THE GARDEN GATE

A Community Newsletter by the Rockbridge Area Master Gardeners

April 2025

INSIDE THIS ISSUE:

Welcome, everyone, to the Rockbridge Area Master Gardener community newsletter.

Each month we bring you relevant seasonal scientific-based horticultural information for Rockbridge County. If you enjoy this newsletter, please pass it on. Subscription information is on the last page of this newsletter or on the RAMGA website, www.ramga.org.

Virginia Master Gardeners are Virginia Cooperative Extension volunteers, extending horticultural and environmental outreach across the commonwealth. Volunteers receive fifty hours of training and are required to do, at the minimum, 20 hours of volunteering per year and 8 hours of Continuing Education to maintain their MG status.

Upcoming: Saturday, April 26, noon – 1:30pm, RARA Community Room, 350 Spotswood Dr., Native Tree and Shrub Giveaway sponsored by the Rockbridge Master Gardeners and the James River Chapter of the Virginia Native Plant Society. In addition, there will be activities for kids. In addition, Root 11 Native Plant Nursery and Master Gardeners will be selling native plants.

Saturday, April 26, 10:30am, RARA Community Room, 350 Spotswood Dr. "Growing Tomatoes" with MG Jill Alvarado.

HAPPENINGS…

Local events are in a larger font

Saturday, April 12, 9:00am – 2:00pm. Spring Plant Sale. Thomas Jefferson Center for Historic Plants, 1293 Tufton Farm, Charlottesville.

Friday, April 25 – Saturday, May 3, 9:00am – 3:00pm. Spring Plant Sale. Edith Carrier Arboretum, Ernst Tree Terrace, James Madison University, Harrisonburg, VA.

*****Saturday, April 26, Noon – 1:30pm, Native Tree and Shrub Giveaway sponsored by the Rockbridge Master Gardeners and the James River Chapter of the Virginia Native Plant Society. RARA Community Room, 250 Spotswood Dr., Lexington.**

*****Saturday, April 26, 10:30am, RARA Community Room, 350 Spotswood Dr. "Growing Tomatoes" with MG Jill Alvarado.**

Saturday, April 26, 9:00am – 1:00pm. Native Plant Sale. The Nature Foundation at Wintergreen. 3421 Wintergreen Drive, Roseland, VA. https://www.Tnfw.org

Saturday, April 26, 9:00am – 1:00pm. Bedford Master Gardener Plant Sale, Bedford County Gym, 1059 Turning Point Rd, Bedford, VA.

Saturday, April 26, 11:00am – 3:00pm. Shenandoah Chapter of the Virginia Native Plant Society Spring Plant Sale, Gypsy Hill Park, Staunton.

Sunday, April 27, 1:00pm – 4:00pm. Jefferson Chapter of the Virginia Native Plant Society Annual Native Plant Sale, Barn at the Ivy Creek Natural Area, Charlottesville.

Saturday, May 3, 10:00am – 2:00pm, Piedmont Master Gardener Spring Plant Sale. Albemarle Square Shopping Center, Charlottesville.

*****Saturday, May 3, 8:30 – noon, Valley of Virginia Herb Sale. Sam Houston Auction Barn 1260 Valley Pike, Lexington.**

APRIL GARDEN TIPS

General:

- Before working in your garden, make sure the soil is dry enough. It should crumble in your hand; if it is not, wait until it dries out before working the soil.
- Clean up garden debris from last year.

- Pull weeds from beds.
- Work organic material such as chopped leaves or compost into garden beds.
- Mulch garden beds 2 to 3 inches deep with an organic material.
- If you did not complete your garden fertilization in March, continue that in April.
- Newly planted perennials, trees and shrubs will generally need 1 inch of water each week – either from rain or irrigation
- Keep an eye out for Asian jumping worms. Here is how to deal with them: https://piedmontmastergardeners.org/article/invasive-jumping-worms/

Insects:

"Insects to be on the Lookout for in April", a great publication by Eric Day, Insect ID Lab, Dept. of Entomology, Virginia Tech

https://albemarle.ext.vt.edu/content/dam/albemarle_ext_vt_edu/files/hort-tip-sheets/4-14-insects.pd

Fruits and Vegetables:

An excellent and useful VCE publication organized by climate zone (Rockbridge, for the most part is zone 6B heading towards 7) is "Virginia's Home Garden Vegetable Planting Guide: Recommended Planting Dates and Amounts to Plant", https://www.pubs.ext.vt.edu/426/426-331/426-331.html

This is the big month for planting vegetables. However, if planted too early, frost will kill your plants unless you are prepared to protect them on those cold nights.

- Plant out starts for cool season vegetables: broccoli, cauliflower, lettuce, spinach, swiss chard, kale.
- Sow seeds for cool season crops: peas, radishes, lettuce, onions, beets, parsley, Swiss chard, spinach, kale, leeks.
- Plant cane berry plants.
- Plant blueberries and strawberries.
- Spray fruit trees with dormant oil spray if temperatures are over 40 degrees.
- Time nutrients to fruit trees at the fruit setting time. A good rule of thumb is to fertilize after the petals fall.

Perennials: Fertilize perennials and spring bulbs as soon as possible if not already done. I am a big fan of Osmocote, a time release fertilizer.

- Spring is the ideal time to divide most perennials, both summer and fall bloomers. Replant the divisions or share with friends.
- Remember that some perennials are late getting started in the spring; mark the spot in some way so you do not inadvertently plant over them.
- Delay organic mulching to allow soil to warm up but act before weeds become established.

Trees and Shrubs:

If you are planting new trees and shrubs, remember to consider hardiness, light requirements, soil drainage, wind tolerance, mature size, insect or disease problems, maintenance levels, etc. when choosing your plant. Remember the "plant right place" rule. Here is another good Tech publication, "How to Plant a Tree", https://www.pubs.ext.vt.edu/SPES/SPES-226/SPES-226.html

Lawns:

- Sharpen mower blades.
- Finish seeding early in the month.

Pruning:

- Prune spring flowering shrubs after flowering is completed.
- Prune roses to an outward facing bud

Without Ants – No Spring Ephemerals!

Researched and written by Jan Smith

Editor's note: "Go to the ant, you sluggard; consider its ways and be wise" (Proverbs 6:6-8). After reading this article, you will have a new respect for the humble ant.

For many years, the local native plant society has led spring wildflower walks along our public trails. These walks not only helped people to learn the names of plants but also their specific uses as host plants to butterflies, as herbal medicines, and other fun factoids. Such a factoid is that many of the lovely flowers' seeds are dispersed by ants. True fact! Keep reading.

This seed-carrying partnership between plants and ants is called myrmecochory. Both sides often benefit from working together. Plants that use ants to disperse their seeds evolved to have seeds with a fat-filled structure on their exterior called an *elaiosome* which is quite yummy and nutritious to ants. The ants take the seeds, one by one, to their colonies where they feed the elaiosomes to their young.

The gelatin-like elaiosomes on these bloodroot seeds may look like a slime or fungus feeding on the seed, but they are in fact made by the seed itself. (Photo Credit: Kent McFarland CC-BY-NC)

But the ants have no use for the seeds and so discard them in a special refuse pile inside their nest, like a "kitchen midden" or trash pile.

In just this past year, I have actually seen pictures of what elaiosomes looked like. It is amazing what they can take a picture of these days.

I then wondered what kinds of ants eat elaiosomes and decided to do some research. Thank goodness for the internet. This is what I learned. *Aphaenogaster* ants are the ones eating elaiosomes in our eastern forests. There are lots of studies being done on ant-plant relationships. For example, there is a study that link ants to trillium. This study found ants prefer certain species of trillium to others, which could explain why certain trilliums are rare. Another intriguing finding. Ants secrete antimicrobial chemicals to clean themselves and their fellow ants. These chemicals change the seeds microbiome -- perhaps changing the seeds' dormancy, viability, timing of germination, and creating a healthier seedling. And one more important finding. In areas disturbed by man – either farmed or logged -- few ants are found perhaps due to less leaf litter, aggressive slugs, and introduced pathogens. Fewer ants could be one reason why there may be fewer plants in the understory. Who knew that ants were nature's seed planters?

I hope you look at ants with a new appreciation this spring. It may be the reason you see a wildflower.

Finding your Niche

Photosynthesizing in Winter

The Story of Two Native Orchids

Researched and written by Jan Smith

Most plants photosynthesis and thus do most of their growth in the summer when the sun's rays are the strongest. But a few plants find their ecological niche by starting to grow their leaves in the autumn, when leaves are falling and letting more sun, albeit weaker, reach the forest floor. This strategy means no competition from taller plants. Photosynthesis can occur in temperatures just above freezing.

On my walks along local trails, I notice two plants using this strategy, both of which are native orchids. Both develop their leaves in the autumn and again in the spring. After the leaves have decayed and disappeared, a single flower stalk shoots up with very small flowers. You must look carefully to find this small stalk or the later seed pods.

Putty Root Orchid (*Aplectrum hyemale)* is found throughout the eastern states. Its oddly veined leaves appear to crinkle along the veins. This may allow them to flex, avoiding freeze-thaw cycles destroying the leaf, as the temperature changes during winter. There is little research about the pollinators for these orchids but are likely small solitary bees; many of these plants also self-pollinate. The seed pods contain thousands of tiny seeds. Like many orchids, these seeds are wind dispersed. Only a few will land on moist soil with the right type of commensal fungi to survive and grow into another plant. Why the name of Putty Root? It seems the underground stem-bulbs, called corms, have a sticky mucus that was used as a type of glue to mend pots and ceramics. The corms will also develop along the root system, sprouting a new leaf. Many times, you'll find clusters of the leaves, a clone from a single founding plant. Speaking of corms, this plant is also referred to as Adam and Eve since its corms come in pairs.

Cranefly Orchid (*Tipularia discolor*), like the Putty Root, is found throughout the eastern states. Its leaves are smooth and dark green above also with some pleats but not as noticeable as the Putty Root's pleats. What is distinctive is its dark purple underside, which explains its Latin name "discolor". The leaf's top and bottom are two different colors. This purple color may redirect energy-giving light waves back into the leaf giving the chlorophyll another chance to use waning light. This orchid is not pollinated by craneflies but by small noctuid moths.

Crane-fly Orchid (*Tipularia discolor*). Photo by Laura Morris.

Traits common to all our local native orchids are easy to recognize. Leaves have fairly noticeable parallel veins from tip to base. This is characteristic of orchids and other monocots like lilies and irises. Also, Orchid flowers have 3 sepals and 3 petals.

Propagating orchids is difficult as their root systems require a symbiotic relationship with compatible mycorrhizal fungi. Otherwise, the orchid may fail to survive. Orchids may be slowly propagated by separating its corms to establish new plants. Propagation by seed is very difficult and rarely successful. A moist to mesic loamy soil with abundant organic material is preferred. Soil pH can vary from mildly acidic to neutral. ***Note that removing orchids from the wild to plant elsewhere will likely not work plus it is illegal.***

References

https://vnps.org/johnclayton/2016/02/08/putty-root-orchid-january-2016-wildflower-of-the-month/

https://www.nnvnps.org/blog/k5zjs9w0psizwe1kw3o4i02bfm0i7h

https://columbusaudubon.org/the-orchids-of-winter/

https://www.illinoiswildflowers.info/woodland/plants/putty_root.html

https://www.fs.usda.gov/wildflowers/plant-of-the-week/tipularia_discolor.shtml

https://www.brandywine.org/conservancy/blog/native-orchids

https://goorchids.northamericanorchidcenter.org/species/aplectrum/hyemale/

Planting and Designing with Dormancy

Jan Smith and Tamara Teaff

Follow the link at the end of this article to explore the importance of plant dormancy during winter. Though the plants featured are herbaceous perennial species of New York state, the physiology, ecology, and aesthetic benefits of plant dormancy may be applied to our native plants. Although winter is behind us, planning what you plant now may have a positive impact on your winter garden and also add a visual interest for all four seasons.

Note that this is a “flip book” presentation. We love how the pages make a “swish sound” when you turn them. Be aware that there are two plants featured that are on the Virginia Invasive Plants Species

List. It is our hope that viewing the book will provide a framework for thinking through your garden landscape design from a new perspective or to encourage you to continue what you are already doing.

https://heyzine.com/flip-book/cb2775e80a.html?utm_campaign=linkinbio&utm_medium=referral&utm_source=later-linkinbio#page/1

KID FRIENDLY ACTIVITIES

Windowsill Garden- A Kid-Friendly Activity

Researched by Tamara Teaff

Known to some as kitchen scrap gardening, it is basically growing a green plant on a windowsill by placing vegetable scraps in a bowl of water and keeping it in a sunny location. This will produce a delightful display of greenery in your kitchen. It is easy to do.

1. Cut the top off a vegetable, such as a carrot, but leave about an inch of the vegetable attached.

2. Place the vegetable scrap in a shallow bowl of water with the cut side down and the leaf end up. Adding decorative pebbles, such as flat glass marbles, to the bowl will give the vegetable some support and the container an aesthetic appeal.

3. Put the container in a sunny location.

4. Replace with fresh water at least once a week or more, if the water evaporates. Fresh greens will soon appear.

Other vegetables to target for this project include green onions, celery, Romaine lettuce hearts, basil, and sweet potato. For the sweet potato, you need to suspend the sweet potato, cut in half, using toothpicks in a shallow container of water. Both roots and sprouts will start to grow in a few days. Just to ensure success, select organic produce since some non-organic vegetables may be treated to prevent sprouting. Some people have had success in transplanting the rooted vegetables in soil utilizing an outside container. Or just enjoy the green foliage created by your kitchen scraps. This activity is a fun way to introduce the importance of sunlight to green plants (the process of photosynthesis) as well as observe a plant's root growth. This may be a fun activity for a budding young gardener you know.

Reference: How to Make Things Grow by David Winkers and John Tuey. 1972. Van Nostrand Reinhold Company

The Garden Gate, a monthly newsletter by the Rockbridge Area Master Gardeners, www.ramga.org

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Extension Master Gardeners