THE GARDEN GATE

A Community Newsletter by the Rockbridge Area Master Gardeners

Summer 2024



Rockbridge Master Gardeners share their knowledge at "Celebrate Rockbridge"

INSIDE THIS ISSUE:

Local Farmers' Markets, p. 2 Summer Garden Chores, p. 2 – 3 Drought Stress, p. 3-5 No-Mow Lawns, p. 5-6 Garden for Fall in Rockbridge County, p.6-7 Butterflies are Cared for by Ants, p. 8-9

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

Each month we will be bringing you relevant seasonal horticultural information for Rockbridge County. If you enjoy this newsletter, please pass it on. Subscription information is on the last page of this newsletter.

LOCAL HAPPENINGS

Have a plant question? Check out the Rockbridge Master Gardener Booths at the following local events:

Saturday, August 24, 9:00am – 3:00pm. Rockbridge Community Festival, downtown Lexington

Saturday, October 12, 10:00am -4:00pm. Buena Vista Mountain Day, downtown Buena Vista on Magnolia Ave. between 20^{th} and 22^{nd} St.

LOCAL FARMERS' MARKETS:

- Lexington Farmers Market, behind the Southern Inn, Weds., 8am 12:30pm
- Rockbridge Baths Farmers Market, Rockbridge Baths Fire Station, Sat., 9am –
 11am
- Glasgow Farmers Market, corner of 10th St. and Kanawha, Fri, 10am 2pm and Sat., 9am noon
- Kerrs Creek Community Market, 27766 West Midland Trail, Sat., 9am noon
- Fairfield Farmers Market, 5613 North Lee Highway, Sat., 9am noon
- Seasons' Yield Farm Market, 165 Oakland Circle, Raphine, 2nd and 4th Saturdays, 10am – 2pm

SUMMER GARDEN CHORES

General

- Watering is essential in the hot months of July and August. Don't neglect your containers. They often need to be watered daily.
- Harvest vegetables as soon as they are ripe to encourage further production.
- Weed, weed, weed.
- Continue to apply mulch to shade plant roots and retain moisture.
- Avoid pruning trees and shrubs now, except for dead or diseased branches.

Insects:

Watch out for Japanese Beetles. We usually see them the end of June here in Rockbridge County
although I spotted the first one the third week of July this year. If you are going to use traps, be
sure and place them far away from the plants you want to protect

Fruits and Vegetables:

Keep an eye on your tomatoes. Late blight is often a problem in this area. Check out this great
article on tomato diseases in the Piedmont Master Gardener's great newsletter, "The Garden
Shed": https://piedmontmastergardeners.org/article/tomato-diseases/. With this hot sunny
summer weather, tomatoes can be susceptible to sun scald. Place row cover or shade cloth
especially on plants that aren't caged. The new tomato guide from RAMGA is also a great

resource:

https://www.ramga.org/ files/ugd/aa5d3e 1d64f23222be458f8bd780b48b63b552.pdf

- A second crop of summer squash started in July/August often deters the dreaded squash beetles.
- Cabbage, Turnips, Collards, Lettuces, Mustard can be started from seed starting August 14 as cool weather crops.
- Sow cover crops such as annual crimson clover once areas become empty.

Flowers:

- Deadhead perennials and annuals to keep them blooming.
- Keep fallen rose foliage cleaned up to help prevent fungus.
- Iris may be divided now through September.
- Deadhead your flowering plants to promote more bloom. Pop the seed heads off your everblooming daylilies such as 'Stella d'Oro's. This will allow the plant to put its energy into more blooms rather than seeds.
- Pinch back lanky annuals.

TROWEL AND ERROR: News from the Rockbridge County RAMGA Help Desk

Drought Stress on my Trees: What to Look For – and What Should I Do?

Where is the rain? As we know there has been little to no rain over the past two months. Right now, some areas of Rockbridge County are experiencing moderate to severe drought conditions exacerbated by high temperatures. Shallow rooted trees have a harder time than deep rooted trees since they need more surface water to stay hydrated. When trees are stressed by lack of water, they become vulnerable to opportunistic bacteria and fungus infections as well as insect invasion. Newly planted trees have underdeveloped root systems throughout their first years requiring more water. So how do I know and what should I do?

Common Symptoms/Early Signs

- Are the edges of your tree leaves browning and beginning to curl? Yes, trees are subject to sunburn which can be damaging.
- Are you noticing premature color changes? Leaves will initiate color changes, green to yellow as an early indicator.
- Leaf drop and curl is another sign. Typically, these leaves feel dehydrated as they lose vitality.
- Thin barked trees such as cherries experience breaks in the bark due to sun damage. It is not uncommon to see sap ooze from these breaks. Since the sap contains sugars, it creates susceptibility to bacterial infections. Black discoloration confirms the problem that can then escalate to gummosis.

Mulch Can Be a Big Help

Spread mulch around your trees, making sure not to place it up against the bark of the tree. Mulching helps retain moisture close to the tree roots and prevents quick evaporation. Mulching helps to keep the roots cool and prevent weeds from growing and competing for the available moisture. Mulch does retain about 10% more moisture than soil, so when you water remember to water a little more around your trees that have mulch to ensure water reaches the tree roots.

Water Your Trees

As gardeners or homeowners, we do not usually water our trees, but in a significant drought watering may be needed. When you do water make sure to water around the base of the tree and out to the edge of the canopy. Below is a table indicating the amount of water needed during a significant dry period. This table is from the South Dakota Extension Service and our current drought situation in Virginia mimics the typical dry conditions in July in South Dakota.

Tree Diameter	Canopy Spread	Weekly Water Needs
(inches@4.5 feet)	(Feet)	(Gallons)
3	5	12
6	10	45
12	20	180
18	30	400
24	40	700

https://extension.sdstate.edu/trees-drought-stress

The table above reflects total water uptake needs for your trees. As a rule of thumb, the larger the tree the deeper the root system, enabling the tree to obtain moisture from ground water. In healthy soil a complex symbiotic relationship between soil microorganisms and roots aids in the delivery of water to the roots. With young trees the nursery has trimmed the bulk of the roots prior to potting. Therefore these trees are most vulnerable and dependent on surface water. Take a walk through your property and observe changes to your trees and if they are showing signs of stress consider supplementing with water.

Some Ideas to Plant a No Mow Lawn, and Keeping your Neighbors or HOA Happy By Karen Carlton

Last month, I had written that I recently attended the Virginia Tech Master Gardener College where I attend a presentation by a fellow Master Gardener, Elaine Mills. The title of the presentation was "Creating A Well-Layered Landscape". She gave us ideas on how to create a home landscape that benefited wildlife, pollinators, birds and beneficial insects, while also being esthetically pleasing to look at. She started the presentation with how to create a sustainable landscape and gave the basic

principles of how one would start to create this garden.

The first is to get rid of any invasive species that are planted in your yard. Lawns (grass) are one of the most invasive plants. Ms. Mills talked about how one can plant a no mow lawn with various native plants and how to landscape your yard to be pleasing to the street view. She talked

about how the ideal landscape formula for doing this no mow lawn project is 70% native plants and 30% benign non-native plants.



Ms. Mills in her presentation stated that you need to create layered perennial beds. This would be done by choosing different flower shapes with a range of bloom times, so all the flowers are not blooming at the same time. Plant at least 3 different species to bloom at any given time. It is best to plant a biodiversity of multiple native plant families in your garden. Plant flowers in layers i.e.: short growing flowers in front, taller growing flowers in the back. Use an organic mulch, such as compost or leaf mulch to maintain the moisture in the soil and to keep the weeds down.

When planting your no turf garden, one needs to keep in mind "curb appeal" for your home landscape. You need to show others who look at your landscape and give them "cues of care". You need to have well defined paths and trails through your garden. It helps to have a high proportion of colorful

flowers. It is best to have indications of care for your property and wildlife with such things as lawn art and bird feeders.

I think that growing a well layered landscape is like having your cake and eating too, the best of both worlds!

RESOURCES: Planting in a Post-Wild World by Thomas Rainer and Claudia West

Video: Sustainable Landscape Basics MGNV: Small Space Garden Plans

Plant NOVA Natives: Native plant landscapes & Damp; "ask the expert" videos.

Gardening for Fall in Rockbridge County

By Amira Walker

The excitement and anticipation of seed planting does not have to be limited to the spring months.

While harvesting is typically on the mind as summer wanes into fall, it is also the perfect time to plan an autumn garden. There are a multitude of benefits to fall planting, both for you and your plants.

Cooler temperatures are pleasant for gardening, but also are less stressful for new seedlings. Pest activity and risk of disease slow down as temperatures fall. Many vegetables are ideal for fall planting, and the cooler weather alters their flavor, enhancing and sweetening their taste. Some veggies simply won't tolerate summer weather and need to be planted in the fall to grow at all.



Fall Gardening display at the Seed Library at the Rockbridge Regional Library

With these benefits in mind, it is important to have a plan in place, as fall planting in Rockbridge County requires strategy. Not only do we have little topsoil, a variety of microclimates, and lots of clay, winter frosts typically arrive in the first weeks of October, and plants generally need to be mature before that date. Fall garden planting and planning must begin in August.

For some vegetables, a mid-summer planting is needed to see them arrive in fall. Some should be started indoors and then transplanted to beds in the fall. Still others can be planted in August and September, with late September really being your last chance to plant for fall before transitioning to a winter/spring garden mindset. Temperature is important. For example, although fall is an ideal time to

plant garlic, the dates vary wildly around the country. Your best bet is to use a soil thermometer and look for a temperature of 60° at a depth of 4 inches before planting your garlic. Kale germinates in temperatures between 45-75 degrees, lettuce from 40-80 degrees, peas from 40-75 degrees, radishes from 45-90 degrees, spinach from 45-75 degrees, and turnips from 60-105 degrees. Peas, radishes, and cabbage can survive temperatures in the mid-20's, lettuce and turnips will survive into the high teens, while kale and spinach can survive single digit temperatures.



Trial, error, and experimentation will be needed. Fall crops include arugula, beets, carrots, cilantro, collard greens, endive, mustard greens, Swiss chard, spinach, radishes, cabbage, garlic, lettuce, kale, turnips, and peas.

Aside from vegetables, fall is also a wonderful time to grow flowers and cover crops. Flowers provide an essential food source to pollinators such as bees, birds, and butterflies, as well as add beautiful color and texture to gardens and fall displays. Flowering plants also act as a buffer between the earth and rain, preventing erosion and purifying water.

Cover crops restore nitrogen, phosphorus, and potassium to garden beds that are depleted after a harvest. Similarly to flowering plants, they also prevent soil erosion and control weeds. Cover crops for this time of year include alfalfa, oats, barley, field peas, buckwheat, winter rye, winter wheat, crimson clover, hairy vetch, winter peas, subterranean clover, rapeseed, black medic, and white clover.

Spring is the best time to shop for seeds that you will use in fall, but this August, be sure to check the seed library at the Lexington branch of the Rockbridge Regional Public Library. There will be a display all about fall planting and several seeds available for free especially suited to fall gardening.

Further Reading:

<u>Fall Vegetable Gardening – Virginia Cooperative Extension Publication</u>

Hardiness Zone 7a Recommended Planting and Harvest Dates

Fall is for Planting Natives – Virginia Department of Conservation and Recreation

Butterflies Are Cared for by Ants!

By Jan Smith with photo by David Rosher

Editor's note: Hover over the underlined words to learn more about the ant and butterfly connection.

I hope you know about the wonderful hiking trails at Brushy Hills Preserve, a city owned 500+ acre property not far from Boxerwood on 1010 Union Run Road, Lexington VA. It has wonderful spring wildflowers and often guided tree, plant, bird, and geology walks. David Rosher is one of the Friends Group leaders (https://www.friendsofbrushyhills.org/) and quite the self-taught botanist and naturalist. He noticed one day these caterpillars on the tall spires of black cohosh (Actaea



Caterpillar on Black Cohosh buds

racemose). Black cohosh is a beautiful woodland native plant with statuesque white spires up to 6 feet tall. It is deer resistant. The only downside of this plant is that it does require time to develop the flowering spires. Importantly, it is the host plant for the Spring azure, Holly Blue, and Appalachian azure butterfly larvae. https://plants.ces.ncsu.edu/plants/actaea-racemosa/

Using the iNaturalist app, David learned that the caterpillars, observed on the trail, are the larval stage of the Appalachian

<u>Azure</u> butterfly, *Celastrina neglectamajor*. The caterpillars are specialists, feeding exclusively on black cohosh flower buds and flowers.

Per the <u>Alabama Butterfly Atlas</u>, the "young caterpillars bore into buds to eat developing pollen grains. Older caterpillars eat entire buds **and are usually tended by ants**. By the time cohosh flowers are in bloom, caterpillars are often well on the way to maturity"

"Tended by ants"! This led to more research to learn how ants and these butterflies are connected. Caterpillars are soft, yummy insects that birds and many other insects enjoy eating. As a defense mechanism, some butterfly species have developed a dorsal gland that secretes sugary liquid. The ants come to eat this sugary substance and take it away to their colonies. Secreting this liquid does not require a lot of energy on the caterpillar's part, and they benefit from the many ants viciously protecting their food source. Some butterfly species may also release chemicals that mimic ant pheromones, thus attracting ants to them for protection. With a multitude of species, there are many different ant-butterfly interactions. One of the most unique is the silvery blue (Glaucopsyche lygdamus). These butterflies are raised by ants. The young, silvery blue caterpillars can produce an incredibly effective chemical mimicry that induces the ants to take them back to the ant colony where

they are fed along with the baby ants. Too bizarre. And since a picture is worth 1,000 words, here is a Florida example the dorsal nectary organ in action: Ants and Blues: The Feeling is Mutual



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