

SOW YOU KNOW 2023

Goochland-Powhatan Master Gardener AssociationWeekly Facebook Tips

Happy New Year!

2023 was the THIRD 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



www.gpmga.org

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Habitat Gardening for Pollinators

by Michael Burns 1/2/2023

In creating a habitat garden, you need first to determine the group of wildlife species you want to attract. A habitat garden can be designed to attract pollinators, woodland birds or amphibians, or any combination of them. It will contribute to overall conservation initiatives, enhance the value of your property, and permit the enjoyment of nature.

Pollinators include hummingbirds, butterflies, moths, bees, wasps, beetles, flies, and bats. If you decide on pollinators as the type of wildlife species you want to attract, you should first determine their requirements and then design a habitat garden that meets those requirements.

To design a habitat for pollinators, follow these steps:

- Draw a map of your landscape and assess whether it and the surrounding habitat have the necessary features.
- Inventory the existing plant species and habitat. For each plant species, assess wildlife value, growth habits and requirements, and when they bloom or bear fruits.
- Select native plants to add to your landscape, including trees, shrubs and flowering perennials. The plants should bloom from early spring until fall.
- Research and make sure that these additions will benefit wildlife, especially pollinators, and are suited to the local environment.
- Plant to create a natural diverse habitat via plant species, shapes and sizes (horizontal and vertical layers) and seasonal interest.
- Keep a list of the plants you plan to add.
- Lastly, design your pollinator habitat garden for balance and symmetry.

Resources:

"Creating Inviting Habitats," Mary Free, Virginia Cooperative Extension Master Gardener, Northern Virginia, https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/HORT/HORT-59/HORT-59-PDF.pdf

"Habitats, A Fact Sheet Series on Managing Lands for Wildlife, Components of a Backyard Wildlife Habitat." https://ucanr.edu/sites/csnce/files/124159.pdf

"Backyard Wildlife Habitat. Natural Wildlife Federation". https://www.nwf.org/garden-for-wildlife/create

"Habitat At Home," https://www.dgif.virginia.gov/habitat

Christmas Rose or Lenten Rose? There's a difference.

by Kitty Williams, 1/16/2023

Although Christmas Roses and Lenten Roses are both hellebores and members of the buttercup family, Ranunculaceae, there are differences beyond their bloom times. Both are among the earliest to bloom, however, and a welcome sight in the winter garden.

They come with a warning: both are toxic to people, pets and wildlife, i.e., "pest resistant." Handle with care, wear gloves and for goodness' sake don't eat them or let your pets or children eat them!

Christmas roses (Helleborus niger) typically have large flat white or pinkish flowers on short stems and



bloom around Christmas. They originated in central Europe and derived their Latin name from the color of their roots. In ancient times they were used medicinally -- and to ward off witches. (Don't try that at home.)

Lenten roses, (Helleborus orientalis) are native to Greece and

Turkey. In addition to blooming later than Christmas roses, they have cup-shaped, drooping flowers and longer stems. They are pretty on a bank or slope where their shy flowers are closer to eye



Image credit: Kitty Williams

level.

Since at least the 18th century, planters have been busy hybridizing them. Today they're available in dozens of shades from white and green to pinks and maroons, with stripes, contrasting edges, freckles and double flowers.

Their glossy dark green leaves are attractive all year, although many people cut all the old leaves off when the flower stalks start to emerge, to showcase the flowers and encourage fresh foliage to grow.

They are said to be hard to grow, but mine reseed freely. In fact, many gardeners consider them to be invasive and recommend cutting the flowers off before they go to seed. The seedlings don't always grow up to look like the parents; another reason for discouraging reseeding.

Resources:

https://www.gardenia.net/compare-plants/helleborus_--_hellebores

https://www.yadkinripple.com/opinion/columnists/hellebore-friend-or-foe/article_4be6a542-f754-5238-aa25-546c88f1d3cc.html

https://en.wikipedia.org/wiki/Helleborus_orientalis

https://en.wikipedia.org/wiki/Helleborus niger

Native Alternatives to Invasive Nandina

By Katrina McIntosh, 1/23/2023

Nandina (Nandina domestica, heavenly bamboo) is a common shrub that is quite popular as a landscape

plant. Long-lasting red berries and evergreen foliage keep this plant in demand at nurseries throughout the South.

While nandina has not been officially placed on the Virginia Invasive Plant Species List, it is included on the Invasives lists of many southern states. In Virginia, it readily escapes cultivated areas and forms thickets that crowd out native beneficial plants.

The berries gardeners find so attractive are toxic to wildlife, pets and humans. In 2009, a study from the University of Georgia College of Veterinary Medicine showed that nandina berry toxicity was responsible for the deaths of cedar waxwings in Thomas County, GA.

Sterile cultivars of nandina have been developed; however, the berries are still toxic and should be removed and disposed of in the trash. The following native plants have multi-season interest, berries that provide nourishment, and habitat for wildlife. Please consider planting one of these instead of nandina:

Red Chokeberry (*Aronia arbutifolia*). 6-12' deciduous shrub with stunning red orange fall foliage. Edible fruit attracts mammals and birds. White blooms in May attract pollinators.

Yaupon holly (*Ilex vomitoria*). Deer-resistant large evergreen shrub with red berries provides food and shelter for many bird species.



Escaped Nandina (top), Red Chokeberry (bottom). Image credit: Katrina McIntosh

Strawberry bush (*Euonymus americanus*). 6-12' deciduous shrub with unique red-orange seed capsules. Showy red fall leaf color.

Resources:

https://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf
https://vet.uga.edu/toxicity-due-to-nandina-domestica-in-cedar-waxwings-bombycilla-cedroru
North Carolina State University Extension Webpage https://plants.ces.ncsu.edu/plants/nandina-domestica/

Blooming in January - Whoa!!!

By Pat Lust, 1/30/2023

As I drove through Westchester Commons at the eastern edge of Powhatan County over the weekend (the last weekend in January), I noticed the fruit trees in the traffic circles in full bloom. How can this be? Does the extra heat from all the traffic have them confused?

Trees and other plants rely on the signals from both the length of day and the temperature as their cues to start growing and blooming. Irregular signals can confuse the natural patterns of plants and cause them to get ahead of the season. It might take only one crazy-warm day to get the buds started. And usually this does not end well.



North Carolina State University - Myrabella CC BY-SA 3.0

In the fall the shorter days and freezing temperatures force fruit trees into what is known as winter dormancy. They need a certain amount of cold time between fruiting seasons to prepare for the spring bloom. In addition to meeting the plants' own internal needs, the cold period helps them fight off insects and disease.

Fruit trees set their buds in late summer, before winter dormancy, for next year's crop. So, the trees in the traffic circles had their buds all ready to go, but something prompted them to get way ahead of their schedule, and their blossoms are most likely to be destroyed by the next freeze. Fortunately, fruit trees don't always offer all their buds at once. So, with a little luck, there may be a second bloom in the traffic circles at an appropriate time.

Resources:

Winter Dormancy and Chilling in Woody Plants – https://www.canr.msu.edu/news/winter dormancy and chilling in woody plants

What is a Cultivar?

By Pat Lust 2/6/2023

Cultivars are popular with gardeners because they have traits that are in some way superior to or more desirable than the straight species: color, size, taste, shape, etc. A cultivar (cultivated variety) is a plant that exists in its current form because of human intervention, and it can continue in this new, desired (cultivar) form only with continued human intervention.

Varieties are variations found in nature, occur naturally, and grow true from seeds of that variety. Cultivars, on the other hand, are usually developed from a "sport" or other mutation or through deliberate cross pollination and are not likely to



Solidago rugosa 'Fireworks' - F.D. Richards CC-BY-SA-2.0 (NCSU Extension)

come true from their seeds. Cultivars must be reproduced through asexual propagation: cuttings, division, grafting, etc.

Cultivars are named according to the International Code of Nomenclature for Cultivated Plants: Genus species 'Cultivar.' Notice that the Genus and species are italicized, and the cultivar name is not, but it is capitalized and enclosed in single quote. This is the standard that you will find on plants in the nurseries. If you produce a cultivar and can replicate it in sufficient quantity, you can probably name it and get it patented.

The problem with cultivars is that the human intervention sometimes modifies more than the intended trait for desirability. The change in size and color of the flowers may confuse insects looking for pollen and nectar. The human modification can also sometimes cause the new plant to be sterile, depriving a variety of wildlife of a winter food source. Straight species native plants, on the other hand, can be guaranteed to support the wildlife of the same area.

Resources:

Cultivar versus Variety – https://hortnews.extension.iastate.edu/2008/2-6/CultivarOrVariety.html
Prairie Moon's Stand on Cultivars – https://www.prairiemoon.com/blog/cultivars

Winter Seed Sowing

By Becky Sido, 2/13/2023

(Back by Popular Demand!)

You can plant seeds outdoors starting today! Winter seed sowing is best for seeds that need a short cold period (a.k.a. cold stratification) to germinate. This method takes advantage of the natural temperatures and length of day to trigger germination. Winter sowing has many benefits: no need for seed trays, lights, treatment for damping-off disease or worry about seedlings drying out.

The method is simple and needs no special equipment.

First prepare one-gallon clean translucent jugs, such as milk jugs, by poking drainage holes in the bottom and around the top to permit air to enter and excess humidity to escape. Cut around the circumference of the jug, leaving an inch-wide section just below the handle attached to serve as a hinge. Add a few inches of damp potting mix and sow your seeds. Label your jugs (inside and out) with a paint marker and tape close with duct tape. Place the jugs outdoors where they will be exposed to rain, snow, and sun (but won't blow away), with the caps off to let water in. Check humidity occasionally. If they are too wet, leave the top open during the day. If you don't see any condensation, they may be too dry, so add a





Image credit: Connie Sorrell

little water. In the spring your seedlings will be ready to transplant into your garden.

Some of the plants you can easily sow in winter include:

alyssum	coneflower	petunias	beets	dill
calendula	coreopsis	echinacea	broccoli	oregano
butterfly weed	cosmos	milkweed	cabbage	radishes
columbine	foxglove	yarrow	kale	spinach

Resources:

Four Seasons Winter Sowing of Seeds - YouTube https://www.youtube.com/watch?v=6eWD9ZC-JPM

https://extension.unh.edu/blog/2021/02/winter-seeding-shortcut-spring?

https://extension.psu.edu/starting-seeds-in-winter

 $\underline{https://marylandgrows.umd.edu/2019/01/23/winter-sowing-how-i-get-a-jump-start-on-my-summer-flower-garden}$

Crape Murder

By Becky Sido, 2/20/2023

Dreadful crimes are being committed all over Goochland and Powhatan -- even in our own yards.

People have been taught to "top" their graceful crapemyrtles (Lagerstroemia indica). Each year around this time murdered crapemyrtles abound.

But crapemyrtles naturally grow as small upright or vase-shaped trees. Their trunks should grow upward and outward. Topping has other problems:

Large wounds made when topping admit fungal decay organisms, increasing stem decay and death. Dead branches in the canopy shorten a tree's life.

Vigorous shoots growing from the top of the cut stems aren't well attached. Heavy blooms that grow at the end of each slender shoot flop, and shoots often break off in strong winds.

Bloom time is shortened, because there's only one big cluster on the end of each shoot, instead of many smaller flower clusters with staggered bloom times.

Instead of murdering them, remove:

- dead, dying, and diseased branches
- branches that are growing inward or downward
- the weaker of two crossed limbs, even if they are not yet touching
- lower branches, as the tree matures, to raise the canopy
- weak, thin or vertical shoots in the inner part of the tree for a cleaner look
- suckers from the base of the trunk

When? **Now.** Flower buds are produced on new growth so the best time to prune crapemyrtles is February or March, before new growth begins.

Please help us end the murder of these beautiful crapemyrtles this coming season.

Resources:

https://www.pubs.ext.vt.edu/430/430-451/430-451.html

https://www.lsuagcenter.com/profiles/rbogren/articles/page1486133699735



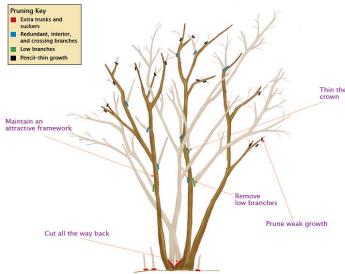


Photo: VCE publication Illustration: Melissa Lucas (Fine Gardening)

Native Alternatives to Invasive Privet

By Katrina McIntosh, 2/27/2023

Chinese privet (*Ligustrum sinense*) is a large semi-evergreen shrub with tiny white flowers that produce an abundance of dark-purple berries. Imported from Asia in 1852, it had escaped cultivation by the 1930s.

Privet is among the worst invasive plants in the South, widely dispersed by birds who eat the fruit. It aggressively colonizes through root suckers, forming impenetrable thickets that outcompete native understory shrubs. Dense populations are found along waterways and riparian areas. Jim Hanula, a US Forest Service entomologist, stated "Chinese privet is the primary cause of the decline in the abundance and diversity of native herbaceous plants and tree seedlings in areas along streams and rivers."

When found, privet should be removed. A study conducted by the US Forest Service from 2009-2014 showed that four times more bee species and three times more butterfly species had returned to areas where privet had been eradicated as compared to areas where privet was left to thrive.

The best control for privet is to avoid planting altogether. Good native alternatives to privet include:

 Black Chokeberry (Aronia melanocarpa) – Large deciduous shrub (6-12'), white/pink flowers in April-May attract butterflies and other pollinators. Berries persist through winter and provide food for birds.



Escaped privet (top), Inkberry (bottom) Image credit: Katrina McIntosh

- Inkberry (*llex glabra*) Evergreen shrub (6-12') with fragrant white blooms June-September attract butterflies and bees and are of special value to honeybees. Produces fruit beneficial for birds and mammals.
- **Blackhaw** (*Viburnum prunifolium*) Deciduous shrub (12-20') with significant red-purple fall foliage is a high-value wildlife plant. Large white flower cymes produce berries eaten by humans and wildlife. Can be used as hedge or specimen.

Resources:

https://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf https://www.srs.fs.usda.gov/pubs/39743

Slug Beer Trap

By Rebecca Crow, 3/6/2023

Slugs are present in your garden all year round, and there are a lot of them out there! On top of that, according to Oregon State University, one slug can lay an average of 500 eggs over its lifetime...

As the weather warms up, they all get busy. Their slimy trails and chew holes are a telltale sign that they have been active in your garden. Slugs are particularly fond of iris, hostas, cabbage, lettuce, lilies and strawberries. (They like cool moist areas and generally do not bother plants that are growing in full sun.)



Image courtesy of University of Maryland Extension

Now is the time to put beer traps out for them!

Fill low containers such as a tin pie pans almost to the rim with cheap beer. Place then near your affected plants at dusk.

The next morning you (and your children) will be amazed at how many slugs will be caught! Dump the drowned dead slugs out for the birds to eat. Continue refilling the pan with beer each night until you see the slug body count diminish.

Resources:

 $\underline{https://extension.umn.edu/yard-and-garden-insects/slugs\#create-a-landscape-less-attractive-to-slugs-298061}$

https://extension.umd.edu/resource/slugs-and-snails-flowers

https://agsci.oregonstate.edu/slug-portal/life-slug/biology-and-life-cycle-gray-field-slug

What's that Blue Patch in my Neighbor's Yard?

By Pat Lust, 3/13/20232

If you have a wellmanicured lawn, you probably do not have winter annuals peeking through with colorful blooms before anything else shows signs of spring. But maybe your neighbor's less-tended yard is bursting forth with little patches of bright blue. With a closer look you see that the patches are low creeping plants with tiny blue flowers. What is it?

It is *Veronica persica*, commonly known as



Douglas Goldman, USDA, CC BY-NC 4.0

Persian speedwell or sometimes bird's eye speedwell. This colorful winter annual is native to Eurasia and probably arrived in VA by way of the British Isles. While it is not native and can become a nuisance, it is not invasive enough to be restricted in any state.

Some people enjoy the bright blue harbinger of spring and others see it as an annoying weed. If you are in the latter category, the best way to get rid of it is to destroy the plant before it sets seed. It is an annual and will produce next year's plants by this year's seeds. It may take several years as a few seeds don't germinate the first one year. On the other hand, Persian speedwell will not grow in a lush, manicured lawn. Mostly, moves into distressed lawn areas.

Personally, I like the early splashes of color in my yard. But then, my yard would not be eligible for a "fine lawn" contest.

Resources:

VA Tech Weed ID – https://weedid.cals.vt.edu/profile/458

National Gardening Association – https://garden.org/plants/photo/163864/

Serviceberry – Look for these very early white blooms!

By Don Vickers, 3/20/2023

In Southeast Virginia, the common serviceberry (Amelanchier arborea) blooms in the latter half of March. Serviceberry, a small deciduous tree of the Rose family, is one of the first trees to flower in spring. This Virginia native (also native to most states in the Eastern U.S.) grows wild in woodland settings as an understory tree. Beautiful clusters of showy white blossoms have five strap-like petals and occur in drooping bunches. They are pollinated by bees, beetles, and other insects.

Other common names include downy serviceberry, juneberry, and shadbush. So, what's in a name?

The name serviceberry derives from the early blooms which open when the ground thaws and when burials and funeral services could be held for those who had passed away during the



winter. The name shadbush comes from correlating the flowering of the tree with the running of shad in rivers. And obviously, Juneberry is indicative of the timing of the occurrence the edible berries and look and taste a bit like blueberries, only sweeter. The berries are a wildlife favorite. Forty species of birds consume the fruit. A variety of mammals also eat the berries, including chipmunks, foxes, and black bears.

Serviceberry also provides outstanding fall color, with varying shades yellow, orange and red.

Considering the early blooms, summer berries and fall color, serviceberry is a great tree for all year!

Resources:

https://plants.ces.ncsu.edu/plants/amelanchier-arborea/

https://piedmontmastergardeners.org/article/serviceberry/

https://www.extension.iastate.edu/news/yard-and-garden-grow-not-so-ordinary-berries

Native Alternatives to Invasive Creeping Jenny

By Pat Lust, 3/27/2023

Creeping Jenny (*Lysimachia nummularia*) is a popular hardy ground cover. It forms dense mats, is almost evergreen, and is only a few inches high. With small yellow cup-shaped flowers at the leaf axils,

it spreads vegetatively as well as by seeds.

Sounds great, right? Not so fast.

Native to southwest Asia and Europe, Creeping Jenny traveled to New England In the late 19th century as an ornamental plant. It is a





Photos from the North Carolina State University Extension Webpage

rampant spreader that escapes into natural habitats and can crowd out more desirable native plants, especially in moist woodlands. In Virginia it is classified as invasive.

Please don't buy this plant.

It can be removed by hand but be sure to get every bit of it. Any little piece will re-root and grow. You can also burn it or crowd it out by establishing a good stand of native grasses.

Ideal Virginia native alternatives to Creeping Jenny:

- Green and Gold (*Chrysogonum virginianum* pictured beside the Creeping Jenny) a perennial ground cover that attracts butterflies, bees and other insects)
- Wild Stonecrop (*Sedum ternatum*) a perennial succulent groundcover that tolerates drought and poor soil. Deer resistant.
- Wild Pink (*Silene caroliniana*) semi-evergreen perennial groundcover that tolerates drought and poor soil. Attracts humming birds, butterflies and other insects

Resources:

Invasive Plant Atlas – https://www.invasiveplantatlas.org/subject.html?sub=5975

Master Gardeners of Northern Virginia – https://mgnv.org/plants/invasive-plants/creeping-jenny/

 $\label{list-plants} \begin{tabular}{ll} Virginia Invasive Plants List- $\underline{https://www.dcr.virginia.gov/natural-heritage/document/nh-invasive-plant-list-2014.pdf} \end{tabular}$

The Virtues of the Common Violet

By Pat Lust, 4/3/2023

Common violets (*viola* sororia) are everywhere in our gardens and lawns. Many of us hate them; we think they're weeds. But wait! They have some good qualities too.

Believe it or not, common violets are a key player in the whole habitat/wildlife thing. They are the host plant for many fritillary butterfly species. As monarch butterfly larvae need milkweed, fritillary larvae need common violets. Not all eggs get laid on violets, but if not, then the larvae have to find nearby violets to get sustenance.



Joshua Mayer, CC-BY-SA 2.0

Some sources will tell you that common violets are deer resistant, but that has not been my experience. Deer will pull up the newly planted violets and leave them to die, just like they do with your pansies. Has anyone tried planting a patch of violets as a decoy to keep the deer out of the more precious plants in your garden?

We've all seen (or at least heard about) candied violet blossoms used as decorations on fancy desserts, but did you know that you can also eat the leaves? Apparently, they are high in vitamin A and C and are good in salads and stews.

One more good word for violets in your garden: they are a great ground cover, especially on a gentle slope. They will spread both by seeds and by their rhizomes, and the rhizomes create a bumpy surface that slows down any water runoff.

Resources:

Underused Native Plants: The Common Violet – https://extension.psu.edu/native-violets

Viola Sororia – https://plants.ces.ncsu.edu/plants/viola-sororia/

Spring into Summer Bulbs!

By Connie Sorrell, 4/10/2023

Now that the daffodils and other early spring bulbs have finished blooming, cut off the faded blooms but DON'T cut the foliage. Let the leaves die back naturally. They are necessary for photosynthesis to happen, which allows carbohydrates to feed the bulb.

The last frost in this area is near (normally around April 15th), so it's time to plant the beautiful summer-flowering bulbs.

Not all bulbs are true bulbs, defined as plants that store their complete lifecycles in a single underground unit. Corms, tubers, rhizomes, and fleshy roots are also called bulbs, however, and that's fine. Among them, dahlias, gladiolus, lilies, cannas, crocosmia, freesia will add endless colors in your garden. Bulbs are available that grow in sun or shade.

A good way to tell if it's time to plant is to take the soil's temperature. It should be at least 55 degrees. Most summer and fall bulbs need lots of water and well-drained soil.



Image credit: Brecks.com

If you have clay soil, be sure to enrich it with plenty of compost, peat moss, coir, or other organic material. The organically amended soil should be at least 12 inches deep. More is better. The PH of the soil should be between 6 and 7.

Bulbs need good phosphorous to encourage roots, mixed into the soil where the bulbs will be located. Use bonemeal or super phosphate in the lower part of the planting bed when you get started. Then, fertilize monthly from their first appearance until they start flowering.

Resources:

Bulb Basics | Bulbs & More | University of Illinois Extension (https://web.extension.illinois.edu/bulbs/bulbbasics.cfm)

Bulbs in the Landscape | Home & Garden Information Center https://hgic.clemson.edu/factsheet/summer-and-fall-flowering-bulbs/?fbclid=IwAR3rF69ofnMvKu9uI2-phJ3eBJsA3SmspdPr1xYzewb3HkjDrbFldX6pR-g

Summer and Fall – https://hgic.clemson.edu/factsheet/summer-and-fall-flowering-bulbs

Daphne odora

By Nancy Stephenson, 4/17/2023

As its Latin botanical name suggests, *Daphne odora* smells delightful. It's an early bloomer whose fragrance will waft past you from quite a distance on a late winter or early spring day. Common names include Dwarf Bay, Fragrant Daphne, Winter Daphne, Paradise Plant, Spurge Flax, and Spurge Laurel.

An evergreen shrub with glossy green leaves, Daphne is native to China, Vietnam and Taiwan. It performs well in this area (hardy to USDA zone 7) and the mound-shaped plants will grow to 2-4 feet wide and 4-6.5 feet tall.

There are several cultivars to choose from. Depending on the variety, the blooms may be



Image credit: Peganum from Small Dole, England – Daphne odora Aureomarginata CC by-SA 2.0

pink, lavender or white. Among them, *Daphne odora* 'Marginata' has a nice band of yellow or white around the leaf's edges, which makes the leaves pop, especially in a woodland garden.

Daphnes should be planted in sun to part shade, in moist, but well-drained soil which is allowed to dry out between waterings. It works well in a woodland setting, as a foundation plant, or as a specimen. A wonderful place to plant Daphnes would be along a walkway where you can enjoy the sweet scent emanating from its blooms. The pleasant fragrant can be noticed as far as 100 feet from the plant.

Plant it in early spring so it can establish roots over the growing season. It will reward you with some of the first blooms the following year – so welcome after a dreary winter.

Resources:

https://plants.ces.ncsu.edu/plants/daphne-odora-marginata/ https://landscapeplants.oregonstate.edu/plants/daphne-odora-marginata

Image credit: peganum from Small Dole, England – Daphne odora Aureomarginata CC by-SA 2.0

A Hard Act to Follow:

The Importance of Hardening Off Seedlings

By Rachael Watman, 4/24/2023

It's about time to start hardening off your seedings before transplanting outdoors. Hardening off is the process of transitioning a tender young plant from a stable indoor environment to outdoors where temps and conditions vary. This is best done by gradually exposing your seedlings to external stressors to enable them to become stronger plants. While hardening off, seedlings develop more roots, accumulate carbohydrates, decrease the amount of freeze-prone water in the plant, and thicken cell walls.

To harden off:

- Make certain your specific plant can tolerate outdoor conditions.
- Move your seedlings outside about two weeks before favorable weather conditions (the last frost date).



Image credit: Rachael Watman

- Place seedlings in a shady, protected outdoor spot starting with two to three hours when temps are at least 45-50 degrees.
- Avoid exposing seedlings to extreme windy conditions or temps below 45 degrees.
- Reduce the amount of water they receive to slow plant growth, but ensure they do not wilt
- Gradually increase the number of hours your seedlings receive sunlight each day until they are outside 24 hours on the last day or two before planting.

While there is a lot of back and forth involved in hardening off your young plants, the goal is to slow their growth to allow them to adjust to a new environment. Doing so makes good hard sense.

Resource

https://lancaster.unl.edu/hardening-transplants

Integrated Pest Management

By Audrey Hirsch, 5/1/2023

Integrated Pest Management (IPM) is an environmentally friendly and sustainable approach to managing pests in the garden. The goal is to minimize the use of pesticides while maximizing the effectiveness of other pest management techniques such as prevention and cultural, mechanical and biological practices,

The first step in implementing an IPM program is to identify the pests and assess the extent of the damage they are causing. Consider how much pest damage to crops you can tolerate.

Next, review tactics and decide on your approach. A combination can be used to control the pests, including habitat modification, cultural and mechanical practices such as crop rotation, using resistant plant varieties, adjusting planting dates to avoid pest outbreaks, hand picking pests off plants, barriers such as mulch, and pest traps.

Biological control should be used with care. Natural predators, parasites, or pathogens are introduced to manage pest populations. This approach can be effective, but it requires constant planning and monitoring to ensure that the introduced species do not become pests themselves.



Image credit: Beneficial green lacewing (https://entomology.ca.uky.edu/ef708)

Chemical control (pesticides) is a last resort in IPM. Use selective and low toxicity pesticides and use only when the pest population reaches a certain threshold, and where the pest is causing significant damage. This will help to minimize risks to health and the environment.

Overall, IPM offers a sustainable and cost-effective way to manage pests while reducing negative impact on the environment and human health.

Resource

An Introduction to Integrated Pest Management: https://www.pubs.ext.vt.edu/ENTO/ENTO-365/ENTO-365/ENTO-365.html

Three Sisters Companion Planting

By Steve Genett 5/8/2023

"Companion planting" means growing vegetables, herbs and flowers together to provide a complimentary environment for better growth, noncompetition for nutrients in the soil and even pest control.

An ancient Native American practice of planting corn, beans and squash together, Three Sisters is perhaps the best-known and easiest to follow companion planting technique.

Three Sisters planting allows each plant to benefit the others. Beans or legumes can climb on the taller corn stalks. Legumes provide nitrogen to the soil for the corn and squash. Corn shades the



Three Sisters by Joachim Quandt is used under the Creative Commons Attribution-ShareAlike 2.0 Generic License (CC BY-SA 2.0)

squash plants. The squash plants help suppress weeds.

Everything works together beneficially.

Resources:

https://extension.wvu.edu/lawn-gardening-pests/gardening/garden-management/companion-planting

The Life of a Rusty Patched Bumble Bee

By Nancy Stephenson, 5/15/2023



Image credit: umn.edu Bee Lab.

On warm spring days, the queen awakens, finds a home, searches for nectar and pollen, and begins laying her eggs. In due time, hard-working Rusty Patched Bumble Bees (Bombus affinis) hatch from the eggs. They build a colony, collect food, and care for the young. The queen continues to lay eggs. During the summer, these bees leave to mate with other queens, who will start the cycle all over again the next spring. In the fall, every bee but the queens die.

The rusty patch may be blurred, but the wing-to-wing "T" shaped patch above the yellow, distinguishes this bee from other commonly confused species.

The rusty patched bumble bee, a native pollinator, once spread over the eastern portion of the U.S. Their population has declined over 87%, and in 2017 the U.S. Fish and Wildlife Service, listed them as an endangered.

These bees are found in small, scattered populations in ten states including Virginia and in Ontario, Canada.

As pollinators, these small, but mighty bees sustain us and our world. They pollinate the plants and trees that provide food and seeds for the future. Habitat loss to suburban sprawl, pesticide poisoning, diseases and parasites may all be contributing to their decline.

How can we help? Flowering bushes, trees or shrubs, even on a small patch of property or a deck, will attract them. Native plants that bloom at different times provide sustained nourishment. Use pesticides only when necessary or not at all. Leave loose plant matter or leaves over the winter to provide protection for the gueen as they overwinter.

Resources:

Rusty-patched bumble bee | Bee Lab (https://beelab.umn.edu/rusty-patched-bumble-bee)

Rusty patched bumble bee | Virginia Tech Insect Collection

(https://collection.ento.vt.edu/2017/01/13/rusty-patched-bumble-bee)

The Value of Mulching Your Garden

By Steve Genett, 5/22/2023

Whatever you are growing -- vegetables, flowers, ornamentals, shrubs or trees -- mulching your garden beds delivers many benefits.

Whether you choose natural or synthetic options, the benefits are similar.

Mulching:

- reduces moisture loss,
- increases soil temperature,
- controls or suppresses weeds,
- keeps garden soil loose for better penetration of water and air,
- reduces nutrient leaching, and



Image credit: https://ext.vt.edu/lawngarden/turfandgardentips/tips/Springtime_mulch.html

• keeps soil from splashing onto fruit during heavy rainfall.

Mulch should be applied after planting in a weed-free bed. Keep it from direct contact with plant stems.

Mulch piled up against plants can hold excess moisture, encourage disease, and allow insect and animal pests easy access to tender stems.

Organic mulch is preferable to synthetic since it adds nutrients to your soil as it decomposes. These mulches include compost, grass clippings, pine bark, shredded hardwood, pine needles, certain types of leguminous hay, newspaper, cardboard, paper. Dried leaves and new sawdust may also be used, but they can lead to a nitrogen deficiency if not supplemented. Stones or gravel are also environmentally friendly mulches.

Landscape fabric, woven fabrics and colored plastic sheeting are examples of synthetic mulch. A layer of organic mulch can be applied on top of the fabric and will help increase moisture retention. There are many options for synthetic mulch in rolls and sheets, but if you use non-biodegradable plastic mulch, be sure to remove it at the end of the season and dispose of it properly.

Resources:

https://extension.unh.edu/resource/garden-mulches-fact-sheet https://www.pubs.ext.vt.edu/426/426-326/426-326.html

Gardens for Birds

By Shere Macumber, 5/29/2023

Do you have favorite birds? Do you wish saw more of them?

Birds play a large role in our ecosystem by contributing to seed dispersal, insect control, pollination and nutrient cycling. As gardeners, we can support their populations by planting



native gardens and fostering their habitats. Healthy habitats provide food, shelter, and water.

When designing a native garden to attract birds, think vertical. Choose plants that vary in height and structure to create a diverse habitat. Tall trees provide nesting sites and shelter, shrubs provide cover and food, while ground-cover plants provide cover and foraging opportunities. Include some logs and debris to attract birds that nest and feed in crevices. Include plants that bloom at different times of year to provide food and nectar throughout the growing season. Add a birdbath or water feature for birds to drink and bathe in.

Be sure to plant native species. Native plants are adapted to the local climate, soil, and rainfall patterns. Species to consider for our area:

- **Trees:** Red Maple Acer rubrum, Downy Serviceberry Amelanchier arborea, Post Oak Quercus stellata
- **Shrubs:** Virginia Sweetspire Itea virginica, Spicebush Lindera benzoin, and Black Raspberry Rubus occidentalis
- *Ground cover:* Wild Strawberry Fragaria virginiana and Virginia Creeper Parthenocissus quinquefolia

When we support healthy bird populations and conserve their habitats, we help to promote the resilience and productivity of Virginia's natural systems.

Resources:

Plant RVA Natives – A Capital Idea https://www.plantvirginianatives.org/plant-rva-natives

Coffee Grounds are a Good Source of Nitrogen

By DanaDee Carragher, 6/5/2023

Coffee beans are rich in minerals such as magnesium, calcium, phosphorus, potassium and nitrogen. Grounds can be used as a mulch and improve soil quality.

Here's how it works: Much of coffee's acidity is removed in the brewing process, leaving behind a green material that promotes plant growth, repels ants and slugs and entices earthworms. You can add grounds to your compost or directly to your garden as a side dressing for nitrogen loving plants, such as roses, dahlias, lettuce, squash, cucumbers, broccoli and cabbage. Nitrogen allows plants to produce more chlorophyl which in turn helps them to grow more quickly.

Where can you get some? Besides your own coffee pot, many coffee houses (Starbucks, for example) will bag their coffee grounds and give them away for free.



Caring for Fresh Cut Flowers

By Rachael Watman, 6/12/2023

Hooray! The flowers are blooming. Are you ready to behold their beauty indoors for an extended period?

Here are some tips that make the cut:

- Always make certain you are using a clean vase. Bacteria + residue = gross. If you wouldn't drink out of it, don't make your flowers.
- Prune any leaves below the waterline. Submerged leaves can rot and cause bacterial growth.
- Cut stems at a 45 degree angle every twothree days. This increases the surface area and prevents stems from sitting flat on the bottom of vase, maximizing water uptake.



Image credit: Rachael Watman

- Change water (most flowers prefer room temp) every two days and make certain vessel is three-quarters full (Bacteria and wilting be gone!)
- Keep flowers out of direct sunlight and away from hot appliances or fans.
- Keep flowers away from fresh fruit. Fruit emits ethylene gas which accelerates wilting.
- Use flower food to feed flowers and eliminate bacteria (See a theme?)

Some flowers need their own container. For example, fresh cut daffodils, irises, and hyacinths don't play well with others: they release toxic chemicals that can kill other plants in the vase. Keep them in a separate container for a day before incorporating into a mixed flower arrangement.

Resource:

https://piedmontmastergardeners.org/article/how-to-keep-cut-flowers-fresh/

National Pollinator Week – What's All the Buzz About?

By Michelle Kaufman, 6/19/2023

In 2017, the US Senate unanimously approved the first National Pollinator Week to raise awareness of declining pollinator populations. Today it is observed annually around the world.

Research has shown that beekeepers are losing approximately 40% of honeybees annually, bird populations have declined by 29% since 1970, and 6,000 acres of monarch butterfly/pollinator habitat are lost every day. These are just a few of the alarming facts.

So, (or "Sow") what to do? Think 3 P's – Provide, Protect, and Promote.



Image credit: Michelle Kaufman

Provide Pollinator Habitats

- Create a pollinator garden with native plants.
- Create a water source where natural sources are not available. Vessels such as bird baths and clay saucers are popular options. Be sure to clean the vessels regularly and provide fresh water daily.
- Create shelters by preserving natural options such as grasses, trees, leaf piles, and snags. Man-made options include bird houses, untreated wood blocks or logs with drilled holes for bees, and cavities in eaves.

Protect Pollinators from Pesticides

- Choose pest resistant plants.
- Monitor and naturally control pests.
- Use pesticides as a last line of defense. Carefully follow directions for handling and applying.

Promote Pollinators

- Take family and friends on a nature walk through the Native Plant Trail in Fighting Creek Park.
- Tour the Historic Garden in Powhatan.
- Host a garden party to show family, friends, and neighbors how easy it is to create habitats for pollinators.
- When you're invited to someone's home, create a pollinator friendly container garden as a hostess gift.

No effort is too small-every action counts to Provide, Protect, and Promote our Pollinators.

Resources:

Virginia Cooperative Extension https://www.pubs.ext.vt.edu/HORT/HORT-59/HORT-59.html
Penn State University Extension https://extension.psu.edu/pollination-and-pollinators
Pollinator Week https://www.pollinator.org/pollinator-week

The Crippled Cranefly Orchid

By Jeanne Wade, 6/26/2023

As you walk in the Virginia woods in wintertime you may come across the Tipular discolor or Crippled Cranefly Orchid. Last winter I noticed a green leaf on the ground when all the other leaves were brown. This caught my attention. I thought "that's odd, why is it green?" When you flip it over it is purple with little bumps on the underside.

The Tipular discolor is a native orchid of North America. Its closest relative is in East Asia. The leaves are green in the winter because it photosynthesizes when it receives the most sunlight, when all the leaves are off the trees. Deer will eat the leaves, but once the leaf is gone, the plant can't store carbohydrates anymore and it won't flower that year.



Image credit: Jeanne Wade

In the spring the leaf will drop off and it will grow a one- to two-foot-tall flowering stalk from the corm. Blooms appear in July through September.

The flowers attract the Noctuidae moth, which are the plant's primary pollinators. This family of moths includes owlet moths, armyworms, or the common looper moth. The moth pollinates by putting its head in the flower, pick up a pollen ball on its eyes and then deposit it on the next plant.

Crippled Crane-fly orchids are hard to notice at first, but they are hidden gems in the woods.

Resource:

NC State Extension: https://plants.ces.ncsu.edu/plants/tipularia-discolor/

Terrariums

By Shere Macumber, 7/3/2023

Terrariums – miniature gardens in transparent containers – offer a fun, easy way to bring nature into your home.

Here are some tips for creating and maintaining one:

Container: Select a clear glass (or plastic) container. Wash and rinse it well. The size is up to you and the plants you like. A container with a lid is best suited to low-light plants like ferns, mosses, and succulents, while an open terrarium or dish



Image credit: Oklahoma State Extension

garden is better for plants such as cacti and air plants.

- Soil: Use commercial potting soil. Avoid garden soil, which contains weed seeds and insect eggs.
- Plant it: Use a small spoon to gently arrange and plant your little garden. Pay attention to design and proportion.
- Water: Overwatering can cause the plants to rot, so use a small watering can or spray bottle only as needed. Carefully monitor the moisture level.
- Care: Terrariums require minimal care but watch for signs of problems. Remove dead or diseased plants and prune as needed. Clean the glass periodically with a soft cloth.

Keeping a terrarium is a fun and rewarding hobby that allows you to create a miniature ecosystem. With a little care and attention, your terrarium can thrive and bring a bit of nature into your daily life.

Resources:

https://extension.okstate.edu/fact-sheets/terrariums.html

Harmful and Beneficial Bugs

By Joanne Gergle, 7/10/2023

Insects that damage, destroy or consume our crops, cause infestations or bite, are considered harmful

bugs. Bugs deemed beneficial, on the other hand, benefit gardens by either pollinating plants or preying upon pests.

In fact, almost all insects are either benign or beneficial! A diverse range of insects are critical to the survival of bats, birds (i.e., 96% of songbirds feed insects to their young) and freshwater fishes.



Some are even prized delicacies in many countries. Most animals and plants that humans eat rely on insects for pollination or food.

We also depend on insects for medical and genetic research and supplies. The heart and myocardium of insects provides good models for biomedical studies; and their neuropeptides, neurotransmitters, and peptide hormones structures are similar to those of human chemicals.

Many insects also serve as decomposers, breaking down dead materials like fallen leaves, animal carcasses, then turning them into simpler materials, making nutrients for plants and algae. Decomposers are nature's own recycling system. Without insects to help breakdown and dispose of wastes, dead animals and plants would accumulate in our environment.

ALL insects, regardless of if we see them as harmful or beneficial, do indeed play an important role in the environment.

This is why it's best to be careful about what you kill or squish in your garden!

Resources:

Virginia Tech Insect ID Lab / Dept of Entomology https://www.ento.vt.edu/idlab.html
The Insect Effect https://www.floridamuseum.ufl.edu/earth-systems/the-insect-effect/
Benefits of Insects to Humans https://www.si.edu/spotlight/buginfo/benefits

Dividing Irises

By Martie Parch, 7/17/2023

If your bearded irises had fewer blooms than normal this spring, it's time to divide. This will give the roots more room to grow and prevent them from rotting.

Using a pitchfork, gently lift a small clump. Chances are that you will end up with more than one rhizome. Loosen the soil from the



Image credit: Martie Radeff Parch

roots of your irises and pull them apart. Siberian irises grow in thicker clumps, so you'll need to cut them into sections. Trim the leaves into a 3"-4" fan shape. If the rhizomes are mushy and soft, then you've probably had some visiting borers. Toss those in the trash, not the compost bin.

Choose an area that will give the irises at least 6 hours of sun a day. After digging a shallow hole, make a small mound and spread the roots over it. Cover the roots and the sides of the rhizome with soil, being careful to leave the top of the rhizome exposed. You will have new growth in a couple of weeks. They should bloom the following spring.

Daffodils can also be divided now. When the foliage is almost brown, lift a clump and pull the bulbs apart. Spray the roots with a hose to clean off the soil. After the bulbs dry, place them in a mesh bag (like the ones that hold clementines) or a paper bag. Then store them in a cool, dark place until next fall when it's time to plant them.

Succession Planting

By Kayleigh Bouwens, 7/24/2023

Succession planting is the practice of seeding crops at seven- to 21-day intervals to maintain a consistent supply of produce.

Dark leafy greens are some of the easiest and most nutritious plants you can grow. They are rich in vitamins A, C, E and K, and B-vitamins. They also have high levels of fiber, iron, magnesium, potassium and calcium, and rank low on the glycemic index.

And wait until you hear how easy they are to grow!



Let's use spinach as the example. Start five to seven spinach seeds indoors. Note the day on a calendar and set a reminder on your phone. Every seven days, start five to seven more seeds. Continue for four weeks.

As the first seedlings get bigger, transplant them to the garden and water them. In a month or so you can start harvesting. Cut the larger outer leaves as needed and the plant with continue to grow and replenish them.

Keep it going! As your indoor seedlings get bigger, continue to transplant them outside. Make sure to harvest from the "oldest" plant, and you will have delicious leafy greens all fall!

Leafy greens love lots of water! *Always* keep them well watered. The early seedlings transplanted in September will appreciate a bit of shade from a nearby plant until our temperatures cool more.

Don't stop at spinach. Other examples of cold hardy greens are spinach, arugula, mustard greens, and kale.

For Zone 7A you can start your first round of spinach seeds around August 30th. Good luck and happy planting!

Resources:

Succession Planting: https://extension.umn.edu/search?q=succession-planting&gsc.page=1

Nutrition Facts: https://www.ars.usda.gov/plains-area/gfnd/gfhnrc/docs/news-articles/2013/dark-green-leafy-vegetables/

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

Soil blocking

By Carol Gertner, 7/31/2023

Soil blocks are made from lightly compressed potting soil and serve as both container and growing medium for starting seeds.

The advantages of soil blocks to your seedlings, the environment, and your wallet are many. The roots of seedlings grown in soil blocks are air pruned (stop growing when they reach the edge of the block) while the roots of seedlings grown in a container can circle the container and become root bound.

When the seedlings are ready to be transplanted into the garden, soil block seedlings are eager to get established. Root-bound seedlings, on the other hand, are shocked by their new surroundings and take longer to recover, delaying harvest.

Using soil as a container also eliminates the need for plastic seed/plug flats and multiple sized plastic pots. The less our food is in contact with plastic the better for us and the environment. Finally, with no need for plastic trays and pots you will have more money to spend on other items/experiences important to you. As an added benefit you'll have less clutter too!



Image credit: Carol Gertner

Soil blocker tools, available online, are used to compress soil into uniform cubes.

A simple recipe for potting soil:

- 30 Units of Peat Moss
- 20 Units of Perlite
- 20 Units of Compost
- 10 Units Screened Home Made Compost (or Garden Soil)

Optional

- 1/8 Unit of Lime
- 1/4 Unit of Blood Meal
- 1/4 Unit of Bone Meal
- 1/4 Unit of Greensand
- 1/4 Unit of Phosphate

Resources:

The New Organic Grower, 2018, by Elliot Coleman

Cornell University Soil blocking instructions: (https://smallfarms.cornell.edu/2021/04/soil-blocking-in-five-easy-steps/)

Johnny's Selected Seeds https://www.johnnyseeds.com/tools-supplies/seed-starting-supplies/soil-blocking/

Cacti

By Shere Macumber, 8/7/2023

Cacti are low-maintenance plants that add an interesting touch to your indoor space. If you're interested in growing cacti, here are some tips to get you started.

Type: There are many different types of cacti, so select the right one for your space and climate. Popular varieties include the Christmas cactus, barrel cactus, and prickly pear cactus.

Soil: Cacti require well-draining soil to prevent root rot. Use cactus potting mix or create your own by combining regular potting soil with sand or perlite. Avoid using garden soil, as it retains too much moisture.

Temperature and Humidity: Cacti prefer warm temperatures (65 to 85 degrees) and low humidity. Avoid placing cacti in drafty areas or near air conditioning vents.

Light: Cacti require plenty of sunlight to thrive. Place them in a location with at least six hours of direct sunlight each day.

Water: Cacti are adapted to survive in arid environments. Water your cactus sparingly and allow the soil to dry out completely between waterings. During the winter months, reduce watering even further.

Fertilizer: Cacti don't require much fertilizer, but you can provide them with a boost by fertilizing once a month during the growing season. Use a balanced, water-soluble fertilizer diluted to half strength.

By following these tips, you can successfully grow cacti and enjoy their unique beauty.

Resources:

The Cactus and Succulent Society of America: https://cactusandsucculentsociety.dreamhosters.com/
University of Minnesota Cooperative Extension: https://extension.umn.edu/houseplants/cacti-and-succulents

Hügelkultur

By CJ Brown, 8/14/2023

As we start thinking about upcoming fall gardening tasks, we could consider building a hügelkultur bed.

Hügelkultur (pronounced hyoo-gul-kulture) is a gardening method that has been used in eastern Europe for centuries. It uses natural materials, such as logs and large branches, leaves, twigs, grass clippings and kitchen scraps to build a garden bed.

Fall is the perfect time to prepare a bed so that it's ready for spring planting.

The bed should be placed downslope and perpendicular to run-off. This will collect stormwater and help with erosion. As the logs used to build the bed decompose, they will retain the water and release it during dry spells. The decomposing materials will also provide nutrients to growing plants.

The bed can be any size or shape. Remove the sod and set aside. Start with large logs and branches and build up using smaller branches to create a 3 to 5 foot mound. Fill spaces with leaves, twigs, kitchen scraps and grass clippings, using the same green-to-brown ratio as you would for a compost pile. Water each layer to jumpstart the decomposition process.

Cover with the sod you removed or topsoil. Add mulch or cover crops and allow the bed to rest for a season. The following season, plant legumes or crops that need low nitrogen, such as carrots or potatoes. Later, as the wood breaks down and starts to add nitrogen, you can plant anything you like. Adding a layer of compost every year will maintain the height.

So, this year, put those fall leaves to work, feeding next year's crops!

Resources:

- ${\color{blue} \bullet} \underline{\text{https://extension.okstate.edu/fact-sheets/sustainable-landscapes-creating-a-hugelkultur-for-gardening-with-stormwater-management-benefits.html}$
- https://extension.uga.edu/content/dam/extension-county-offices/cherokee-county/master-gardeners/newsletters/2019/Apr MayNews19.pdf (see p.4)

Deadheading Annual Flowers for Continual Bloom

By Terry Festa, 8/21/2023

In summer, some of our garden gorgeousness comes from annual flowers. They are not only attractive to us, but more importantly to pollinating insects. But how do we keep plants flowering for as long as possible?

The job of plants is to propagate their species by making more of themselves. Many do this through seed production, which begins when flowers are pollinated. This process takes lots and lots of energy from plants. In fact, if allowed to go to seed prematurely, plants have little left for producing more buds and decline. So, to keep plants healthy and in flower over the long haul, we need to interrupt this process by deadheading, or manually removing faded flowers. It is simply a matter of clipping off the flower stems and all portions of the flower heads as they fade.

Not all flowering plants need deadheading. Fortunately for us, some of our showy plants self-clean, That means spent flowers fall off and they keep producing new foliage and flowers, so need no deadheading. This is especially appreciated as temps and humidity rise.

With a bit of research, it's easy to find whether a particular flowering plant needs deadheading. The resources listed below are good places to start.

With a small amount of effort, we are rewarded with many more months of color and bloom. As weather cools and plants begin to exhaust themselves, we can stop deadheading and let seeds mature for self-seeding or collecting, if we desire.

Resources:

https://extension.sdstate.edu/enjoy-more-flowers-your-garden-deadheading-regularly

https://hgic.clemson.edu/the-gardeners-toolkit-deadheading/

 $\underline{https://extension.psu.edu/to-deadhead-or-not-your-final-answer-is}$

Soilless Gardening

By Andrew Cushing, 8/28/2023

If you don't have the space for a garden; don't have the time or energy to properly prepare and maintain garden soil; or just don't like weeding, consider using a soilless container mix.

A mixture of 50% coconut coir, and 50% perlite, together with a slow-release fertilizer such as Osmocote®, will provide plants with sufficient nutrients for up to 6 months. Liquid or organic fertilizers with a readily available source of nitrogen will also work. Read the label carefully to ensure that it contains all the essential macro- and micronutrients needed for plant growth. Avoid urea nitrogen, as it is not readily available to plants.

Coconut coir and perlite are porous materials and allow for good air circulation around plant roots. This is important for preventing root rot and other plant diseases.

With a neutral pH of 6.5-7.0, coconut coir is ideal for most plants. On the other hand, peat moss, with a more acidic pH of 4.5-5.5, can be problematic for plants like herbs and vegetables that prefer a more neutral pH.

In addition, coconut coir retains water well, which can help to keep plants hydrated during hot, dry weather. It can also retain nutrients so that they remain available to plants, and don't leech out of the pot.

Finally, coconut coir is a sustainable alternative to peat moss. Peat moss is harvested from bogs, which are delicate ecosystems that can take centuries to recover. Coconut coir, on the other hand, is a byproduct of the coconut industry.

Resources:

https://extension.okstate.edu/fact-sheets/soilless-growing-mediums.html

https://chemung.cce.cornell.edu/resources/container-gardening

https://www.ilsoyadvisor.com/are-you-neutral/

Rose Rosette Disease

By Shere Macumber, 9/4/2023

Rose rosette disease (RRD) is a devastating disease caused by a virus that is transmitted by a microscopic mite. It is important for rose growers to understand the disease and how to prevent it.

RRD can affect all types of roses, including shrubs, climbers, and miniature varieties. The disease is characterized by the following symptoms:

- Development of an excessive number of thorns, which are longer and sharper than normal.
- Reddish-brown discoloration on the stems.
- Deformed growth, including the development of elongated stems, malformed leaves, and abnormal flower buds.
- Abnormal flowers that are smaller and less vibrant than normal.

Infected plants often decline rapidly. There is no cure for the disease, so prevention is key. Take these steps to prevent RRD from affecting your roses:



Image credit: Plant infected with RRD (Rose rosette emaravirus) Originally posted to iNaturalist by apgarm at https://www.inaturalist.org/photos/61116219. CC-by-4.0 license.

- Purchase disease-free plants.
- Regularly inspect your roses for the presence of the tiny mites. They are difficult to see, so use a magnifying glass.
- Remove infected plants immediately to prevent the spread of the disease.
- If you find mites on your roses, control them with a miticide or insecticide. Carefully follow the manufacturer's instructions.
- Prune your roses regularly to remove any diseased or damaged stems. Disinfect your pruning tools between each cut to prevent the spread of the virus.
- Providing roses with proper nutrition, water, and sunlight. Healthy plants are better able to resist disease.

Resources:

Penn State Extension https://extension.psu.edu/tips-to-control-rose-rosette-disease

American Rose Society

https://www.rose.org/ files/ugd/b152c0 d42726a1f5b444d5967e72192a8b3c62.pdf

Composting

By Dana Gould, 9/11/2023

Composting is a simple and effective way to turn kitchen scraps and yard waste into nutrient-rich soil that can improve the health of your garden and plants.

To get started, collect green and brown materials. Green materials include fruit and vegetable scraps, coffee grounds and grass clippings, while brown materials include leaves, straw, cardboard and wood chips.

Next build a pile by alternating layers of green and brown materials. Some people like to use a bin to help contain the pile, it's up to you. Make sure to keep the pile moist and turn it regularly to let in air and speed up the composting process.

Depending on how much you tend the pile (watering and turning) it can take several months to a year for your compost to be ready. When it's dark and crumbly like the image, it's ready to use.

Composting is an eco-friendly and cost-effective way to improve your garden's soil and reduce waste. With a little effort and patience, you can turn your kitchen scraps and yard waste into a valuable resource for your plants.



Resources:

For more details on how to make compost check out the Virginia Cooperative Extension Publication 426-703 (https://pubs.ext.vt.edu/426/426-703.html

For ideas on how to put your compost to good use around your yard see publication 426-704 (https://www.pubs.ext.vt.edu/426/426-704/426-704.html)

Winterizing Your Garden for Birds and Insects

By Shere Macumber, 9/18/2023

Autumn is a great time to prepare gardens to support

birds and insects in the winter. With the increasing loss of natural spaces, it is important for gardeners to supplement feeding, nesting and shelter for our feathered friends and insects.

Add plant diversity so different wildlife species can find the right areas. Evergreens such as pines, hollies, and junipers, planted in dense layers provide thick cover and shelter. Tree options include



Winterberry, Chris Light, CC BY-SA 4.0, via Wikimedia Commons

Red Oak (*Quercus rubra*), Redbud (*Cercis canadensis*), and Flowering Dogwood (*Cornus florida*). Add a few berry producing shrubs like Winterberry (*Ilex verticillata*) and Red Chokeberry (*Aronia arbutifolia*). Finish off with Spicebush (*Lindera benzoin*) and Witch Hazel (*Hamamelis virginiana*) to attract insects.

Clean sparingly. Leave some leaves and plant debris in flower beds. Many native bees lay eggs in burrows just



Lindera benzoin in flower. Fritzflohrreynolds, CC BY-SA 3.0, via Wikimedia Commons



Hamamelis virginiana, Krzysztof Ziarnek, Kenraiz, CC BY-SA 4.0, via Wikimedia Commons

beneath the surface of that protective layer. Decaying leaves also harbor tiny insects and insect eggs. When trimming perennials with hollow stems, leave half the stem. These stems are used by native bees to hibernate, and by cavity-nesting bees and insects for egg laying.

Add winter feeders. Different bird species have different feeding needs, so consider using both hanging and tray feeders. Reliable water sources are crucial so add a birdbath with a heater to provide hydration for the birds.

Be a steward of wildlife habitats. Sparingly clean up flower beds. Provide food, water, and protection. Remember that the life seen in spring and summer is often living in the fallen leaves and stems left behind in fall.

Helpful Gardening Info!

By Rebecca Crow, 9/25/2023

As a Master Gardener who does residential site visits, I frequently rely on these tools. Many have been mentioned in previous Sow You Know posts, but here they are – all in one place.

- 1) PictureThis a reliable plant identifier app available for iPhone or Android phones. (Free trial period, then monthly or annual payment options.) https://www.picturethisai.com
- 2) Rutgers Deer Resistant Plants database https://njaes.rutgers.edu/deer-resistant-plants/
- 3) Native Plants for Virginia's Capital Region Native trees, shrubs, perennials, grasses and ferns loved by butterflies and caterpillars with their water/sun requirements. https://static1.squarespace.com/static/58e25c41e6f2e17ea4cb7766/t/5ed00bfcb208c2251311ebc6/15906 92887078/Native+Plants+for+Virginia%27s+Capital+Region+Guide+for+download.pdf
- 4) Sandy's Plants-Advanced Search Free plant website landscaping tool https://www.sandysplants.com/Plant-Finder.
- 5) Smart Lawn form & instructions (Goochland residents only). \$20 fee for Virginia Tech lab report and recommendations for great-looking lawns. https://goochland.ext.vt.edu/content/dam/goochland_ext_vt_edu/files/smartlawn/2019%20GP%20SMART%20Lawn%20Enrollment-Brochure.pdf
- 6) Soil Test forms and kits for lawns, gardens, fruit trees and ornamentals may be picked up at either Goochland or Powhatan Extension Offices. \$10 fee for Virginia Tech Lab report with results and recommendations. www.soiltest.vt.edu https://www.soiltest.vt.edu/fees-and-forms.html
- 7) Plant Disease Diagnosis Form and instructions on how to submit samples to VA Tech Lab for diagnosis and treatment recommendations (\$35): https://www.pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/450/450-097/SPES-361.pdf.
- 8) Pollinator native plant collections for Virginia curated by Dr. Doug Tallamy, for sale online or locally. https://gardenforwildlife.com/collections/native-plants-for-virginia
- 9) Arbor Day Foundation's Best Tree Finder Tree Wizard helps select the best tree to plant https://www.arborday.org/shopping/trees/treewizard/Intro.cfm
- 10) Water Runoff and Rain Garden Installations Schedule a free site visit. You can even apply to have a percentage of the installation paid by them! Go to the VCAP Brochure https://vaswcd.org/vcap-information-2 / Contact VCAP Coordinator Blair Blanchette at blair.blanchette@vaswcd.org for more details.
- 11) Virginia Tech Extension's Home Grounds & Animals Pest Management resource: https://www.pubs.ext.vt.edu/456/456-018/456-018.html

To request a free Master Gardener residential site visit for your Goochland or Powhatan home, discuss plant problems or submit photos showing your concerns, email gpmail.com

Companion Planting for pest control

By Joanne Gergle, 10/2/2023

Companion plants can be used to repel insects, attract them, or simply mask the odors of other plants. Marigolds are great insect repellent companions for tomato, potato, and eggplant. Mint attracts bees, but repulses aphids, black flies, cabbage loopers, worms and moths, flea beetles, squash bugs, whiteflies, and ants; and best grown in a container as this fast grower easily spreads.

Many gardeners grow basil alongside tomatoes to repel whiteflies, asparagus beetles, and to enhance the tomatoes growth and taste. They plant nasturtium with squash to reduce squash bug populations. Sage is used to remove ants, flies, and mosquitos; and rosemary to fight off slugs and beetles. Garlic planted near roses, cucumbers, peas, lettuce, or celery deters rabbits and repels tree borers, aphids, Japanese beetles, ants, and cabbage loopers, moths and maggots. Spicier brassica crops can serve as a trap crop for flea beetles.

Many gardeners (including me) grow lavender, mint, basil, rosemary, and other highly aromatic herbs in hanging planters or containers. These are placed near patios, porches, entryways, and barbecue grilling stations to drive away pests, such as fleas, mosquitos, and wasps.

Researching and experimenting with companion plants for pest control is an exciting, chemical-free way to learn what does and does not work for you, your garden, and surroundings!

Side Note: My first-year shelling pea crop resulted in a zero-pest harvest thanks to the use of calendula, nasturtium and marigold allies! Basil, nasturtium, and marigold workmates also provided a 3rd year abundance of pest free tomatoes and peppers.

Resources:

Companion Planting at Home Gardens at https://extension.umn.edu/planting-and-growing-guides/companion-planting-home-gardens

Pest Control Companion Planting chart at

https://womensconference.byu.edu/sites/womensconference.ce.byu.edu/files/49e 1.pdf

Repel Pests with Plants at https://www.permaculturenews.org/2017/02/06/repel-pests-plants

Creating a Garden

By Dennis Kassner, 10/9/2023

Sole Gardener and Experience – If you are new to gardening, and the only person preparing and tending the garden, start small. Once you understand the work required, you can always enlarge it. Creating and tending a garden has a definite learning curve but will yield excellent results if done well.

Garden Preparation – Avoid using black plastic to "solarize" the garden beds as it is likely to kill the valuable micro-organisms in the topsoil. Instead, I laid two layers of cardboard on top of the existing vegetation and covered them with soil from Hanover Vegetable Farm. The cardboard suppressed the weeds and quickly decomposed.

Garden Location – My two 12' x 3' raised garden beds are near a tree line. After excavating about five inches of soil for better drainage, I lined the bottom and the tree-side of the beds with used commercial-grade landscape material from a nearby strawberry farm. Once my garden was established, I used a broadfork to aerate and maintain top soil.

Water Source – If using well water contact Goochland County Extension Office for a water test kit (Cost \$65. Test offered Sept 2023). If city water is your source, contact the county for water test results.

Garden Orientation and Sunshine – Plant rows running north-south if possible. However, east-west rows are acceptable IF the taller plants are grown on the north side of the bed/garden. The taller plants will not block the sun falling east-west on the shorter plants.

Amendments – Aged cow manure is recommended because fewer viable weed seeds survive the cow's complex digestion process. Horse manure is a satisfactory alternative, but remove wiregrass before incorporating, and watch out for sprouting weeds.

Resources:

www.virginiasoilhealth.org https://durham.ces.ncsu.edu/ www.nrcs.usda.gov

Mexican Bush Sage – It's Still Blooming

By Terry Festa, 10/16/2023

Mexican Bush Sage (*Salvia leucantha*) is a welcome ornamental in the late season garden. Its velvety purple flowers are held on spikes up to 10" long at the ends of the branches. They are covered with pollinators, butterflies, and hummingbirds when there are few other flowers in bloom.

This tender perennial (zones 8-10) is normally grown from cuttings. Although not available everywhere, it is worth the effort to search it out at local plant sales, at your favorite garden centers, or from online sources. Once all danger of frost has passed in spring, it is happy planted in either a garden bed or container (14" or wider).



Image credit: "salvia leucantha" by keroyama is licensed under CC BY 2.0.

It is a "plant it and (almost) forget it" plant. A full sun location, medium moisture, and fertile, well-draining soil are just about all it needs. Once established, it is fairly drought resistant. The small, single-stemmed plant with grayish-green, lance-shaped foliage in a 3-4" pot grows into a 4' tall by 2' wide well-branched beauty by late summer with no pruning, primping, or staking needed. It has no serious disease or insect problems and is deer resistant.

Abundant flowering begins in August and continues until frost. Cut flower stems have a long vase-life. They can also be dried since they hold color and form well, although dried stems are a tad delicate so should be handled with a modicum of care.

So, if you've never grown this impressive plant, jot yourself a note to buy one (or more) next spring.

Resources:

https://savvygardening.com/mexican-bush-sage/

https://www.thespruce.com/growing-salvia-leucantha-5076973

https://www.missouribotanicalgarden.org/PlantFinder/plantfindersearch.aspx

Seed Saving – Which Seeds Will Come True?

By Terry Festa, 10/23/2023

If you liked what you grew this year, you may want to save the seeds to grow again. Collection takes place at the end of the flowering cycle for perennials and late in the season for annuals.

If you save seeds, you want the offspring have very similar characteristics to those of the parent plant. When this happens, it is said that the seeds "come true."

For the most part, seeds come true from plants that "self-pollinate" when pollen within the flower pollinates itself or a flower on the same plant. Vegetable examples of are beans, tomatoes, peas, eggplant, and lettuce.

There are limited circumstances when seeds will come true when "cross pollination" by wind, insects, water, animals, or humans takes place. To avoid serendipity, be aware that the only time cross-pollinated seeds will come true is when:

A "true species" pollinates with the same true species. (The botanical name will only have two parts.)

A "variety of a species" pollinates with the same variety. (The botanical name will have two parts plus "var." followed by a variety name.)

A "passalong plant" pollinates with the same passalong plant. Passalongs are those that have been passed from one generation to the next and their genetic material has stabilized so the dominant characteristics are consistent from parent to offspring. Those that were developed before 1940 are considered "heirlooms."

With these caveats in mind, why not give seed saving a try? It works for both flowers and vegetables, and the adventurous, frugal gardener might try saving lots of different kinds of seeds.

Resources:

https://www.pubs.ext.vt.edu/426/426-316/426-316.html

"Seed to Seed, Seed Saving and Growing Techniques for Vegetable Gardens" by Suzanne Ashworth

How to Gather Seed for Saving

Terry Festa, 10/30/2023

Gathering seed is a cost-effective way to fill our gardens. We harvest seed from plants that will "come true" to the parent plant, are disease and insect free, represent the best specimens, and exhibit desired qualities and characteristics.

Dry process seeds when flowers are faded and dry, pods are brown and dry, and/or seed darkens in color. Collect mature seed on a sunny day after the dew has dried, but before it falls to the ground. Separate the chaff (parts other than the seed) from the seed.

Seed that is embedded in damp flesh must be "wet processed." Vegetables and fruits should be past ripe before collecting; some may change color and form a leathery skin. Cut them in half and scoop out the seeds removing as much of the pulp as possible. Use a small amount of water to help clean the seed and strain thoroughly.



Image credit: DutraElliott, licensed under CC BY-NC-SA 4.0 via Flickr.

Wet processing tomato seed requires a special technique: Scoop out the seeds and put them in a jar with a small amount of water. Allow to ferment and bubble for two to four days, stirring daily. This separates the pulp, kills viruses, and removes a seed coating that prohibits germination. When the bubbling stops, pour off the pulp, water, and bad seed that has floated to the top. Strain the water from the remaining seed

Dry thoroughly before storing seed. Arrange seeds in a single layer and dry in a well-ventilated spot out of direct sunlight. Drying time will depend on the size and thickness of the seed. Dry seeds are ready to store until the next growing season.

Resources:

Seed Savers https://axg.b87.myftpupload.com/learn/seed-saving/
https://www.southernexposure.com/growing-guides/

"Seed to Seed, Seed Saving and Growing Techniques for Vegetable Gardens" by Suzanne Ashworth

Proper Seed Storage – The First Step for Quality Plants

By Terry Festa, 11/6/2023

Great plants reflect appropriate seed storage techniques. Whether we purchase seeds or save them from our own gardens, storage methods impact their viability and vigor when planted out.

Key words for proper storage are dry, dark, and cool. Humidity allows the growth of microorganisms that can degrade seed quality. Light can also reduce quality and high temperatures can completely kill seeds. Fluctuating temperatures can cause germination rates and vigor to drop drastically.

In fact, seed vigor goes down well before the germination rate. That means even though a seed may sprout, the plant produced may struggle.

If seeds are purchased, keep them in the original packet which includes growing information. If they are gathered from the garden, the "completely dry" seeds can be packaged in paper envelopes or small zip bags. To avoid surprises, use permanent ink to label them with their botanical and/or common name, as well as the year of harvest.

These small seed parcels are best kept in tightly closed containers and maintained around 40 degrees F. in a dark, low humidity environment. Glass jars with rubber seals or plastic zip bags are good choices. Many gardeners store their seeds in the back of their refrigerators for safe keeping.

Some seeds are only viable for one year, even when stored properly. However, most will last for longer, some even for decades. With a bit of online searching the expected number of years can be found for each kind of seed.

Resources:

https://www.highmowingseeds.com/blog/best-practices-for-long-term-seed-storage

https://www.johnnyseeds.com/on/demandware.static/-/Library-Sites-

JSSSharedLibrary/default/dw913ac4d0/assets/information/seed-storage-guide.pdf

https://seedsavers.org/storing-seeds/

Mothballs....What You Don't Know Can Be Deadly

By Rebecca Crow, 11/13/2023

Did you know that mothballs do NOT deter animals like deer or moles? (I didn't!)

Did you know that mothballs are a pesticide that is regulated by the Environmental Protection Agency? (I didn't!)

Did you know that using mothballs outside of the parameters listed on the label is considered illegal? (Thankfully, as a Master Gardener, I DID know that!)

Mothballs are not intended to be used outdoors! Using mothballs to deter animals is a dangerous environmental hazard. According to the Virginia Farm Bureau, "If used outside its chemicals can leech onto the ground putting children, pets and other animals at risk while contaminating plants, soil and water."



Image credit: Mothballs. Wiki Farazi, CC0, via Wikimedia Commons

Mothballs are meant to be used in closed, airtight containers so that the trapped fumes build up and kill any clothes moths inside.

Resources:

https://issuu.com/virginiafarmbureau/docs/cultivate 23 spring final

Spring 2023, Virginia Farm Bureau's newsletter Cultivate, page 15

What's in a Name? – Botanical Plant Names

By Terry Festa, 11/20/2023

Have you ever seen a plant that you felt you simply must have? Watch out! That beautiful plant may have many different common names. To confuse the matter even more, many very different plants may share the same common name.

So, what is one to do? The answer is to use the plant's botanical or scientific name. Don't worry about the pronunciation, just do your best -- or simply write them down.

The first word in a botanical name is the **genus** (pronounced JEE-nuhs) and is shared by plants with similar characteristics. It may be derived from Latin or Greek words, a person's name or just describe the plant. The second word or **specific epithet** may honor a person, describe a plant characteristic, or designate the plant's origin or the habitat. Together, the **genus** and **specific epithet** indicate the **species**. A "true species" will only have these two parts to its name and is specific to only one plant.

A plant's name may have more parts. Similar plants within a species can have one or more outstanding differences.

- Subspecies (subsp.) and varieties (var.) occurred naturally, stabilized, and are true to type.
- Cultivated varieties or "cultivars" are unstable. They may have occurred naturally or been hybridized to exhibit special characteristics. They are expressed in modern language and set off in single quotes. Sometimes, easily pronounced trademark names marked with TM or ® are used as a marketing tool and take the place of a cultivar name.

As you visit garden centers and botanical gardens or scan plant catalogs and online plant sites, begin to notice the botanical names. The more you expose yourself to them, the easier it gets. You'll then be able to research the exact plant to make sure it is the "right plant for the right place" in your landscape.

Resources:

https://mastergardener.extension.wisc.edu/files/2015/12/plantnames.pdf

How to Write Botanical Names: https://generalhorticulture.tamu.edu/h202/labs/lab3/sciname.html

It's Poinsettia Time

By Terry Festa, 11/27/2023

As temperatures fall 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?

Above their green leaves, modified leaf forms, or bracts, magically turn red, pink, white or other colors as the days shorten. In the center of the bracts are buds that open into small yellow flowers. The most popular flowering potted plant in the United States, according to the University of Missouri Extension, they are readily available.

The tender plants are native to Southern Mexico, and they hate cold! Buy yours on a mild day, have it wrapped, keep it above 55 degrees and take it straight home.

With proper care, poinsettias will last well into winter.

Keep them at a steady 65 to 70 degrees with six to eight hours of bright indirect light. Avoid temperature fluctuations, dry or drafty areas, windows, heaters, fireplaces or fans.



Image credit: Mollyroselee from Pixabay

Keep soil moist but never soggy: dry plants will wilt but can be revived; too much water can cause fatal root rot. So, water when the soil feels dry to the touch or if the pot feels light. Place the pot in the sink, saturate the soil, then allow it to drain thoroughly over the sink before replacing the foil or putting it in an ornamental container, or on a saucer.

If you want to keep the plant longer than a few months, feed it once a month with an all-purpose houseplant fertilizer at half strength.

With care and luck, you can keep it going and get it to rebloom next year. There is plenty of easy-to-follow information online for the adventurous gardener.

Resources:

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

Cultivating Mental Well-Being and Inner Peace

By Shere Macumber, 12/4/2023

Amidst our fast-paced and stressful modern lifestyle, finding solace in nature is a therapeutic necessity. Gardening, with its blend of nurturing plants and reconnecting with the earth, is a powerful tool for promoting mental well-being and inner peace.

Gardening provides a unique sense of purpose and accomplishment. Witnessing the growth of plants nurtured by our own hands instills a sense of satisfaction and pride, boosting self-esteem and confidence.



Image credit: Japanese Garden Artifact, Herman National Park, Houston, TX 2021, Pixabay.com

Gardening encourages mindfulness – a state of focused awareness in the present moment. As we immerse

ourselves in planting, we momentarily let go of worries, allowing our minds to find tranquility amidst the beauty of nature.

Gardening offers an outlet for stress relief. The rhythmic and repetitive motions involved in weeding, watering, and pruning can be meditative, calming the mind and reducing anxiety. The sights, sounds, and smells create a sensory sanctuary, promoting relaxation and reducing cortisol, the stress hormone.

Gardening exposes us to natural sunlight, which triggers the release of serotonin – a neurotransmitter associated with mood regulation. This leads to improved mood and increased feelings of happiness. It also provides a physical workout, releasing endorphins, known as the "feel-good" hormones.

Lastly, gardening fosters a sense of connection – not just with the plants we tend, but also with the wider community. Engaging in gardening activities with others promotes social interaction and a support network, reducing feelings of isolation and loneliness.

Resources:

https://www.antioch.edu/wp-content/uploads/2020/11/0411953horticulture-therapy-workbook.pdf

Garden Themed Gifts

By Terry Festa, 12/11/2023

Gifts please both the recipient and the giver, and garden-themed gifts are appropriate for those who enjoy gardening and those who prefer not to get their hands dirty. Right now, garden centers, specialty stores and craft fairs are brimming with ideas for the perfect gift.

Any pretty potted plant or floral arrangement would be welcome. Add a personal touch by potting a few small plants together in an attractive container. Don't forget to include plant care instructions for novice growers.



Image credit: kalhh from Pixabay

Whimsical and practical ornaments of all sizes and materials – resin, stone, concrete, wood, glass, ceramic, or metal – and in every price range, abound. Choose from sundials, sun catchers, favorite animals or figurines, whirligigs, wind spinners, plaques, solar lights, outdoor furniture, and much more.

Friends who enjoy bird watching would like birdhouses, feeders, and birdbaths to attract birds to their backyard. The pleasure of observing birds' antics and hearing their songs will keep on giving all year long.

A stylish pair of garden shoes would be useful in - and out of - the garden. Your recipient will think of you gratefully whenever they slip them on to venture outdoors whether to collect the mail or work in the wet garden.

If you are still stymied, what about a gift certificate? A well-stocked business will have something for everyone's taste.

So, doesn't a trip to the garden center seem like an excellent idea? There's plenty of parking, plenty to choose from, and plenty of elbow room to wander with ease. Just walking in will stave off the grumpies, spark a feeling of Zen, and add a smile to your face.

Winter Sunlight vs. Summer Sunlight

By Joanne Gergle, 12/18/2023

Successful gardening depends on location, location and location! So, when planning a garden during the

winter months, a new gardener should consider how existing structures and seasonal sunlight changes will affect their landscape.

The sun will always rise in the east and set in the west, but the amount of sun exposure varies significantly with the seasons. In other words, a spot that is bright and sunny in the wintertime may be in deep shade six months later.

During the winter, when the Northern Hemisphere leans away from the sun, there are fewer daylight hours, and the sun hits us at a lower angle. When the sun doesn't get as high in the sky, we have shorter days and longer nights, and the earth doesn't warm up.

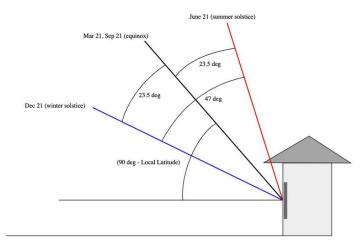


Image credit: Seasonal differences in the Sun's declination, as viewed from the mid-northern city of New York, New York; CC BY-SA 3.0,

Hartz – Own work

Although the sun always shines at the same strength, in summer it is far higher in the sky with less atmosphere to block its rays, leading to shorter shadows, and longer sunny days.

Another planning consideration is any structures (i.e., trees, shrubs, a house, a garage) that could cast shade over the garden during the change in seasons. Plan for changes that may impact plants in a negative way during the growing season or provide them with some much-needed relief from the scorching afternoon sun.

"The garden year has no beginning and no end." – Elizabeth Lawrence

Resources:

Planning the Vegetable Garden https://vtechworks.lib.vt.edu/handle/10919/75327

Updated USDA Plant Hardiness Zone Map https://planthardiness.ars.usda.gov/

Garden Planning – The Most Wonderful Time of The Year

By Steve Genett, 12/25/2023

Winter is a great time to plan your garden. Do a little extra research, review your notes on last year's successes and problems. Read a book or three. Get more specific on varieties. Look for opportunities to replace existing plants with native alternatives in your landscape.

The possibilities when you dream (or scheme, maybe) can be exciting.

Enjoy your optimism, but be realistic about your time, goals and available space.

I usually make two plans: (A) The Dream Plan and (B) The Priority Plan.



- (A) The Dream Plan can repeat year after year -- until your dreams come true. For years, we dreamed about tearing out our front lawn and replacing it with a vegetable garden. It came true in 2022 and was moved to the Priority List. This year we added ten raised beds.
- (B) The Priority Plan is more systematic. It begins with seed selection, and includes lists for plant starting, companion planting, soil preparation, containers, beds, in-ground planting dates, bloom times and days to maturity.

Last year's notes will remind you about pest life cycles and other challenges you faced. (If you didn't keep good notes, start this year!)

Warning!! Online advice won't always be helpful. Instead, use trusted sources like research universities, local master gardener associations and Virginia Tech Cooperative Extension offices where you will find a vast amount of reliable information.

Whatever type of gardening or landscape plants you prefer, there's no time like December and January to get started with planning. There are fewer chores to do in Winter, so this is an ideal time to be hopeful about the coming Spring. Soon seed exchanges, winter sowing, spring starts, cool weather plants, pruning and other activities will be upon us, and it will be time to get outside again!

Resources:

The Virginia Tech Cooperative Extension, https://ext.vt.edu/lawn-garden.html; https://ext.vt.edu/lawn-garden.html

Get Gardening! https://www.youtube.com/playlist?list=PLnWrSBjZVh9f1DCZmjQAfJNVZdT8F8tYw



Cover and back page images by Kitty Williams