Lemmon, Master Gardener Volunteer

4/22/2022

Cleaning up the garden? Consider building a bug snug to benefit insects, birds, and small mammals.

Throughout the year, insects seek places to overwinter or hide. Many are already nestled in native plant stems. Birds and small mammals look for shelter and for food. Think of a bug snug as a neater and more decorative way to make a brush pile for them. Perhaps, one that's even nicelooking enough to charm that picky neighbor.

Assembling the bug snug is easy. First, build a tripod frame. Determine the site for the bug snug and place three sturdy branches or bamboo poles, four to six feet long, to make the tripod. Connect the three sticks with a zip tie or twine (or both) at the top. Gently press or pound the ends of the sticks in the ground for stability.

Second, the fun part. Collect plant materials from the garden or tree line: sticks, plant stems (including seed pods) and leaves, evergreen branches, pine straw, oak leaves, moss, and pinecones are all good.



Photo by Laura Lemmon

Third, fill the frame with your collection. In this example, items were placed from the bottom up, adding more material as the snug settled. Only Virginia native plants, flower stems and seed pods were used in case they germinated. Avoid invasive plants and their seeds for the same reason. This initial build used two trugs full of found items and sticks. (That's a lot of plant material.) With the addition of a hedgehog, the bug snug adds interest in a "wild" portion of the property.

https://www.gardenista.com/posts/bug-snug-easy-free-diy-project-garden-omved-gardens/ https://extension.umn.edu/yard-and-garden-news/snug-bug-pile-leaves-how-insects-spend-winter

### **Pollinator Gardens**

by Brittany Ketcham. Master Gardener Volunteer 4/29/2024

Want to attract pollinators? Here's how! But first, why do we want to attract pollinators?

Well, they pollinate the plants that create the food we eat while also creating genetic diversity and without them, we could not live!

So back to how! You'll want to plant native plants of all sizes and color, friendly non-natives are

fine as well but stay away from any invasives. You'll want to minimize or eradicate pesticide use, provide a water source, (bird bath, creek etc.), pick a location with mostly sun, provide basking areas, and create a shelter for pollinators such as bee boxes, shrubs, and bat boxes.

Pick a spot that has good drainage, get a soil test done, remove any invasive species that might be present, plant and enjoy! The spot can be a container garden, a small backyard or a larger spot, anything you can handle.



Photo by Brittany Ketcham

Some native plants that pollinators love:

- Columbine (Aquilegia canadensi)
- Milkweeds (Asclepias spp)
- Purple coneflower (Echinacea purpurea)
- Asters (Symphyotrichum cordifolium)
- Native Dogwoods (Cornuss spp)
- Eastern Redbud (Cercis canadensis)

Visit <a href="https://www.hopeftg.org/natives">https://www.hopeftg.org/natives</a> to learn more about Virginia natives and to find alternatives to invasive plants.

## No 'Thanks' Required

by Karen Woodring, Master Gardener Volunteer 5/6/2024

As we draw closer to Mother's Day, it is 'plant gifting' time all over. I grew up being told by my grandmothers, great-aunts and various other venerable Southern gardeners to never say 'thank you' for plants that someone passed along to you.

The superstition states that the plant will not thrive or could possibly die if you have thanked the giver. Instead, thank someone for: the dirt, the pot, or the box that it came in.

If you are the giver and the recipient isn't aware of this old saying then you should probably provide context too!

So what is YOUR favorite 'Pass Along' plant?



Image by Karen Woodring

## Mayapple

by Nancy Stephenson, Master Gardener Volunteer

5/13/2024

Mayapples (*Podophyllum peltatum L.*) are commonly known as Indian Apples, Devil's Apple, Wild Mandrakes, Duck's Foot, Pomme De Mai, Raccoon Berry, Umbrella Leaf, Hog Apple, Podophylle Pelt and Wild Lemon. The name *Podophyllum*, comes from two Greek words: *pous* or *podos* which means foot, and *phyllon* which means leaf. *Peltatum* refers to the shield-shape of the leaves.

Members of the *Berberidacease* or Barberry family, these herbaceous perennials are found in shady or partially shaded woodlands in zones 3-8: eastern North America south to Texas. The plants prefer moist woodlands, rich organic soil and spots along riverbeds.

In March, the furled leaves of mayapples emerge from the forest floor. They grow to 12 to 18" tall then the twin leaves unfurl into little green umbrellas. A fragrant white or rose-colored

flower, somewhat like an apple blossom, blooms in May, hidden under the protective umbrella leaves. Flowers have 6-9 petals with many stamens, and attract bumblebees and other long-tongued bees as pollinators.

Mayapples are deer and rabbit resistant. All parts of the plants are poisonous except the ripe fruit. The large, lemon shaped berries are used in jams and jellies. Native Americans often used these plants for medicines and insecticide. Remember: everything but the fruit is **highly toxic**.

Mayapples spread by rhizomes, but they can self-seed if conditions are right. Box turtles will sometimes eat the fruit and disperse the seeds that way. When the plant is dormant it can be propagated by root divisions. Seeds can also be collected but require several months of cold weather to germinate. Seedlings take up to 4-5 years to mature.

Always wear protective gloves when handling mayapples.



Image by Nancy Stephenson

#### **Resources:**

https://plants.ces.ncsu.edu/plants/podophyllum-peltatum/ https://www.wildflower.org/plants/result.php?id\_plant=pope https://hort.extension.wisc.edu/articles/mayapple-podophyllum-peltatum/

## Native Plants and Suppliers

by Rebecca Crutchfield Crow, Master Gardener 5/20/2024

The native plant movement is BIG now, thanks in part to Dr. Doug Tallamy's research and his many publications. An American entomologist, ecologist, and conservationist, Dr. Tallamy is a professor in the Department of Entomology and Wildlife Ecology at the University of Delaware.

According to Dr. Tallamy "70% of the plants in your yard should be native species in order to support bird populations."

Recently I watched *Plant This, Not That*, a recorded garden talk by the Virginia Beach Master Gardeners (VBMG), where this statistic from Dr. Tallamy was shown. The VBMG presenter noted that the 70% refers to BIOMASS and not to the number of individual plants. (see PNAS research article by Desirée L. Narango, Douglas W. Tallamy, and Peter P. Marra where this is referenced)

This makes me feel better about the non-native shrubs we have in our yard, since we also have loads of mature native oak trees. In other words, it would take a lot of non-native plants to equal the biomass of one mature oak tree.

**So, where do you buy native plants?** There are many sources online, but it can sometimes be hard to tell where the native plants on sale actually belong. (For example, a plant that's native to Michigan, California, or Florida may not necessarily be native to Virginia.) VBMG suggests going to The Virginia Native Plant Society's native plant nursery list for good information.

Plant This, Not That and other valuable talks are available online as well.

#### References:

VNPS native plant nursery list: https://vnps.org/native-plant-nursery-list/

VBMG 2024 Gardening

Talks: https://www.vbmg.org/gardening-talks-recordings.html

"Nonnative plants reduce population growth of an insectivorous bird," article in PNAS (Proceedings of the National Academy of Sciences): <a href="https://www.pnas.org/doi/10.1073/pnas.1809259115">https://www.pnas.org/doi/10.1073/pnas.1809259115</a>



## **Jumping Worms**

by George Schutte, Master Gardener Volunteer 5/27/2024

While removing leaf litter in my yard recently, I saw an earthworm unlike any I'd seen before. It thrashed like a snake, jumped off the ground, and shed its tail when I tried to pick it up. The remainder escaped beneath the leaves.

It was an invasive "Jumping Worm" (*Amynthas spp.*). The worms arrived in the 19th century from eastern Asia, probably in horticultural or agricultural products (1), and have spread in the Midwest and East Coast. While other non-native earthworms in our topsoil, like *Lumbricus terrestris*, have naturalized peacefully over time, this one poses a threat. (2)

Jumping worms feed voraciously on leaf litter and organic material in the upper portion of the soil "A" layer. They leave behind loose and granular soil that looks like coffee grounds and is highly susceptible to erosion. This depleted soil lacks organic nutrients and stresses plants and biota (bacteria, fungi, etc.). Wildlife dependent on these plants for their habitat are at greater risk of predation.

Jumping worms are asexual and grow to adulthood in 60 days. Doubling their population over a long summer is possible. Hard frosts kill adult worms, but their eggs survive in protective cocoons over winter and hatch when springtime soil temperatures warm above 50 oF.

Test your soil for Jumping
Worms with a mustard seed
solution (3). Besides their
physical reaction to the solution,
Jumping Worms have a
light/white-colored clitellum, in
contrast to the reddish-brown of
European earthworms. Captured
Jumping Worms
should always be bagged and
thrown away in a landfill. Never
return them to the environment.



Jumping Worm (N. Knauss, Penn State Ext.)



Common Earthworm, <u>Lumbricus</u> terrestris (J. Berger, Bugwood.org)

The only control is preventing their spread (4).

The Asian Jumping Worm Invasion - <a href="https://blogs.ext.vt.edu/ag-pest-advisory/the-asian-jumping-worm-invasion-exploring-its-range-and-environmental-consequences-in-virginia/">https://blogs.ext.vt.edu/ag-pest-advisory/the-asian-jumping-worm-invasion-exploring-its-range-and-environmental-consequences-in-virginia/</a>
Jumping Worms (Amynthas spp.) -

https://www.pubs.ext.vt.edu/content/pubs\_ext\_vt\_edu/en/ENTO-427/ENTO-427.html Invasive Jumping Worms - https://extension.umd.edu/resource/invasive-jumping-worms/Jumping Worms - https://monroe.cce.cornell.edu/resources/asian-worms

## A Holistic Approach to Gardening

by Judith Kohnen, Master Gardener Volunteer

6/3/2024

All living beings are interconnected. Supporting the health and well-being of the whole includes not only the physical, but also the mental, emotional, and spiritual qualities that encompass our existence. A holistic approach to gardening means becoming aware of our inherent connection with nature. In doing so, we can foster harmony and balance that will not only benefit ourselves, but the life of our planet as well.

Think of a farm or garden as being made up of many different organs and systems (like your body). Each has specific needs. By following more natural, ecological, and ethical approaches toward farming and gardening, such as permaculture, we can create nutritious, healthier nourishment for ourselves.

I challenge you to recognize the unique personality and identity of your garden and/or plant. Experience nature's spirit. Forming a positive and caring relationship with your plants can really make a difference.

Be attentive – be mindful that your garden or plant is more than just a physical thing in your yard or container.

Practice sustainability— test your soil, compost, plant native species, crop rotate, mulch, choose organic/natural alternatives for pest control and soil maintenance.

Support biodiversity and promote a balanced ecosystem – diversity in plant species, insects, birds, and beneficial organisms.

Say positive and caring things to your plant(s) –they have complex sensory systems; your words and actions matter.



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#### **Resources:**

Utah State University Permaculture Extension - <a href="https://extension.usu.edu/permaculture/">https://extension.usu.edu/permaculture/</a> Horticultural Therapy Institute <a href="https://www.htinstitute.org">https://www.htinstitute.org</a> Biodynamic Association - <a href="https://www.biodynamics.com">https://www.biodynamics.com</a>

## Vermicomposting

by Kelly Moore, Master Gardener Volunteer

6/10/2024

Vermicomposting is an aerobic process by which worms (specifically red wigglers/*Eisenia fetida*) convert organic waste materials into a valuable fertilizer. The worms require only moisture, your kitchen scraps and your wastepaper to create a humus-like medium full of microbes and nutrients in a form readily available to your plants.

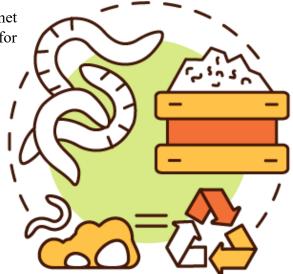
The home for your composting worms can be as simple as a dark plastic bin under your sink to a pre-made system purchased from a retailer. The key conditions to caring for a worm bin are

- neutral pH
- 80% moisture
- 55-77 degree Fahrenheit temperature and
- oxygen

If you can give them a dark, quiet home with these needs met your red wigglers will create fertilizer (and more worms!) for you for years.

Any form of composting is good for our environment and vermicomposting is no different. It decreases the waste we send to landfills, reduces energy spent on removal and transport of trash and decreases landfill methane production. It's easier than a large, outdoor compost pile because you don't have to turn it; it makes a smaller, more manageable amount and you don't have to worry with a green to brown ratio. It's also quicker than traditional compost piles and you can use it year round.

Not only can worm composting create free, nutrient rich fertilizer for you and your plants, it's fun and educational!



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For information on creating your own bin at home check out:

https://composting.ces.ncsu.edu/

https://extension.usu.edu/yardandgarden/research/vermicomposting

### **Cutleaf Toothwort**

by Nancy Stephenson, Master Gardener Volunteer

6/17/2024

Cutleaf toothwort (*Brassicaceae Cardamine concatenata*) is an herbaceous perennial in the mustard family. The plant's common name refers to tooth-like projections on the underground stems. Other common names include pepper-root and crow's toes. Native from eastern North American to west of the Dakotas and Texas, it thrives in zones 3-8.

The three-lobed leaves are deeply cut and toothed, appearing to have five parts. It typically grows in masses, with 3"–12" tall stems. The fragrant white or pink flowers bloom for two weeks in April. Each ½"-¾" bell-shaped flower has four petals arranged in the shape of a cross. Bees, bee flies and early flying butterflies are attracted to the blooms.

Cutleaf toothwort spreads by shallow rhizomes in the soil, which spread parallel to the surface of the soil. They can be propagated from seeds or division when the plant is dormant. Erect, 1½"-long fruits each contain up to a dozen, flat, brown seeds. Collected seeds lose viability in storage and should be sown immediately. Seeds require warm weather, followed by the coldness of winter to germinate. It takes three to four years for seedlings to flower.

According to the University of Wisconsin Division of Extension, the leaves and rhizomes are edible and contain vitamin C, and the plant has been used as a tonic for stomach, an expectorant and antiscorbutic. Use caution when consuming wild plants.

This is a great woodland plant that grows in moist forest and woods with deep leaf litter and organic matter.



Image by Nancy Stephenson

#### Resources

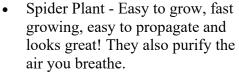
https://hort.extension.wisc.edu/articles/cutleaf-toothwort-cardamine-concatenata/https://www.wildflower.org/plants/result.php?id\_plant=caco26

### Pet-Safe Houseplants

by Brittany Ketcham, Master Gardener Volunteer

6/24/2024

Houseplants liven up our living spaces and bring joy to our lives, but not every houseplant you buy is safe for the other joy in our lives, our pets. Some houseplants can cause nausea, irritation, vomiting, diarrhea, seizures or worse. Most greenhouses do a great job of labeling these plants, but some don't. Do not worry! Some pet safe options are below:





- Parlor Palm Tall, large and fluffy, a great centerpiece in the living room or bedroom. Slow growers, so buy the size you'd want.
- Polka Dot Plant A colorful alternative to green.
- Orchids Pet safe but harder to grow and care for. They require warmth, humidity, frequent waterings, and indirect sunlight.
- Staghorn Ferns Gorgeous variety gets large if you let it! They can be potted, mounted or hung on the wall.
- Fishbone Cactus A funky shaped cactus, requires more water than a typical cactus.
- Ponytail Palm Easy to care for and looks great. Need less water and tending than other palms.
- And many, many more!

What if you want to keep other houseplants without the risk to your pets? Keep them up on high shelves, (easier for dogs than cats). Keep them in a separate room or an outdoor greenhouse where your pets do not venture. Or you can purchase glass cabinets with doors to keep pets out. Some even have locks. Online sources included Ikea. This is my indoor go-to solution for keeping my pets safe from the toxic houseplants that I tend.

#### Resources

The ASPCA list of unsafe plants: <a href="https://www.aspca.org/pet-care/animal-poison-control/toxic-and-non-toxic-plants">https://www.aspca.org/pet-care/animal-poison-control/toxic-and-non-toxic-plants</a>

❖ Images: Chihuahua on plant cabinet by Brittany Ketcham; Spider plant: https://www.kinship.com/cat-health/are-spider-plants-toxic-to-cats

## Creating a Bird Habitat with Natives

by Pamela Talbott, Master Gardener Volunteer 7/1/2024

Many people love bird watching. If you already feed birds, you probably offer a few different types of bird feeders and seed. Did you know that you can attract your favorite birds to your yard and keep them returning by planting native plants?

Each bird species has different needs, so research the native plants that will make your favorites call your yard home.

Eastern Bluebirds love insects. The adults' diet is made up of 70% of beetles, worms, grasshoppers, crickets, spiders, caterpillars and flying insects, and the rest is native berries. Babies are fed only insects. Natives in your yard will attract more of the bugs they need, and bluebirds will also visit your feeder for live or dried mealworms. A bluebird house, placed about 5 feet off the ground and facing an open field will almost guarantee they will raise their babies in your yard.

American Goldfinches LOVE seeds. Planting purple coneflower, black-eyed Susans, little bluestem, coreopsis and smooth alder will supply food in all seasons and keep them coming back all winter. Leave the seed heads for them and wait until spring to clean up the garden.

Ruby Throated Hummingbirds are thrilling to watch. Planting beebalm, cardinal flower, crossvine, eastern redbuds and smooth beardtongue will keep them in

your yard more effectively than purchased hummingbird feeders.

Planting natives in layers creates a safe haven from the weather and predators for all birds. Make sure to offer fresh water too.

Get planting a few natives, then grab a drink, and ENJOY the sights and sounds of your favorite birds.

❖ Image: Purple Coneflowers (Echinacea purpurea) provide both seeds for birds and nectar for insect pollinators. Photo by Will Stuart, image courtesy of Ecological Landscape Alliance

#### Resource

Ecological Landscape Alliance - <a href="https://www.ecolandscaping.org/10/landscaping-for-wildlife-habitats/plants-birds-plant-will-come/">https://www.ecolandscaping.org/10/landscaping-for-wildlife-habitats/plants-birds-plant-will-come/</a>

## Establishing a Vineyard

by Dana Smith, Master Gardener Volunteer

7/8/2024

If you are thinking of growing grapes, here are some tips and reminders to consider. But first, get your soil tested!

- Year One: Buy your vines and plant them in a north-south direction so both sides of the vines benefit from the daily east-west travel of the sun.
- Year Two: The vines will be small at first, so erect your trellis system during the second year. Adequate space is essential so a tractor can fit between the rows for maintenance, so allow 9 feet between rows and 6 feet between vines.
- Year Three: You can hope to enjoy your first small harvest.
- Year Four: You should have a mature harvest.

Keep a calendar of these important maintenance tasks:

- Inspect your vines regularly for pests and disease.
- Keep weeds at bay they invite moisture and humidity and compete with the vines for nutrients.
- Train your vines to grow on the trellis system.
- Prune at least annually in late winter after the vines have gone dormant.



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You may need to spray regularly during the growing season to combat pests and disease. You may also need netting to protect your harvest from birds and fencing to protect your harvest from land critters.

Harvest the grapes in the fall. Turn harvest time into a party – invite volunteers to help, then treat them to a good meal with a bottle of good wine, maybe even some made with your own grapes!

#### References

Growing Grapes for Beginners, West Virginia University Extension Office <a href="https://extension.wvu.edu/lawn-gardening-pests/gardening/gardening-101/growing-grapes-for-beginners">https://extension.wvu.edu/lawn-gardening-pests/gardening/gardening-101/growing-grapes-for-beginners</a>

Wine Grape Production Guide for Eastern North America, Editor: Tony K. Wolf, Virginia Tech https://ecommons.cornell.edu/items/b9024c75-774f-4fa7-8d47-434f5b8e73a9

Commercial Grape Varieties for Virginia, Tony K. Wolf, Imad E. Dami, Bruce W. Zoecklein, M.

### Medicinal Herbs

by Judith Kohnen, Master Gardener Volunteer

7/15/2024

Medicinal herbs are our superheroes. Not only do they have the power to heal, but many serve as sources for our culinary seasonings, teas, dyes, and fragrances. These herbs make up 10% of all vascular plants. Many are pest-resistant, drought-tolerant, and able to grow in poor conditions. Some are edible and all can be beneficial to our health and well-being in multiple ways.

Herbs can help with a variety of conditions and often serve more than one purpose. For instance, calendula and plantain are both edible medicinal plants with a multitude of healing elements. They both help heal skin irritations, wounds, burns, and infections. Calendula is especially great for skin care and fast healing recovery. Plantain is a blood purifier. Mashing its leaves & placing them directly onto the skin can quickly stop bleeding. It's also a great liver stimulator.

Bloodroot, a Virginia native at-risk medicinal plant, named for its orangey-red underground stem (the rhizome, which contains strong medicinal components) is a multi-purpose healer. Part of the poppy family, caution is needed while using. It can assist in skin cancers, migraines, ulcers, coughs, sore throats, and more. It was used by Native Americans for face paint and dyes for their baskets and clothing.

Important: Medicinal herbs should be used responsibly and cautiously. Before using, talk to your healthcare provider. Many websites contain inaccurate or incomplete information, so educate yourself by consulting research-based sites such as those listed below – look for the .edu extension. Finally, be sure to identify plants accurately. Used improperly, some medicinal and non-medicinal look-alikes can be quite poisonous.



Licensed Stock Photo

#### Resources

University of Rochester Medical Center

https://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=1&contentid=1169
North Carolina State Extension https://homegrown.extension.ncsu.edu/2021/12/18/growing-medicinal-plants-in-the-home-garden/

Clemson Cooperative Extension <a href="https://hgic.clemson.edu/factsheet/herbs/">https://hgic.clemson.edu/factsheet/herbs/</a>

### Kitchen Gardening -- Growing Sprouts

by Raeanne Roemmich, Master Gardener Volunteer

7/22/2024

Sprouts are a great addition to any meal.

They are easy to grow, low cost, anticancer, and easily digestible. They are also low in calories, low glycemic, high in fiber and protein. They contain vitamins, minerals, antioxidants, and pre and probiotics. In fact, broccoli sprouts contain a much higher amount of anticancer ingredients than regular broccoli.

Seeds for sprouting can be found in many places, but it is best to purchase seeds designed for sprouting that are certified organic by the USDA and have been tested for high germination rates

and pathogens.

Sprouting is easy. Start with a one-quart mason jar with a sprouting (screen) lid. Add a tablespoon of seeds, let them soak overnight in water, drain in the morning, and prop the jar upside down at a 70-degree angle. After that, just rinse quickly and drain twice a day. Sprouts will be ready in 4-7 days, when their tails (roots) are about an inch long. Refrigerate the sprouts for up to four days.



Enjoy! Licensed Stock Photo

Grow Your Own Sprouts in a Jar <a href="https://www.treehugger.com/grow-your-own-sprouts-jar-4858702">https://www.treehugger.com/grow-your-own-sprouts-jar-4858702</a>

Sprouting Seeds for Food <a href="https://www.pubs.ext.vt.edu/content/dam/pubs">https://www.pubs.ext.vt.edu/content/dam/pubs</a> ext vt edu/426/426-419/SPES-394P.pdf

### Rattlesnake Master

by Pat Lust, Master Gardener Volunteer

7/29/2024

Thanks to several GPMGA native plant growers, Rattlesnake Master (*Eryngium yuccifolium*) is making a comeback in central Virginia. If you were lucky enough to get one at the Spring Garden Fest, you may be helping to reintroduce or replenish the species in central Virginia. While the "Digital Atlas of the Virginia Flora" lists Rattlesnake Master as native to most counties in our area, the Virginia Department of Conservation and Recreation ranks it as "Imperiled" in Virginia. It is easy to grow in our gardens, so with little effort, we can help cultivate a new crop for the wildlife that once were accustomed to finding it.

Rattlesnake Master grows up to 5' tall and produces clusters of 1"-globe flowers that resemble little golf balls. The green to white, honey scented flowers that appear on long stiff stems from the first of June through August appeal to wasps, flies, butterflies and especially to native bees. The spiney blue-green leaves form on a basal rosette and look a bit like yucca leaves. It is part of the carrot family (*Apiaceae*).

You might find Rattlesnake Master in the wild in open woods or sandy roadsides. When it is happy, it can self-seed prolifically. If left standing, it can provide winter interest in your garden.

The plant works well as an accent in a perennial garden. You can see examples in the Powhatan Pollinator Garden at Fighting Creek Park where it is growing in full afternoon sun. Come visit us and check it out.



Photo: Susan Strine CC BY 2.0 NCSU

#### For additional information:

Lady Bird Johnson Wildflower Center – https://www.wildflower.org/plants/result.php?id\_plant=ERYU

North Carolina Extension Gardener Toolbox – https://plants.ces.ncsu.edu/plants/eryngium-yuccifolium/

Wisconsin Horticulture Division of Extension -

https://hort.extension.wisc.edu/articles/rattlesnake-master-eryngium-yuccifolium/

### Japanese Stiltgrass Control

by Rebecca Crutchfield Crow

8/5/2024

On a recent residential site visit I was asked to advise on how to eradicate a very large patch of Japanese Stiltgrass. This invasive plant hails from Asia and is now found in most of Eastern America. Its range extends to Texas, and its seeds can travel on the tires of construction trucks, cars, hiker's boots and on the hair of animals. A tough annual plant, stiltgrass gets taller than other plants. When it dies, it forms a mat that smothers them. Yikes!

One solution suggested by Dr. Doug Tallamy, famed professor and founder of the native plant movement, is to plant goldenrod to thwart the expansion of stiltgrass. Solidago Canadensis, an aggressive native, will outgrow and crowd out stiltgrass, says Dr. Tallamy. See the YouTube video listed below.

After a deep dive into topic of stiltgrass, I found these control methods:

- 1) In August, you can use a string trimmer. Because this is done in the late summer, the plant doesn't have the energy to rebound or produce seeds for the Fall. Some sources recommend using a propane torch to burn it down, but fire danger is often high in August. Always check with the local fire authorities first before doing any outdoor burning.
- 2) After August, you can smother it with black tarp for 6 weeks or put down a 4-inch layer of mulch.
- 3) Surprisingly, the chemical herbicide glyphosate (found in Round Up) doesn't do the trick. See the attached link to page 22, table 5.7 in VA Cooperative Extension's Pest Management Home Grounds and Animals, 2024 Pest Management Guide, for recommended herbicides for stiltgrass.
- 4) For small amounts, hand pulling will work as the roots are shallow. If it has formed seed heads, dispose of it in a plastic bag and not in your compost!



Licensed Stock Photo

#### **Resources:**

 $\frac{https://www.pubs.ext.vt.edu/content/dam/pubs\_ext\_vt\_edu/456/456-018/ENTO-567-E.pdf}{https://www.nybg.org/blogs/plant-talk/2010/09/tip-of-the-week/tip-of-the-week-removing-invasive-japanese-stilt-grass/}$ 

https://extension.psu.edu/controlling-japanese-stiltgrass-in-your-garden

https://extension.psu.edu/japanese-stiltgrass https://www.youtube.com/watch?v=j7ligldtfc4

## Honeybees -- Worker Jobs

*by Kelly Moore, Master Gardener Volunteer* 8/12/2024

In the summer months worker bees live for about six weeks: the first three inside the hive, the final three outside. All females, their first jobs upon emerging from their capped cells center around the brood nest, the area of the hive where the eggs are laid by the queen and the young are cared for. These nurse bees have glands which allow them to feed and care for freshly hatched larvae. They will clean the brood nest cells of debris, waste and cocoon material and cap the cells of larvae about to pupate. They also tend to the queen, cleaning her, feeding her and transferring her pheromones to other bees.

As their feeding glands begin to atrophy the worker bees move on to jobs away from the brood nest and closer to the outside of the hive. They collect the nectar and pollen brought in by forager bees and store it in cells around the brood nest where the nectar will be made into honey. These house bees also manage the temperature of the hive by fanning their wings.

When it's time for the honeybees to work outside the hive they will start as guard bees near the entrance. They inspect any insects trying to enter the hive, rejecting intruders and ensuring those with access clean off before they come inside. We know worker bees best for their final occupation – foraging. They start with an orientation flight to get the lay of the land before fully exploring for sources of nectar, pollen and water to bring back to the hive.



#### Resources

Rodriguez, Anthony. (2022, August 22). Tasks and Duties Throughout the Life Cycle of a Worker Honey Bee.

 $\underline{https://blogs.ifas.ufl.edu/miamidadeco/2022/08/22/tasks-and-duties-throughout-the-life-cycle-of-\underline{a-worker-honey-bee/}}$ 

Sammataro, Diana & Avitabile, Alphonse. *The Beekeeper's Handbook Fifth Edition*. Ithaca, NY, Comstock Publishing Associates, 2021.

❖ Photo by Kelly Moore - up close view of larvae in cells next to a capped cell--brood nest surrounded by capped honey

# **Culinary Herbs**

by Judith Kohnen Master Gardener Volunteer

8/19/2024

Nearly all culinary herbs and spices have medicinal qualities, effective to keep your body and mind well-balanced. Take basil for example. This sun-loving herb is easy to grow and works on both the digestive and nervous systems. Not only can it ease stomach gas and cramps, prevent nausea and vomiting, it can act as a mild sedative to treat anxiety, irritability, depression, as well as insomnia. The juice from its leaves has an antibacterial effect on the skin to relieve itch and pain from stings and insect bites.

Cayenne is legendary in curing ailments with the ability to warm a cold body, increase blood circulation, and cut through congestion in the lungs. The only edible and medicinal part of a cayenne plant is the fruit as the leaves, stems, and flowers are toxic. Using an appropriate small dose of this strong stimulant is important and shouldn't be handled by sensitive skin. Use gloves when handling. Capsaicin is one of its main ingredients and helps to release "feel-good" hormones called endorphins. Capsaicin is an ingredient in topical pain relievers, effective for joint and muscle pain. It has a history of being a heart herb, too.

Many other culinary herbs act as excellent antioxidants, anti-inflammatories, immune-enhancers, antiseptics, digestive aids, antispasmodics, and so much more. Just a small list includes garlic, ginger, rosemary, sage, arugula, clove, dill, oregano, parsley, mint, cinnamon, cardamon, and horseradish. Culinary herbs thrive well in containers and raised beds.



Licensed Stock Photo

### Resources

NC State Extension - https://www.ces.ncsu.edu/search-results/?q=culinary+herbs

University of Rochester Medical Center -

https://www.urmc.rochester.edu/encyclopedia/collection.aspx?subtopicid=3597

# How Does My Dog-Friendly Garden Grow?

by Karen Woodring, Master Gardener Volunteer 8/26/2024

The Goochland Animal Shelter Sensory Garden bed has been a challenge this year with heat and drought-like conditions. If this isn't a testament to planting Native then I don't know what is!

"Dog-friendly" is defined as 'non-toxic to dogs' according to the ASPCA. This allows Bunny the Beagle and FritterLoaf (to name a few current residents) to sniff, taste and touch the plants with abandon on their daily walkabouts. Engaging with nature through sniffing and investigation provides these Shelter dogs with positive experiences to build confidence and reduce "shelter stress".

In 2025, I hope to add a solar powered water feature to the Garden and reintroduce Hummingbird Feeders to the planters by the Cat observation rooms. They surely do enjoy watching the birds zoom in and out! Goldfinches still prefer to drink water out of the Ant Moats

on the Hummingbird feeders and then pluck at the sunflower petals leaving them quite lopsided!

Back to the Shelter garden bed. Lambs Ear, Nepeta, Coreopsis, Black Eyed Susan, Cannas and Echinacea are happy so far. I'll add some additional Natives in the fall and spring. Let's all root for rain!



Photo by Karen Woodring

#### **Resources:**

**ASPCA** 

https://www.aspca.org/pet-care/animal-poison-control/dogs-plant-list

https://www.aspca.org/news/what-sensory-garden-and-how-does-it-help-fearful-dogs

# Peggy Singlemann's Native Plant List

by Rebecca Crow, Master Gardener Volunteer

9/2/2024

Back in April, I watched a Blue Ridge PRISM Spring webinar featuring Peggy Singlemann, retired Director of Park Operations and Horticulture at Maymont. Mrs. Singlemann shared lists of her favorite native plants to use in landscaping. Although her great talk is not available online, here are just a few of her suggestions.

## **Shade loving Perennials**

Aquilegia canadensis Eastern Red Columbine Chrysogonum virginianum Green and Gold Phlox divaricata Woodland Pink Packera aurea Golden Ragwort

### Evergreens-

Magnolia grandiflora Southern Magnolia Juniperus virginiana 'Emerald Sentinel' Emerald Sentinel Red Cedar Ilex opaca American Holly Thuja occidentalis Arborvitae

## **Flowering Trees**

Amelanchier canadensis Serviceberry Aesculus pavia Red Buckeye Chionanthus virginicus White Fringetree Diospyros virginiana Common Persimmon

#### **Flowering Shrubs:**

#### Full Sun/Pt. Shade

Clethra alnifolia Sweet Pepperbush Cephalanthus occidentalis Buttonbush Hypericum prolificum Shrubby St. Johns-wort Callicarpa armericana American Beautyberry

### **Shade/Part Shade**

Rhododendron periclymenoides Pinxter Azalea Hydrangea quercifolia 'Snow Queen' Oakleaf Hydrangea

Hamamelis virginiana Common Witchhazel Rhus aromatica 'Gro-Low' Fragrant Sumac

#### Full Sun/Part Shade

Baptisia australis, B. tinctoria Blue or Yellow Wild Indigos
Monarda fistulosa Wild Bergamot

Achillea millifolium 'Paprika' Yarrow Asclepias spp. Butterfly Weed, Swamp Milkweed and Common Milkweed

#### Sun

Agastache 'Morello' - May- Nov Echinacea laviegata - VA's true native Heliopsis scabra 'Summer Sun' - June- Sept Solidago canadensis 'Little Miss Sunshine' -Aug- Oct

### Plants for Riparian Buffers along Streams

Hibiscus grandifloras Swamp Rose Mallow Eutrochium fistulosum Joe Pye Weed Aesculus pavia Bottlebrush Buckeye Itea virginica Virginia Sweetspire

Keep an eye out for more great talks by Mrs. Singlemann and many other experts online from Blue Ridge PRISM as well as Master Gardeners of Northern Virginia and the Lewis Ginter Botanical Garden. As a bonus, if it's research-based, the talk counts toward your Master Gardener Continuing Education hours!

#### Resources:

Peggy Singlemann:

https://www.facebook.com/p/Peggy-Singlemann-RVA-Gardener-100083605545635/Blue Ridge PRISM: https://blueridgeprism.org/MGNVA: https://mgnv.org/mg-virtual-classroom/

Lewis Ginter Botanical Garden:

https://www.lewisginter.org/learn/adult-classes/

# Bringing Tropical Plants Inside for Fall & Winter

by Brittany Ketcham, Master Gardener Volunteer

9/9/2024

Bringing your tropical plants in for the incoming cooler weather can be stressful, but it doesn't have to be! Here are ways to reduce stress on you and your plants.

- 1. Check for pests. Gently spray the plants, including stems, leaves and pot with your hose. Gently wipe off aphids, spider mites, mealies, etc. Actual spiders won't harm a plant, but you don't want them indoors -- spraying clears them out and never harms them.
- 2. Give plants a spa day before moving inside: remove dead leaves and struggling foliage/flowers. Check for root rot and remove dead roots. Repot if needed, but only increase one pot size at a time.
- 3. Transition gradually. Bring plants inside on cooler nights and back out on warm days.
- 4. Create an outdoor environment inside with indoor plastic or glass greenhouses. Alternatively, chose appropriate spots for each plant, depending on their needs for sunlight and warmth. I keep multiple glass greenhouses in a sunroom that stays pretty warm in the winter. The smaller plants stay in the greenhouses with humidifiers, the

larger plants are around the greenhouses. Plastic trays catch the water drainage.

Some plants go dormant in the cooler months and don't need much water. Others die back entirely and return next year. Don't throw them away! Elephant ears, banana plants, and alocasias are some examples. Label their pots before they disappear for the season.

Keep a close eye on everyone for the first couple of weeks. You may lose some leaves or experience slower and stunted growth during the inside season, but that's ok.



Image by Brittany Ketcham

For more information:

https://www.youtube.com/watch?v=OVuR4FqRBjc

# Amaryllis Need Their Beauty Rest

by Karen Woodring, Master Gardener Volunteer 9/16/2024

Many consider Amaryllis Hippeastrum a winter holiday 'annual'. There are hundreds of cultivars. You can often find healthy bulbs in the 'clearance' rack at Garden Centers and online after the traditional holiday gifts have long been forgotten.

Amaryllis do double-duty indoors and outdoors. Set the pots outdoors in June and move them into an unheated garage or shed and stop watering them in September. Do not remove the leaves. Allow them to wither away like you would with daffodils or tulips. After the bulbs have dried, brush the soil off and trim the roots.

The dormancy 'nap' begins in mid-late October in a garden tray in a dark cabinet in my garage. This is the same process that I use to store Caladium and Calla.

Inspect your bulbs occasionally and when you're ready to wake them up (8 weeks later), pot them up in new soil and place them in a warm sunny indoor location. I stagger the Amaryllis 'wake up' times so that I have them blooming throughout the winter.

Do not overwater Amaryllis. A sip is all they need. Fertilize with new growth (diluted 5-10-10) and enjoy your first blooms about 4-6 weeks later. Keep a journal that you can refer to each year. Some are 'early risers' and some like to 'sleep in'.



Photo: 'Rilona' by Karen Woodring

### **Resources:**

 $Illinois\ State\ Extension - \underline{https://extension.illinois.edu/blogs/good-growing/2021-12-03-how-take-care-amaryllis-and-get-them-rebloom$ 

Iowa State Extension – https://www.extension.iastate.edu/news/search/content/Amaryllis

# **Practical Tips for Harvesting Herbs**

by Judith Kohnen, Master Gardener Volunteer 9/23/2024

Choosing the optimal time to harvest your herbs depends on (1) the herb and its growing conditions; (2) the part of the plant you're after – leaves, flowers, or roots; and (3) whether the plant is at its peak for potency. If we emphasize the highest quality, we ensure that we receive the

best healing and nutritional value that herbs can provide for our bodies, as well as sate our appetites with good taste and flavor.

As a rule of thumb, we should pick at the herb's prime time. The herb should be dried quickly and at the right temperature. Lastly, package and store your herb correctly to ensure the integrity of the plant.



Licensed Stock Photo

## Guidelines for Harvesting Herbs:

- Above ground parts (leaves, buds, flowers): the general rule is to harvest in the morning after the dew has evaporated.
- Buds & Flowers: best to harvest when they are first opening, especially if using for medicinal purposes (waiting till fully open means a loss of potency)
- Leaves: In general, best to harvest before flowering (exceptions exist: mints are higher potency when in flower)
- Roots: harvest in fall or early spring when energy is still stored in the root or bulb; can even harvest in winter as long as the ground is not frozen, and the plant is still identifiable.
- Assess and examine herbs before you harvest. Determine its quality: strong color, smell, taste? Insect damage? Does it look vitally alive & healthy? If so, harvest!

### **RESOURCES:**

NC State Extension -

https://content.ces.ncsu.edu/harvesting-and-preserving-herbs-for-the-home-gardener Iowa State University & Outreach —

https://yardandgarden.extension.iastate.edu/how-to/growing-harvesting-and-drying-herbs

# What are Heirloom or Old Garden Roses?

by Laura Lemmon, Master Gardener Volunteer 9/30/2024

Simply put, old garden roses (also known as heirloom or antique roses) are survivors. They are roses sometimes found near old home sites and in cemeteries, and increasingly, in home gardens. Old roses are known for hardiness and fragrance and trace back centuries. The American Rose Society defines the term 'old rose' as a rose introduced before 1867.

The five classes of true Old Garden Roses are: Gallicas, Damasks, Albas, Centifolias, and Moss Roses. Repeat flowering roses descended from China roses introduced in Europe in the 18th century where they were crossed with the existing species, which eventually lead to the modern repeat flowering roses such as tea roses and the common Knockout Rose.

In recent years, rosarians and 'rose rustlers' have searched out and catalogued roses growing near old and abandoned homes and in cemeteries. Some of old roses they found have been cultivated and are now available through nurseries. One example is Darlow's Enigma (*Rosa* 'Darlow's Enigma'), an antique rose found and re-introduced into the nursery trade by Mike Darlow in the 1990s. It is a vigorous grower in my Powhatan garden and its single white flowers attracts pollinator insects.



A Cherokee Rose (*Rosa laevigata*) flourishes in the Powhatan Historic Garden with a flush of white blooms in spring. The Cherokee Rose is native to Vietnam and Taiwan. Introduced in the United States in 1780, it was cultivated by the native Cherokee people and is well established in the Southeast. Cherokee Roses are a common "passalong" plant and may be found with other heirloom roses or flowers in a garden near you.

### **Resources:**

Cherokee Rose https://plants.ces.ncsu.edu/plants/rosa-laevigata/

Antique Roses for the South <a href="https://aggie-hort.tamu.edu/southerngarden/antique.html">https://aggie-hort.tamu.edu/southerngarden/antique.html</a>

❖ Image: Cherokee Rose in Powhatan Historic Garden, Photo by Laura Lemmon

# Ways to Heat an Outdoor Greenhouse

by Brittany Ketcham, Master Gardener Volunteer 10/7/2024

Fall is here! Time to start heating outdoor greenhouses at night. Unless yours is in direct sunlight, shade cloths also can come down.

Tropical plants don't like to get below 70 degrees and won't survive below 50. Gardens, vegetable and outdoor plants should be fine down to 40 degrees, but no colder.

**Hotbeds** are raised beds filled with straw, compost and other organic matter, topped by a thin layer of growing medium to plant in. The decomposing organic matter keeps plants warm and creates humidity.



Image by Brittany Ketcham

**Solar Panels** on top or around your greenhouse can power a heater.

**Electric & Propane Powered Heaters** are the least expensive option. My Palram waterproof greenhouse electric heaters are powered by an extension cord from my garage. I only use them at night unless it is super cloudy. Monitor carefully; they get hot quickly and can pose fire hazards. Propane heaters generate carbon dioxide which plants love, but also give off toxic gases, that can harm plants and people.

**Insulation:** Wrap your greenhouse with horticultural fleece and horticultural bubble. This will block some sunlight so make sure to only use this option with lower light plants and vegetables.

**Wood Burning Stove:** Last winter when the power went out, I used a small wood-burning camp stove as a backup. It kept things warm, but I had to cut a hole in the top for the chimney and add wood every few hours. It could also be a fire hazard.

Be aware of potential risks and practice safety! Keep a thermometer in the greenhouse or find a wireless one you can check from the house. See what works best for you!

#### **Resources:**

https://farmplasticsupply.com/blog/how-to-heat-your-greenhouse-methods-and-options

# Prep Your Garden for Winter

by Brittany Ketcham. Master Gardener Volunteer

10/14/2024

Autumn weather usually means sweaters, bonfires, s'mores and gorgeous fall colors, but it also means it's time to prep your garden for winter!

For this tip we are going to focus on raised garden beds. This is a great time to assess your raised beds and plan what you're going to plant for spring and where.

Here is a list of some of the tasks that will need to be done.

- Pull weeds and remove diseased and decaying plants -you can leave the seeds if you want the same plants to
  grow next year. Rotting vegetables and plant material
  attracts pests, but dry stems, leaves and small branches
  will provide winter protection for small animals and
  beneficial insects.
- Feed your soil.
- Apply a thick layer of mulch, compost, straw, hay, etc., whichever you prefer -- this will help to protect your perennial plants, as well as keep weeds from taking over.
- Plant cover crops if you want to have something nice to look at over fall and winter instead of heavily mulched beds.
- Remove any plant stakes, supports, posts, shade clothes, pots, gardening tools. Make sure to store these items so they do not get ruined by fall and winter weather.
- Plant any plants that will grow over winter such as garlic.
- Check your raised beds for any damage and fix accordingly.

Start your seeds indoors for spring! Always the best part of gardening!



Graphic by Brittany Ketcham

Most of these tasks also apply to your favorite flowers and plants, wherever they are growing. Autumn is also a great time to plant fall bulbs such as tulips and daffodils.

#### **Resource:**

https://savvygardening.com/preparing-raised-beds-for-winter/

# Harvesting & Keeping Pumpkin Seeds

by Brittany Ketcham, Master Gardener Volunteer

10/21/2024

Pumpkins are great for carving, eating, baking, planting & growing and evening feeding to wildlife!

Did you know that you can keep your seeds to plant the next year? There are a couple of different ways to do this. Once you cut open the pumpkin and scoop out the seeds you can either:

- Lay them flat on a paper towel and keep them in a window to dry or
- Clean them to get all of the gunk off, then add them to a jar filled with water and ferment for 3-4 days, then drain.

Either way, be sure to lay them out flat to dry for a few days. Once they are dry you will need put them in an airtight container and then store them in a cool dry place. They will be viable for four years or more!

You can do this with all varieties of pumpkins, but make sure to label your containers so you know what you are planting next year.

NOTE: Make *sure* the seeds are dry before storing or they will get moldy and will not sprout. For the same reason, you should store them in a cool, dry place.

You also have some options if you want to eat them:

- Dry them thoroughly, toss with a little oil and your favorite seasonings, and roast at 250 o for 10 -15 minutes.
- Boil in salted water for 30 minutes, drain, dry completely, and roast at 3000 for 30-40 minutes, stirring often.



GARDENERSPATH.COM

How to Save Pumpkin Seeds to Plant Next Year | Gardener's Path

❖ Image: https://gardenerspath.com/plants/vegetables/save-pumpkin-seeds/

#### Resources:

 $\frac{https://blog.southernexposure.com/2021/10/6-easy-steps-to-saving-pumpkin-seeds}{https://www.gardeningknowhow.com/edible/vegetables/pumpkin/saving-pumpkin-seeds-how-to-store-pumpkin-seed-for-planting.htm}$ 

# Perennials for Fall Gardens

by Judith Kohnen, Master Gardener Volunteer 10/28/2024

Our summer days may have ended. Many of our flowers are no longer blooming. But autumn brings various ornamental plants that continue to provide much beauty, support pollinators and feed our birds in winter.

Some perennials are late-blooming due to *photoperiodism*, a process by which photoreceptors within the plant regulate its flowering. Their growth depends on the length of daylight they receive (photoperiod). The amount of darkness is also relevant. Our short-day, long-night perennials include goldenrods, chrysanthemums, blue-eyed grass, Christmas cacti, and poinsettias. I've provided photos of some fall perennials presently blooming on my own property.

The best pollinator-habitat-supporting perennials you can have in your garden are natives (i.e., coneflowers, black-eyed Susans, asters). Their seed heads provide food sources for birds that don't fly south. Insects are another food source for birds in our winter gardens, and the more insects, the greater the diverse bird population. Fall perennials provide important pollen & nectar reserves for our butterflies and bees in winter.



Image by Judith Kohnen

A few tips to bring your fall garden beneficial results:

- 1. Go wild this year! Take a break from your usual fall pruning and cleanup and let nature do what it does best.
- 2. Let the leaves fall without a rake in hand; the winter covering will be a valuable habitat for insects and serve as high quality mulch too!
- 3. Think natives when planting your shrubs, trees, and perennials. Why not start now before the first frost?

#### **Resources:**

Smithsonian Gardens –

 $\frac{https://gardens.si.edu/learn/blog/fall-in-the-perennial-garden-favorite-plants-best-practices}{Oregon\ State\ University\ -}$ 

https://news.oregonstate.edu/news/what-are-short-day-and-long-day-plants

# Reconsider Your Lawn!

by Audrey Hirsch, Master Gardener Volunteer

11/4/2024

There is a national movement to convert lawns to native plant meadows or gardens. Traditional lawns are made up of turf grass, a non-native plant that provides little in terms of food or shelter to local wildlife. Many beneficial species cannot eat turf grass, and instead depend on native plants. Traditional lawns are also vast monoculture non-native habitats, which have huge impacts on our native wildlife and the environment.

Many gardening and conservation organizations are promoting the idea of "unlawning America" because our traditional monoculture green lawn:

- Does not support biodiversity of organisms.
- Is labor- and financial resource-intensive.
- Uses chemical fertilizers and pesticides, which often harm or kill beneficial animals and soil microbes.
- Has shallow root systems which don't filter water and chemicals sufficiently,
- Leaches chemicals into local water systems.

•

It is possible to start small with unlawning your yard. Consider unlawning areas of your property that you don't use frequently. It can be as simple as letting a portion of your grass grow. Mow it once or twice a year. You may see native plants and wildflowers emerge from the soil, which will benefit the local ecosystem. You will be providing a more beneficial environment to flora and fauna, decreasing some of the ecological stress facing native species of plants, insects, birds, and microorganisms, and decreasing your workload and financial outlay!

When you unlawn your yard, you give up a portion of your monoculture grass lawn. But in exchange, you get plants that benefit you and your local ecosystem. Here are areas to consider unlawning:

- Steep hills
- Shady places
- Tree lines
- Swampy areas

For more information or to get started with unlawning your yard, visit:



Photo by <a href="https://unlawn.org/">https://unlawn.org/</a>

University of Deleware: <a href="https://www.udel.edu/academics/colleges/canr/cooperative-extension/fact-sheets/turf-grass-madness-reasons-to-reduce-the-lawn-in-your-landscape/">https://extension.udeleges/canr/cooperative-extension/fact-sheets/turf-grass-madness-reasons-to-reduce-the-lawn-in-your-landscape/</a> University of Maryland Extension: <a href="https://extension.umd.edu/resource/lawn-alternatives/">https://extension.umd.edu/resource/lawn-alternatives/</a>

# Leave the Leaves! Do Less Yard Work!

by Audrey Hirsch, Master Gardener Volunteer

11/11/2024

The National Wildlife Federation, along with other gardening and conservation organizations are urging gardeners to Leave the Leaves! Here are some great reasons why:

- Leaves provide shelter and insulation for many invertebrates, pollinators and predators, thereby improving the health of our gardens. These beneficial insects and animals may have already settled in to shelter for the winter. Clearing your lawn and garden of all spent plant material disturbs these organisms.
- Leaves provide food and nutrients for the micro-organisms in the soil. The more leaves in your gardens, the more food is left for these micro-organisms, resulting in healthier soil and plants.
- While too many leaves can harm grass, leaving a thin cover is beneficial to the invertebrates and other organisms who rely on leaf cover for food, shelter, reproduction and concealment.
- Leaves are natural mulch, covering soil, preventing erosion and retaining moisture. As the leaves decompose, they add vital nutrients to soil, improving fertility. This reduces the need for chemical fertilizers.
- Leaving the leaves reduces your workload by diminishing the time you spend on leaf blowing, raking and clearing. You can wait for Spring to trim spent foliage and other clean-up to preserve nesting areas.
- Leaving the leaves reduces the amount of time using emissions producing machinery, reducing air and noise pollution
- A thin layer of leaves on the lawn is beneficial. It isn't necessary to shred leaves, the insects and animals will take care of that. Heavy leaf cover can be raked whole into natural areas, flower beds and woods.



Licensed Stock Photo

### For more information:

National Wildlife Federation- <u>Federation-https://www.nwf.org/Leavetheleaves</u>
NC Cooperative Extension- <u>https://richmond.ces.ncsu.edu/2016/10/leave-the-leaves/</u>
USDA- <u>https://richmond.ces.ncsu.edu/2016/10/leave-the-leaves/</u>
Xerxes Society- <u>https://xerces.org/publications/fact-sheets/nesting-overwintering-habitat</u>

# Compost!

by Audrey Hirsch, Master Gardener Volunteer

### 11/18/2024

Compost is a nutrient-rich, soil-like material comprised of decomposing organic matter—most often made up of fallen leaves, grass clippings, plant debris, vegetable scraps, and yard waste. Materials and waste that you might normally throw away can be recycled and made into a soil amendment that is rich in vital nutrients to fertilize your garden.

#### **Benefits:**

- Adds beneficial organisms and nutrients to soil
- Improves the structure of soil.
- Reduces soil erosion and water run-off
- Provides food for earthworms, soil insects, and beneficial microorganisms
- Assists the soil in holding nutrients, decreasing the need for chemical fertilizers
- Promotes healthy plants which are less susceptible to diseases and insect pests, reducing the need for pesticides
- Recycles waste which might otherwise fill up landfills

### What to Compost:

- Yard debris (leaves, twigs, yard trimmings & Grass clippings)
- Fruits, vegetables and their trimmings
- Coffee grounds and filters
- Tea leaves and bags
- Sawdust from deciduous trees
- Houseplant leaves and dead flowers
- Stale herbs
- Spent potting soil
- Dead blossoms
- Eggshells

#### How to compost:

- Collect the scraps for composting, place them in a pile.
- Add dried leaves, grasses and other yard materials to the pile.
- Turn your pile with a pitchfork periodically (the more you turn, the faster it works).
- Keep your pile moist add water in drier weather.
- Insects and worms are necessary, don't remove them.
- Once decomposition is done and the material resembles soil, add it to your garden.

Keep several piles in different stages of decomposition. For convenience consider a compost bin, either commercial or make it yourself from planks, blocks, pallets, hardware cloth, or chicken wire.

ile. Free Photo Stock Image of the pile. re you turn, the faster it works).

https://www.pubs.ext.vt.edu/content/pubs\_ext\_vt\_edu/en/426/426-703/426-703.html https://extension.wvu.edu/natural-resources/soil-water/composting-for-beginners https://extension.umd.edu/resource/how-make-compost-home/

# Using Kudzu Vines to Make Wreaths (rerun from 2022)

by Rachael Watman, Master Gardener Volunteer

11/25/2024

Kudzu is hated. I know.

It's invasive, it can grow up to a foot per day, and it causes economic and environmental damage. Despite all that, it has strengths I can work with. I use vines from my tenacious 1.5-acre kudzu patch to make ring bases for wreaths.

It's straightforward. Here's how. Harvest after the first frost. Kudzu loses its leaves, making it easier to pull longer sections of vines. The vines are woodier when the sap is down, and they don't break as quickly.

After harvesting, coil the vines and dry for a few weeks in a moisture and mold-free environment out of direct sunlight. Prior to weaving, soak the vines in hot tap water for 15 minutes, then run the vine over a bullnose edge to enhance flexibility.

To make a wreath, form a circle and braid around the circumference at least three times. Cut the end at an angle and tuck into the wreath ring. A satin finish polyurethane spray will seal the finished wreath and bring out the natural colors.

I decorate my kudzu vine wreaths by wiring bunches of flowers and greenery, which I have dried from the summer. I'm also a fan of adorning with pinecones, bird nests, and berries. Use whatever suits you to make your kudzu wreath de vine.



Photo by Rachael Watman

#### **Resources:**

For more information on loving kudzu, here's a recent podcast I did with our Master Gardener team: https://anchor.fm/humus-and-humans

To learn more on harvesting and weaving with kudzu check out Matt Tommey of Asheville, NC who also has lots of helpful info and video tutorials: <a href="https://www.matttommey.com/basket-weaving-techniques">https://www.matttommey.com/basket-weaving-techniques</a>

# Japanese Gardens

by Rebecca Crow, Master Gardener Volunteer

12/2/2024

Last month, I spent 14 days touring Japan with a small group. For gardeners like my husband and me, it was an extraordinary experience. The gardens were absolutely stunning with bright fall colors of red from the Japanese Maples, yellow from Gingko trees and oranges. We even met an experienced Japanese Master Gardener who came along with our group as we visited three gardens, and he discussed their unique features.

How the gardens were meticulously maintained was truly awe-inspiring. Thousands of leaves and pine needles were swept up with hand rakes. No noisy Zen-busting leaf blowers or string trimmers were used. Incredibly, most of these very large gardens had a small staff of 12 to 14 volunteers!

Pine trees were protected with tan mats wrapped around the trunks and secured with twine. The mats, made of plant material, attracted borers that laid their eggs in the mats. The mats would be disposed of in the very early Spring before the insects could hatch and then replaced with fresh mats.

In addition, I came back with a new appreciation of how meditative and simple gardening can be! A grouping of moss and black and white rocks in four or five low wooden frames on the ground can be stunning. I plan on doing this somewhere in our yard.

If you like gardening, I hope that one day you too will visit the Land of the Rising Sun. The gardens and friendly softspoken people are wonderful!



Image: Rebecca Crow

# Herbs for the Holidays

by Judith Kohnen, Master Gardener Volunteer

12/9/2024

Parsley, Sage, Rosemary, and Thyme – that classic Simon and Garfunkel tune began playing in my head the other day while planning a family menu for the upcoming holiday. It occurred to me that these four herbs are still growing in my garden, even though it is late November as I write this. These four herbs are nutritiously high in calcium, potassium, and Vitamin A, and they can make a flavorful substitute for salt and sugar in our diets. Less salt and sugar mean a healthier heart and endocrine system.

Both dried herbs and fresh herbs require proper storage methods to preserve their nutritional and medicinal properties. Although drying fresh herbs can alter some vitamin content, the mineral content normally stays the same, and often will increase. Fresh herbs can also be preserved frozen. It is the oils within the cells of the plant that bring on the flavor, so chopping or breaking

apart a fresh herb is suggested to heighten its taste.

Since dried herbs are more concentrated and need more time to rehydrate, it is best to place these into your recipes early on while preparing your food. Add fresh herbs toward the end of your cooking for best flavor and vitamin content.









Photo by Judith Kohnen

A partial list of their herbal medicinal properties:

- Parsley (Petroselinum crispum) diuretic, antioxidant, decreases gas & bloating
- Garden Sage (Salvia officinalis) antioxidant, antibacterial, antifungal, carminative
- Rosemary (Salvia Rosmarinus) antimicrobial, antioxidant, antidepressant, nervine
- Thyme (*Thymus vulgaris*) antimicrobial, expectorant, diaphoretic, antispasmodic

#### **Resources:**

University of Rochester Medical Center:

https://www.urmc.rochester.edu/encyclopedia/collection.aspx?subtopicid=15145 Chestnut School of Herbal Medicine:

https://chestnutherbs.com/growing-medicinal-culinary-herbs-in-containers/

Colorado State University Extension:

https://extension.colostate.edu/docs/pubs/foodnut/09335.pdf

# It's Poinsettia Time! (rerun from 2023)

by Terry Festa, Master Gardener Volunteer 12/16/2024

As temperatures trend downward and autumn progresses towards winter, red and green become the predominant colors of the season. Evergreens stand sentinel outdoors. If the birds and animals haven't gotten to them, berries brighten the paling landscape. What better way to mimic these colors in the home than with poinsettias.

Topping the green leaves at the base, what one thinks are flower petals are actually modified leaf forms called bracts which magically changed color in the grower's greenhouse as the daylight hours shortened. But it isn't just traditional red; these plants are also available in shades of pink, burgundy, salmon, and creamy white – some are even variegated or patterned. Nestled in the center of the bracts are the buds that open into small yellow flowers.

Poinsettia is the number one flowering potted plant in the United States so is readily available. Once you choose your plant, it is important to keep it warm when leaving the store as well as in the car. Having it wrapped, buying it on a mild day, and bringing it directly home will keep it safe. 55 degrees F. is a minimum.

With proper care, poinsettias will last well into winter. They require six to eight hours of bright indirect light. An indoor temperature of 65 to 70 degrees is ideal. Plants do not like fluctuations in temperature or being in a spot that is drying such as near cold drafts, windows, heat sources, fireplaces, or fans.

Soil should be kept moist but never soggy. Although too dry plants will wilt, too much water can cause root rot. Water when the soil feels dry to the touch or if the pot feels light. Plants are sold in pots with drainage holes to allow excess water to drain out. A good way to water is to take the plant to the sink, saturate the soil, then allow it to drain thoroughly before putting the decorative foil back on, putting it in an ornamental container, or putting it on a saucer.

Poinsettias will grow just fine without any added fertilizer for a couple of months. If desiring to keep the plant longer, feed it once a month with an all-purpose houseplant fertilizer at half the recommended strength.

Keeping poinsettias growing year-round and getting them to re-bloom, although not the easiest process, can be done. There is plenty of easy-to-follow information online for the adventurous gardener.

### **Resources:**

https://extension.umn.edu/houseplants/poinsettia#acknowledgments-2009960

https://web.extension.illinois.edu/poinsettia/facts.cfm

# Creating a Woodland Garden

by Sharon Anderson, Master Gardener Volunteer

12/23/2024

What is a Woodland Garden? It is a garden or area of garden that has a wilder look (less formal) and more natural appearance. It usually includes large trees with layers of vegetation below. Peaceful, rustic & quiet with dappled sunlight & lots of shades of green. There are many benefits to this type of garden:

- Low maintenance
- Attracts wildlife/insects & full of birdsong
- Native species fit in well
- Reduces noise, pollution and moderates temperature
- Pathways and nature trails fit in nicely

## The Layers

- Top Layer is the tree canopy low hanging branches can be trimmed to allow in more light
- Understory includes smaller trees & shrubs
- Ground Cover can be filled with native plants, wildflowers & perennials with contrasting leaf shapes & colors



Photo by Richard Bloom

## How to Get Started: The Most Important Factors are Soil & Shade

- Take a soil test in several spots
- Remove weeds but leave rich leaf mold and add compost to improve soil
- Create vertical structure with a framework of trees, plan pathways to protect plants & add interest meandering & narrow
- Add smaller trees, shrubs, plants & vines limb up larger shrubs & underplant with herbaceous material then mulch
- Create horizontal structure with planting beds: use color, texture & natural curves rock walls in low areas for edging, fill with leaf compost & extra topsoil to raise bed
- Added elements: water feature, bird feeder or nesting boxes, gateway or boundaries, focal point, frame view from house into garden, forest garden

## **Resources:**

https://plants.ces.ncsu.edu/garden-detail/woodland-backyard-garden-walk/hgic.clemson.edu/woodland-garden/
Finegardening.com/article/a-woodlandgardendesign

## Bonsai!

by Rebecca Crow, Master Gardener Volunteer

12/30/2024

My husband and I recently had the pleasure of visiting a Bonsai farm owned by a Japanese family. Evergreen trees, like Bonsai, are favored by the Japanese people because they represent longevity. Through our tour guide's translation, we asked them about the process of creating the miniature living trees.

At least a half of acre of Bonsai stretched out as far as we could see. Some Bonsai were on tables in plain square or round clay pots and others planted directly into the ground. The sizes ranged from 6 feet tall down to 2 inches tall.

New bonsai are made by grafting white pine into black pine root stocks. Soft copper wires are applied to train the trees into a permanent bent shape. Trees are watered by overhead irrigation. The soil and leaves are sprayed with organic pesticide for borers only when deemed necessary.

As the trees grow, they normally shed their pine needles twice a year. The old yellow needles are brushed out by hand and discarded. Older Bonsai are distinguished by thick trunks and can fetch

high prices in European and Chinese markets. However, export from Japan to the United States is limited due to American Customs standards.

Growing and training Bonsai is a slow process that requires patience. Some of their trees were over a 100 years old. We saw one Bonsai that had been planted by the farm owner's grandfather. It was about 4 feet tall and was valued at two million dollars!



Photo by Rebecca Crow