April 2023-Vol.9, No.4

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Advice from a Professional Vegetable Gardener

By Cathy Caldwell | April 2023-Vol.9, No.4

If you have dreamed of following around a professional vegetable gardener for a few days so you could emulate their methods in your own garden, read on! I recently had a long and fascinating conversation with a professional — Kyle Crawford — who grows and sells his edibles through a CSA. Just in case that's an unfamiliar term, CSA stands for Community Supported Agriculture, and the basic idea is that the farmer sells "shares" in his or her harvest and then delivers them once a week through the course of the growing season.

Kyle bravely launched his CSA — Ladybird Farm — in 2020, just as the pandemic was taking off. Since then I've been enjoying his delicious lettuces, tomatoes, and beets (my favorite!), along with his many other veggies, fruits, and herbs. With his background — a BS in horticulture and experience managing several

vegetable farms, including the vegetable garden at Innisfree Village — the man knows what he's doing. Since many folks have taken up vegetable gardening as a result of the pandemic, my first question sought advice for those new gardeners.

Kyle's Advice to New Gardeners:

Start small and observe! Too often newbies go too big, and Kyle says he was guilty of that himself. A better course is to put your efforts into preparing the soil and cover-cropping in a small bed, aiming to be finished with prep two weeks before planting. If you observe closely and regularly, you'll learn a lot from your first garden that you can use to improve next season's results.

Direct seed. Most folks wish to start with transplants purchased at a garden store, but many vegetables will perform better if grown from seed.

Start with easy-to-grow crops? Lettuce, peppers, okra, potatoes, and sweet potatoes are good starter-crops for the new gardener. You might **not** want to start with carrots — because they can be tough to germinate — **nor** with brassicas — because they can be plagued by flea beetles or caterpillars. However, Kyle has a suggestion that seems contradictory: plant what you really like; you'll put in more effort, and that will probably pay off.

Use high-quality compost, and preferably, make your own. "A high quality compost will contain bacteria, and fungi, as well as beneficial insects, such as springtails, worms, rove beetles, and more. Using a quality compost can reintroduce life to depleted soils that have been overworked or treated with chemicals, resulting in loss of microbial life. Soil life is important for nutrient cycling, breaking down crop residues, and providing plants with needed nutrients. I use organic soil amendments to provide nutrients to young plants, but rely mostly on creating a healthy soil so that the soil microorganisms can work together to provide plants with what they need. There are many organic soil amendments available, but a soil test will best indicate what the soil is deficient in so you'll know what best to apply. And for building soil fertility overall, I focus on using quality compost.

Kyle's final bit of advice: **fall.** It's an excellent time to grow vegetables. Many crops from the spring have improved flavor with the cooler days in fall and pest pressure is often reduced.

Ladybird Farm. Photo: courtesy of Kyle Crawford

How did you get started with CSA farming? "Food is fundamental, and I wanted to be part of that. But a lot of agriculture is bad for the environment." Nature is also fundamental and a deep interest of Kyle's. "Nature and food: these two have to come together," he says. So Kyle set out to create a food-growing system that worked along with nature while doing it no harm. With these goals in mind, Kyle launched

Ladybird Farm, where he dedicates himself to sustainable, environmentally-responsible methods.

H**ow much land are you cultivating and what kind of equipment do you use?** The garden is around 2/3 of an acre with permanent beds that are slightly raised. I have a walk-behind tractor with a rotary plow that I use for working soil and preparing beds, and a sickle-bar mower for cutting cover crops.

Kyle is a major practitioner of cover-cropping, and when one of my fellow *Garden Shed* writers raised some follow-up questions on that topic, Kyle responded with plenty of helpful detail.

Do you cover crop all growing areas over winter or do you grow too long into winter to get them started in time? And what kind of winter cover crop do you plant? I strive to get a cover crop planted soon after a vegetable crop comes out of a bed. The cover crop I use the most is Dutch white clover. I use it in my pathways to reduce weed pressure, protect and improve soil, and provide habitat for beneficial insects.

When possible I will seed a cover crop into an established crop so that there is a cover crop in place when a crop finishes. Timing and pairing for this is critical to prevent too much competition for the cash crop while still providing enough light to get a cover crop established. One combo that I have found to work is seeding crimson clover under peppers and fall brassicas. When timed properly, it can be lightly worked into the soil at the final weeding for the crop, and then the clover will grow slowly under the crop for the remainder of the summer. When the crop dies back or is removed, the crimson clover is ready to put on some growth in the fall and protect the soil all winter long.

For late season cover crops, I plant winter rye which can be seeded through late November (and in some cases into December). Winter rye will grow slowly in the winter and put on rapid growth with the warming of spring. I cut it in late spring — prior to setting seed — to use as mulch. Cut it too soon and it will simply regrow. I have a sickle bar mower that cuts the rye just above the soil to provide straw, but I have also cut cover crops with a scythe, which can be very effective in smaller gardens (although I have cut up to an acre in a day with a scythe). A string trimmer can cut down tall cover crops in a pinch but can also create a big mess. Winter rye is best followed by transplanted summer crops, as it can be tough to control, and its profuse growth can make it difficult to cut. Start with a small spot when experimenting with winter rye.

Oats offer a great winter cover if planted by late summer. Oats are usually killed back by cold winter temperatures, leaving a crop residue to protect soil until spring planting. Winter peas and crimson clover are good legume cover crops that pair well with oats and will increase soil nitrogen levels. For maximum nitrogen fixation, wait until flowering before cutting back winter peas or crimson clover. Winter peas and hairy vetch work well with winter rye and provide some nitrogen in addition to straw production. The flowers on legume cover crops can be great for supporting beneficial insects; just be sure to control the cover crops before they set seed to prevent them from turning into a weed issue.

If I can’t get a cover crop seeded in time, I sometimes sprinkle on a layer of mulch for winter protection and rake this off the bed prior to spring plantings.

How do you remove the cover crop to prepare beds for planting in the spring? Do you till? And how do you prepare your beds for planting and seeding? Working the soil is damaging to the soil life and soil structure, so I try to work the soil only when necessary. I have a rotary plow for my walk-behind tractor that I use sometimes for bed prep. The plow basically cuts a trench in the soil and tosses the soil to the right. I will run the plow down the edge of each side of a bed, effectively hilling up the middle of the bed and covering any compost or soil amendments. I then use hoes and rakes to shape the bed, depending on what crop follows (hilled for carrots and flat for cut greens). The rotary plow allows me to create a seedbed that is conducive to direct seeding with a precision seeder while leaving the middle of the bed mostly undisturbed to maintain soil structure and biology.

To work beds deeply and alleviate compaction, I use a broadfork. These can be great for alleviating compaction without destroying soil structure, but can be tough to use in rocky soil. For some beds I only need a hoe and rake to clear off crop residue and weeds before seeding. I sometimes use a flame weeder (propane torch) to clear out weeds or cover crops. Torching back crop residues can leave a bare bed that is ready for seeding without having to work the soil.

One thing to keep in mind when flame weeding — or doing any work on the soil — is that it can be damaging to the soil microbiology and insect life in the garden. Flame weeding will kill insects as well as weeds, so always be sure to balance flame weeding with leaving cover for beneficial insects.

How do you deal with weeds? Winter-killed oats can provide a relatively weed-free bed, allowing you to insert your transplants through the cover crop residue with minimal weeding. Winter rye cut back prior to setting seed can provide a bed with rye stubble that can be transplanted through as well, and the resulting straw can be used as mulch around the transplants for weed control.

Kyle also plants a cover crop in the summer: buckwheat. According to Kyle, it germinates quickly and the flowers attract hordes of beneficials.

Buckwheat cover crop — and monarchs! Photo: Kyle Crawford

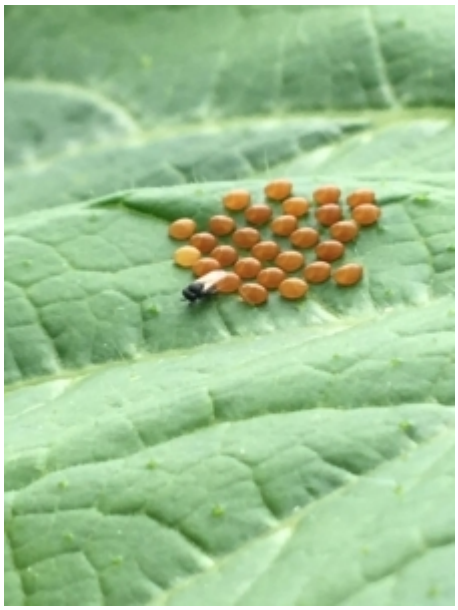
Kyle seeds the buckwheat after the last frost, and it grows quickly, smothering weeds. Says Kyle, "I often plant a bed of buckwheat next to a crop that I want to attract beneficial insects to. For instance, I will plant a bed of buckwheat between beds of tomatoes to attract parasitic wasps for the control of tomato hornworms. Buckwheat that is allowed to produce flowers for attracting beneficial insects can produce seed and become weedy; however, it is pretty easy to control. For buckwheat that has set seed, I will often chop and drop that buckwheat right in the bed it's growing in, and then when the seeds have germinated, I will cut the cover crop again at flowering, greatly reducing the weedy-ness of the buckwheat while providing lots of crop residue for mulching."

"For cover crops that don't die back in the winter, I usually cut them down at flowering, which often kills the cover crop, and I use the residue for mulching around plants. With cover crops, timing is key, and experimenting with cover crop/cash crop combos can be a great way to keep soil covered all season long."

Do you use herbicides, pesticides, or fertilizers?

"I don't use any herbicides, pesticides, or chemical fertilizers in the garden. I control weeds largely by using a hoe, plus timely mowing and bed prep. Flaming can be especially effective to clear out weeds in a new bed **without turning the soil,** which would bring new weed seeds to the surface to germinate."

"Rather than using pesticides for pest control, **I have directed my efforts to creating a healthy, diverse population of predators.** Predators need pests as prey, and when using sprays to control garden pests, predator populations can be negatively impacted by removing their food source. Prey populations often rebound more quickly than predator populations, thus leading to the need for additional pesticides. Crop damage and loss can occur as you work to build a healthy predator population, which is why crop diversity is important to ensure that not all is lost.



Parasitic wasp laying its eggs on squash bug eggs. Photo: Kyle Crawford

Kyle mentioned something that was news to me: **many organic farms see an uptick in pests in the first few years after making the switch to organic,** but AFTER that initial period, the number of pests go down. He believes that for every pest, there's probably some natural control — though we may not have discovered it yet.

How did you get interested in gardening? "Every summer I visited my grandparents' farm for a week. Pretty soon I was doing things like harvesting field corn and planting it in my yard at home, just to see what would happen." As a kid who loved visiting my own grandparents' farm, I could definitely relate. I figure that there are lots of grandparents — and parents — who set a future gardener in motion.

What do you like most about gardening/farming? Kyle's answer to this question took me by surprise: the insects! He is clearly fascinated by them, saying he is constantly pausing in his work to look at insects scurrying around in his fields. He is eager to share his excitement about insects; he described with undisguised wonder finding black soldier fly maggots in his compost. Then he noticed that the population of house flies was reduced! In many ways, Kyle's orientation is that of a scientist, and the farm offers many opportunities for discovery. No wonder he's been experimenting with African vegetables and Asian greens!

Orange assassin bug feeding on pigweed flea beetle. Photo: Kyle Crawford

What is your LEAST favorite part of gardening/farming? Another surprise. For Kyle, it's harvesting. Yes, gathering the fruits of your labor is the goal, but as he explains it, "all the experiences are over" — and most gardeners know exactly what he means. The daily practice of observing, tending, problem-solving — these moments in deep interaction with nature are what it's all about. "But don't get me wrong," says Kyle, "I enjoy eating the veggies too."

Upcoming Events

By Cathy Caldwell | April 2023-Vol.9, No.4

PMG Speakers Bureau Presentation

Tuesday, April 4 @ 6:30 pm
In-person at The Center at Belvedere
540 Belvedere Blvd. in Charlottesville
Admission: Free
Register ⇒ https://thecentercville.org/calendar/event/82752.

Dr. Linda K. Blum, a soil scientist in the University of Virginia's Environmental Sciences Department and a Piedmont Master Gardener, will explain why a soil test is essential to determining how much fertilizer, lime and other amendments may be needed in lawns and gardens. Adding supplements in the absence of a soil analysis risks unnecessary or excessive fertilization that can damage plants and lead to increased nutrient pollution in waterways and dead zones in the Chesapeake Bay, even when organic fertilizers are used.

Dr. Blum will offer instructions on how to collect a soil sample, how to have it tested, how to interpret the results and how to follow the recommendations included with the test results.

UVA Tree Walk with C'ville Area Tree Stewards
Sunday, April 9, 9:30 to 11:30

Charlottesville Area Tree Stewards

Limited to 15 adult participants
Register for the walk **HERE**

Join Tree Stewards Dana Denbar and Carol Wise at the University of Virginia on this walk through a gently sloping area of paved walkways and grass, under a high canopy of trees.

Tree Identification by Season: Spring (via Zoom)

Tuesday, April 12, 7:00 to 9:00 p.m. – Register HERE

Garden Basics: "Planting Your Annual Garden"

Saturday, April 15, 2–4 pm

In-person at Trinity Episcopal Church
1118 Preston Ave., Charlottesville
Admission: Free
Register ⇒ https://pmgarchives.com/events/.
Space is limited.

An annual garden adds beauty, color, texture, and diversity into any yard, and it's easy on the pocketbook. Whether standing alone or supplementing a perennial garden, it can be in sun or shade, and it can be adapted to fit into almost any spot, large or small. This Garden Basics class will cover how to choose a site, create a design, select the seeds, prepare the soil, and keep annuals attractive and healthy through the growing season. Garden Basics is a partnership with the Bread and Roses Ministry at Trinity Church. The class will include a tour of the Bread and Roses annual beds.

If you have a disability and desire assistance or accommodation to take part in one of these programs, please contact the Virginia Cooperative Extension office for Albemarle County and Charlottesville prior to registering for the event at 434-872-4580 during business hours (8 a.m. to 5 p.m. Monday through Friday). The TTD number is (800) 828-1120.

Charlottesville Tree Stewards Spring Tree Sale

@ Virginia Department of Forestry, 900 Natural Resources Drive, Charlottesville.

–Saturday, April 15, 10:00-12:00

Spring Tree ID Walk
Saturday, April 15 from 1:30 to 3:30

Limited to 13 participants

Register for the walk HERE
Join Emily Ferguson at the Virginia Department of Forestry (VDoF) to see which emerges first from buds; leaves or flowers. VDoF is located at 900 Natural Resources Drive in Charlottesville.

Blue Ridge PRISM's 2023 Spring Meeting
"All About Callery Pear," with audience Q&A

Wednesday, April 19
11:30 am – 1:00 pm
(via Zoom)
REGISTER

Coming up in May . . .

Saturday, May 6 @ 10:00 am – 2:00 pm*

The Piedmont Master Gardeners' 20th Annual Spring Plant Sale

Albemarle Square Shopping Center
Charlottesville, VA
** If extreme weather causes a change in schedule, we will announce it on our Facebook page.*

Join us for our 20th Annual Spring Plant and Green Elephant Sale. The sale offers something for all gardens:

• plants for sun, shade, or something in between
• annuals, perennials, native and pollinator plants
• herbs
• vegetables
• houseplants
• trees
• shrubs
• fruit

New this year: Native plant combination trays for sun and shade.

Also available: The Virginia Native Plant Society Wildflower of the Year, *Eutrochium fistulosum*, (Tall Joe

Pye Weed). Grows eight feet tall, adapts to average garden conditions but loves sunny moist sites. The shorter cultivar *Eutrochium dubium* ('Little Joe') will also be for sale.

Plus, have your tools and knives sharpened.

Cash, credit cards, and checks accepted. Sale happens rain or shine.* Wagons or carts are welcome to load up your plants.

Master Gardeners will offer demonstrations, educational displays, and a **Horticultural Help Desk** to answer your questions about problem plants, insects and more. Plan to pick up a soil test kit.

April in the Ornamental Garden

By Cathy Caldwell | April 2023-Vol.9, No.4

April is prime planting season for gardeners in the mid-Atlantic. In fact, this can be our busiest month as we contend with spring cleanup, dividing, transplanting, weeding, and other spring gardening chores. The bright, sunny days and warm spring breezes this month are perfect for working outside and we can be lulled into thinking cold weather is behind us. But it's important to stay vigilant for sudden dips in night-time temperatures that can result in deadly overnight frosts.

The average last spring frost in Albemarle County (USDA Zone 7a) generally occurs between April 15 and April 25. If a frost is forecast, cover tender new growth to protect it from frost damage. Use a row cover, an old sheet, cardboard, or even layers of newspaper for this purpose. Remove the coverings the next morning so that you don't inadvertently "cook" your plants as daytime temperatures warm up.

As daffodils and hyacinths finish blooming, cut the flower stalks all the way back to the ground but leave the foliage in place to die back naturally. This allows the plant to focus on storing energy for next year's blossoms rather than on developing seed heads. The foliage may look a bit messy, but don't braid or tie it up because this may interfere with photosynthesis, which could affect next year's blossoms.

If spring-flowering bulbs such as daffodils, snow drops, or crocus have become crowded and didn't produce as many flowers as in past years, that may mean they need to be divided. The ideal time to divide these bulbs is after the foliage has died back, which may be June or July. Mark the location of the flower clump now while you can still see the green or yellowing foliage. This will help you remember where the clump is located, plus it will remind you not to plant something else in the same spot. Make a note to dig up and separate the bulbs once they are dormant. Either replant them immediately or store them in a cool, dry, well-ventilated place and replant them in the fall.

Top dress established ornamental flower beds with an inch of compost. For new flowerbeds, work compost or aged cow manure into the loosened soil before you start to plant. A slow-release fertilizer and lime may also be added to the soil if a soil test indicates the need for either.

Remove broadleaf winter weeds before they set seed. These cool-season weeds include chickweed, deadnettle, hairy bittercress, and henbit. They germinate in late summer or early fall, overwinter in the landscape, and produce flowers and seeds in spring. You can suppress their growth in your flower beds by applying a layer of mulch over bare ground or planting a dense ground cover. Weed identification information and photos are available on a number of extension websites such as Virginia Tech (weedid.cals.vt.edu), University of Missouri (weedid.missouri.edu), or the University of Illinois (weeds.cropsci.illinois.edu).

Hairy bittercress. Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org, CC BY 3.0

Divide fall-blooming perennials, such as asters (*Symphyotrichum* species), chrysanthemums (*Dendranthema*), shasta daisies (*Leucanthemum*), black-eyed Susan (*Rudbeckia*), ornamental grasses, sneezeweed (*Helenium*), false aster (*Boltonia*), and bee balm (*Monarda*). Most perennials benefit from being divided every three to five years on average, but if you're not sure if a plant should be divided, here are a few questions to ask yourself:

- Is the plant not producing as many flowers as in previous years?

- Has it outgrown its assigned space in your landscape and is it crowding other nearby plants?
- Is it alive around the edges of the crown but dead in the center?
- Does it seem less vigorous in general?
- Do the stems in the center of the plant have smaller leaves?
- Are the inner flower stalks weak or flopping over?

If the answer to any of these questions is yes, then the plant probably needs to be divided. Try to complete this task at least six weeks before hot weather sets in so that the divisions have ample opportunity to become well established.

Another reason to divide perennials is to increase air circulation, which helps control fungal diseases. For example, Monarda fistulosa (or wild bergamot) is valued for its highly aromatic flowers that attract pollinator insects such as bees and butterflies, but it is subject to powdery mildew. By dividing this popular native plant every 3 years to improve air flow and providing it with moist, well-drained soil, a sunny site, and destroying all infected foliage, can help keep this common fungal problem under control.

Before digging holes for new plantings, keep in mind the ultimate size of each plant. Also, group plants together according to similar needs for water, nutrients, and sunlight. Remember to update your gardening records indicating the location of your new plantings.

Pinch back chrysanthemum foliage this month when the plants are about 4 inches high. Pinching makes the plant bushier, sturdier, and more wind-resistant later in the season. Tall aster species also benefit from being pinched back for the same reasons. False sunflower (*Heliopsis helianthoides*) is another plant that benefits from being pinched back in spring to reduce the plant's height.

At this time of year, garden centers are overflowing with the best selections of landscape plants. **Shop for azaleas and rhododendrons while they are in bloom** to ensure you like the color and that the color harmonizes with your other landscape choices. This is particularly important if you are adding new plantings to an established landscape. Some pink selections, for example, have an orange or coral undertone that may clash with other spring-blooming species located nearby. Tip: Azaleas generally look best planted as a grouping in part sun or filtered shade and acidic, well drained, organically rich soil with a pH of 5.0 to 6.0.

As you select new plantings for your garden, **avoid plant species that are potentially invasive** in this area of Virginia. Look for native plants that minimize maintenance, require less water, and increase habitat, particularly for beneficial insects. A number of excellent native plant resources are available, such as the Virginia Native Plant Society's website at vnps.org, the Albemarle County Recommended Native Plants website at webapps.albemarle.org/nativeplants, or the Virginia Department of Conservation and Recreation's Natural Heritage Program at dcr.virginia.gov/natural-heritage. Also, explore back issues of *The Garden Shed* for a number of articles on native plants suitable for our area.

Buy annual bedding plants such as begonias, petunias, pentas, geraniums, or marigolds while selections are plentiful. Choose healthy plants with well-developed root systems that are not too large for their pots. Don't plant them, however, until the danger of frost is past, night-time temperatures are consistently above 50° F, and soil temperatures are above 60° F. Depending on the weather, that may be toward the end of April or even early May. If you just can't wait that long, be prepared to protect those tender seedlings from frost if temperatures threaten to turn chilly.

If you prefer to start bedding plants indoors from seed rather than buy transplants from a garden center, you can still sow the seeds during the early part of April if you didn't get around to it in March. Don't forget to harden off tender seedlings before planting them outdoors. For the new or inexperienced gardener, Virginia Cooperative Extension (VCE) Publication 426-001, Plant Propagation From Seed, provides

good information on sowing seeds.

Plant some everlastings in your ornamental garden this spring. The term "everlasting" refers to a flower, seedpod, or other plant part that can be dried or preserved without the loss of its shape or color. Everlastings are used in dried flower arrangements, wreaths, bridal bouquets, and many craft projects. In addition to strawflower (*Helichrysum*), baby's breath (*Gypsophila paniculata*), and statice (*Limonium*), all of which are easily preserved, try experimenting with other flowers such as: Bells of Ireland (*Molucella laevis*), cockscomb (*Celosia*), or globe amaranth (*Gomphrena*).

Don't move your houseplants outside until night-time temperatures consistently stay at 50° F or higher. Depending on the weather, this may not happen until very late April or in May. Place them in a shaded area on a porch, patio, or under a tree or wherever they can **gradually acclimate** to the increased light levels. Moving a houseplant from indoors directly out into a sunny location can burn the leaves, which will severely damage the plant.

Before you move your houseplants outdoors for the summer, repot any that are rootbound. You can tell a plant is rootbound if:

- The roots are growing through the pot's drainage hole or can be seen on the surface of the soil.
- The plant is either growing very slowly or has stopped growing even when fertilized.
- The lower leaves are turning yellow, which may be a sign of a nutrient deficiency.
- The potting mix is drying out faster requiring more frequent watering.
- The plant appears to be too large for the pot.

To repot a houseplant, choose a container that is only slightly larger in size. If the pot is too large, the soil can stay moist for too long, which can cause root rot. For additional information on houseplant care, see Virginia Cooperative Extension Publication 426-100, Indoor Plant Culture, or see the University of Maryland Extension's publication on Potting and repotting Indoor Plants.

With the arrival of spring comes the start of the annual battle with insects, such as leafminers. Leafminers are the larvae of insect species that burrow within a leaf and devour its inner layers, leaving either winding, serpentine tunnels or brownish blotches, depending on the plant and the leafminer insect species. Both the larvae and the damage they cause are generally undetectable until after it is too late. Winding tunnels caused by sawfly insects are commonly found on the foliage of columbine (*Aquilegia*), hollies (*Ilex*), and roses. The damage doesn't actually harm the plant, but it can look unsightly. It's usually sufficient to snip off the damaged leaves or simply ignore the problem if it's not too pervasive. Other leafminer insect species cause blotchy or blistery looking damage, which is more destructive to plants such as boxwood. (See University of Maryland Extension publication for a description of and management options for Boxwood Leafminer on Shrubs). To learn more about Leafmining Insects, see Colorado State University Extension Fact Sheet No. 5-548.

Boxwood leafminer damage. Photo: Jim Baker, North Carolina State University, Bugwood.org, CC BY-NC 3.0

Inspect Azaleas for lacebugs (*Stephanitis pyrioides*), which overwinter as eggs on the underside of infested leaves, then hatch out in spring. They damage foliage by piercing plant cells with their mouthparts and sucking the leaf dry. Look for white or silvery looking stippling on the upper leaf surface. The damage is unsightly, but it won't kill the plant.

Slugs and snails start making their appearance in spring, particularly if the weather has been cool and

wet. One very effective control method is to pick them by hand, or with tweezers if you're squeamish, and drop them into a pail of soapy water to drown. For more information on how to control slugs and snails, see the University of Maryland extension's publication on Slugs and Snails on Flowers.

Check emerging Irises for diseases or borer damage. Leaf Spot is one of the more common fungal diseases of irises. For information on symptoms and controls of this disease, see VCE Publication 450-600, Iris Leaf Spot. Iris borers are another common problem. The larvae of this pest feed below the soil level on the rhizomes. Feeding damage is sometimes not apparent until the plant dies or the leaves wilt. Inspect young iris foliage for notches that are cut in the edges of center foliage and slimy frass. This is the point where the borer enters the leaf. If you detect the presence of a borer caterpillar inside the leaf, crush it with your fingers. Once this voracious pest burrows to the rhizome, it will hollow it out and then proceed to other rhizomes**.** Bacterial soft rot often follows borer damage and can destroy an entire bed of Irises. The best way to control this pest is to burn the foliage or dispose of all dead or damaged leaves in the trash in fall.

And speaking of pests, **apply deer repellent as vulnerable plants emerge in spring or take other preemptive measures to discourage deer browse** on tender, succulent new plant growth.

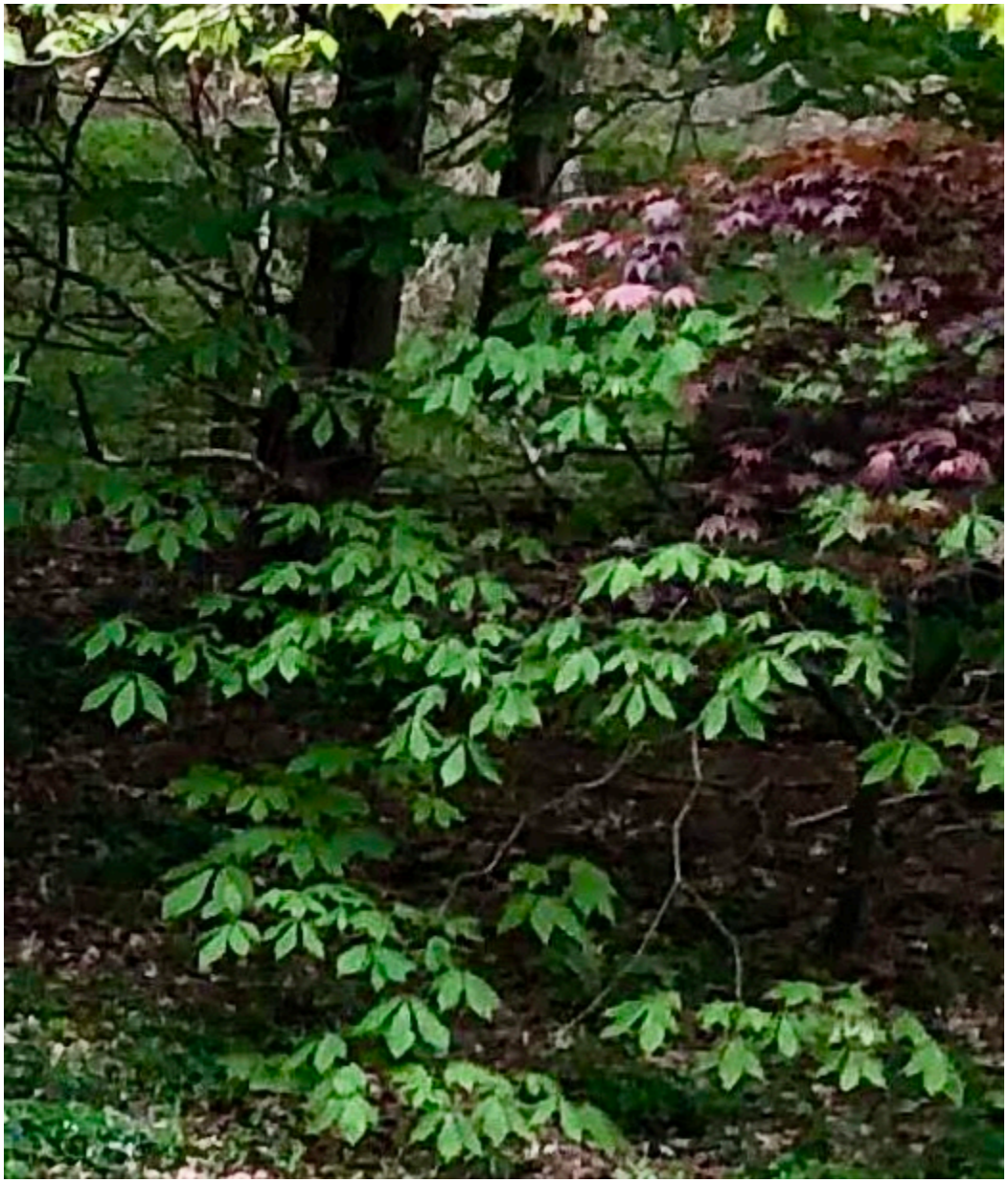
Invasive watch: Callery or Bradford (*Pyrus calleryana* 'Bradford') is in bloom this month. This invasive species and other ornamental pears started out as popular landscape trees in the 1960s and are now considered invasive in 29 states. The trees often produce fertile seeds that are easily spread by birds. The seedlings can easily establish in disturbed areas, where they are contributing to the shrinking biodiversity of our urban forests. **Control trees less than 6' tall with a higher-than-usual (3-4%) concentration of foliar spray.** Foliar sprays are effective from **when leaves emerge in spring until just before they begin to develop fall color.** For detailed information on how and when to eradicate this invasive species, **including tree trunk methods in the fall**, see the Blue Ridge Partnership for Regional Invasive Species Management's Bradford Pear Fact Sheet.

Garlic mustard should be removed now before it flowers and sets seeds. For more about garlic mustard, see Blue Ridge Prism.org/Garlic Mustard Factsheet.

Feature photo of spring-blooming *Phlox divaricata*: Pat Chadwick

Bottlebrush Buckeye

By Cathy Caldwell | April 2023-Vol.9, No.4



A native shrub with a lovely mounding shape, beautiful white blossoms that support pollinators, is generally pest and disease-free, and — oh yes — avoided by deer? Who wouldn't want one — or more? The plant is bottlebrush buckeye (*Aesculus parviflora*), and you can probably find the straight species at a local nursery, as did I. Admittedly, it's not evergreen, but other than that, it's the complete package. In fact, "No better plant could be recommended as a lawn shrub," according to Dirr's *Manual of Woody Landscape* Plants (quoting W.J. Bean). Why this plant has been underutilized in American gardens is a mystery.

Bottlebrush buckeye — a native of the Southeast — beguiles with its large palmately compound leaves and its creamy panicles, which appear in early summer and do indeed resemble a bottlebrush. You'll want to give the blooms a close inspection; the anthers are red and the filaments pink. This multi-stemmed, suckering shrub grows slowly but can eventually reach 7 to 10 feet tall and 12 to 15 feet wide. The leaves turn yellow in fall, which is when it produces "buckeyes" — the seed capsules, which each contain 1 to 3 seeds.

I planted my original bottlebrush buckeye over 25 years ago in partial shade, where it thrived despite the neglect of my early-motherhood years. It did some "mothering" of its own, spreading seedlings that my neighbor and I have welcomed into our yards. But not too many seedlings; it is far from aggressive in its spreading.

Photo: Missouri Botanical Garden PlantFinder

Bottlebrush buckeyes leafing out in April. My first plant is on the right; one of its seedlings on left. Photo: Cathy Caldwell

In the wild, bottlebrush buckeye grows in hardwood forests along river bluffs. It prefers moist soil; as to drought tolerance, the experts are not in agreement, though it may tolerate some drought, but NOT in its early years of establishment. In our area, plant it in partial shade, and be sure to give it plenty of room for expansion. One expert cautions against pruning, which can spoil its shape.

In northern regions, where it is well-loved, at least one expert recommends both sunny and partially-shady spots. One other notable difference among plants in northern climes is that, in the north, the seeds are rarely viable due to the shortened growing season.

This plant has high severity poison characteristics. That's the warning that appears at the top of the plant profile in the North Carolina State Extension Toolbox. I guess that's why deer avoid it; but so should cats, dogs, horses, and humans. According to NC State, it is "HIGHLY TOXIC, MAY BE FATAL IF EATEN!"

Happily, the nectar and pollen of *A. parviflora* are NOT poisonous, at least not for the bees and butterflies. Among those which may visit are Eastern tiger swallowtails, giant swallowtails, and monarchs.

Although deer have never so much as nibbled at my bottlebrush buckeyes, a couple of them have new injuries to their bark at the lower end of the trunk. Could it be squirrels or rabbits stripping bark or could it be a "southwest injury" due to sudden temperature changes? Those are the possibilities turned up by my research. I plan to follow up on this by sending samples to the lab at Virginia Tech. Stay tuned!

Seed capsule. Photo: Missouri Botanical Garden PlantFinder

While the self-seeding of my mature shrub has provided plenty of new plants, my research revealed that there are additional methods of propagation: the seeds from the seed capsule can be planted immediately after they ripen. It "may also be propagated from underground stems (stolons) that allow the shrub to spread. These stolons produce both roots and an above ground stem at specific points called nodes. Sections of stolons with nodes may be dug and transplanted." Clemson University Extension.

I was pleasantly surprised to come across detailed **design suggestions** for bottlebrush buckeye, and they're worth quoting in full:

> *Bottlebrush buckeye works well as a background or massing plant to highlight the forms and colors of companion plants and block undesirable views. The fine texture and medium leaves of the buckeye will show well with contrasting plant features such as large leaves, coarse texture, thick stems, and dark green or burgundy color. Other contrasting textures include thin blades and clumping, arching forms of grasses and other vase-shaped, small-leaved shrubs. Contrasting size and shape such as low-growing groundcover with a sprawling, mounding form will emphasize the upright, arching shape of buckeye. To create large plant masses select plants with similar characteristics that blend with the buckeye.*
>
> *— Prof. Edward F. Gilman, Ryan W. Klein & Assoc.Prof.Gail Hansen, University of Florida IFAS Extension*

No matter how you use it in your landscape design, a bottlebrush buckeye is sure to provide much beauty to

your yard, plus food for pollinators. You can't miss with this plant!

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Iowa State Ext/hortnews/Bottlebrush Buckeye

"The Beauty of Bottlebrush Buckeye," Ohio State University/Hort Shorts

"Bottlebrush Buckeye," University of Maryland Arboretum & Botanical Garden

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"Bark Stripper Squirrels," Ohio State University

Celebrating The Garden Shed Newsletter's 100th Issue

By Patsy Chadwick | April 2023-Vol.9, No.4

The *Garden Shed* newsletter has come a long way since the Piedmont Master Gardeners published the first issue in January 2015. One hundred issues later, it's important to look back at what we've accomplished and assess where we are going as an on-line gardening publication.

WHERE WE STARTED

The concept for the newsletter was born from the notion that there's a huge market out there for **solid, reliable, science-based gardening information and advice**. The original plan was to create a calendar of monthly gardening tasks and tips that could be published either on-line or distributed in hard copy. But after much thought and many, many meetings, the calendar idea was expanded upon and ultimately resulted in our current online newsletter format. While retaining the monthly tasks and tips aspect, we chose to provide in-depth articles that would both inform and educate our readers on best practices in three key areas: edible gardening, ornamental gardening, and general gardening. On a lark, we also occasionally threw in some recipes just to keep things interesting and down to earth (no pun intended).

We wanted the articles to be useful for both inexperienced gardeners and seasoned ones alike. Writing for such a broad spectrum of readers is not easy. We addressed the issue by defining terms or concepts to educate inexperienced gardeners, yet providing a depth of expository writing that would appeal to more experienced gardeners.

The original Garden Shed team: Nancy Bolton, Cathy Caldwell, Pat Chadwick, David Garth, and Cleve Campbell, our founder and first leader.

As we developed the newsletter, we found that a lot of effort and coordination goes into choosing topics to write about, assigning writers, researching background material, checking and double checking our sources, editing the copy, and proofing the final article. Once we check off all those boxes, the final step is to coordinate each article with the Virginia Cooperative Extension service to make sure we got it right.

With so much valuable information in each issue, we wanted the articles to be searchable. So we made it easy to access our archive of back issues published since inception of the newsletter.

OUR TOP TEN ARTICLES

In looking at the history of the newsletter, we explored the kinds of topics that have had the greatest appeal to our readers since newsletter inception. As might be expected, there's a wide range of interests in all aspects of gardening and horticulture. While this is a moving target, the top 10 most visited *Garden Shed* articles published to date include:

1. "The Pros and Cons of the Eastern Redcedar Tree" by Pat Chadwick
2. "Catmint – A Must-Have Perennial" by Pat Chadwick
3. "Magical Repelling Powers of Marigolds – Myth or Fact?" by Cleve Campbell
4. "Oakleaf Hydrangea" by Pat Chadwick
5. "The Vegetable Garden in August" by Ralph Morini
6. "Streptocarpella: The Houseplant that Flowers all Year" by Cathy Caldwell
7. "What's Killing Our Oak Trees?" by Ralph Morini
8. "Serviceberry" by Pat Chadwick
9. "OMG! What's Eating the Broccoli?" by Ralph Morini
10. "Consider a Hornbeam" by Susan Martin

WHAT WE LEARNED

The interesting thing about gardening and horticulture in general is that there's always something new to learn. As the newsletter team members began working together, we found that each member had a unique perspective, set of skills, or life experience that benefited the group as a whole as well as our readers. Whereas some of our writers are knowledgeable about various edible gardening topics, other writers focus on landscape plants, native species, plant pests and diseases, or ecological and environmental issues. With such a wide variety of experience and writing interests, we find that we continually learn from one another.

The team in 2020. Standing: David Garth, Pat Chadwick, Ralph Morini, Sarah Bingham, Susan Martin, Cathy Caldwell. Seated: Melissa King and Penny Fenner-Crisp. Photo: Bill Sublette

We do our best to make the information in our articles as accurate as possible and to provide additional resources to our readers, hence the links and often very long lists of sources listed at the end of each article. Many of the sources listed are ".edu" websites associated with university cooperative extension services around the country. We also rely on other trusted sources such as respected experts in various aspects of horticulture. What we learned from our readers is that the sources included in our articles are invaluable to them as they explore topics on their own.

Our idea was to develop a newsletter that would primarily target the geographical area covered by the Piedmont Master Gardeners and the local Virginia Cooperative Extension, which includes the counties of Albemarle, Green, Fluvanna, Nelson, Louisa and the city of Charlottesville. But we soon learned that once an issue is published on the internet, it knows no boundaries. Anyone anywhere in the country with an internet connection can access the newsletter. As a result, comments on our articles come from all around the U.S. It is a point of pride that organizations from other states reference our articles or request permission to use them.

OUR READERS' COMMENTS

In addition to learning from each other, we have benefitted from the comments our readers post online. Those comments have, in many ways, influenced our choice of topics as we plan each year's newsletter issues. We found, for example, that the monthly gardening tasks and tips published each month are very useful at all levels of gardening experience. We learned that our readers wanted to know more about native species and their impact on wildlife. They wanted to know more about invasive species and how to identify and manage them. We learned also that they are interested in protecting the environment, protecting our natural resources, living with wildlife, and learning how to grow their own food.

We receive a great many posts from readers requesting additional information on various topics or sharing their own gardening experiences or expressing appreciation for our articles. Here's a very small sampling of the many wonderful comments we've received from our readers:

"Thank you for your very informative article. It's the first place that I've found all the information I needed

in one place…." Eva 7/19/22

"…I found it to be the best and most comprehensive reference for growing milkweed that I've read! Saved and tucked away in my gardening files!" Jan 6/14/22

"…thank you so much for this article! We have a small herb garden, which is just about the only thing the deer leave alone in our garden. You've given us so many more options and ways to use the plants! Thanks also for all the research and helpful links." Ginger 6/6/22

"Thank you for this great guide to Fall gardening chores; advice about what's good to plant now and what isn't; what's good to cut back now and what to leave; and all the various informative links…. It's much appreciated." Marilyn 10/3/21

"This article is very helpful. It educates all us gardeners to help mitigate climate change. Thank you for sharing this valuable article that really matters. Good job!" Frank 7/3/2021

"Thanks for these tips. I love how you include a lot of things in here. Continue making blogs like this. It is very informative for us. More power to you." Patricia 9/21/21

LOOKING TO THE FUTURE

We value the feedback we receive from our readers and welcome ideas for future articles so that we can keep the newsletter interesting, educational, and relevant. Our readers have mentioned, for example, that there's a lot of interest in knowing more about the gardens of experienced master gardeners. So, we look forward to presenting more interviews such as one on vegetable gardening with Extension Master Gardeners Fern and Cleve Campbell in the September 2022 issue: An Amazing Master Gardeners' Garden. And we hope to provide gardening insights and advice from horticultural experts such as C. Colston Burrell, who was interviewed for the article on *Gardening for Beauty and Ecology* in the February 2022 issue. While our articles are written almost exclusively by our Piedmont Master Gardeners team, we hope to provide the occasional article written by guest writers such as William Cocke, who wrote *Gardening to Save the Planet* in the August 2021 issue.

The current Garden Shed Team, March. 2023. Standing: Meg Norling, Pat Chadwick, Chris Stroupe, Sarah Bingham, Charles D'Aniello. Seated: Cathy Caldwell & Melissa King. Not pictured: Ralph Morini, Barbara Gardino, Erin Hall, Kaila Pennock. Photo: Bill Sublette

We started out small, thinking we were providing an educational service to our local Albemarle County/Charlottesville area. We had no idea of the impact our newsletter has made throughout Virginia and well beyond, which both surprises and delights us. So it is with great pride that we celebrate this 100th issue of *The Garden Shed* newsletter and look

forward to our next 100 issues with unabashed enthusiasm.

–*The Garden Shed* Publication Team

April in the Edible Garden

By Ralph Morini | April 2023-Vol.9, No.4

It’s April and if you didn’t start early, gambling on the warm winter weather we have had, now is a good time to get the edible gardening going. The air and ground are warming, buds are fattening and if you started cool weather vegetable planting earlier, you may soon be enjoying some garden produce. If you haven’t gotten started yet, April is a great time to plant cool weather vegetables. Our average first frost date is April 15-25 in Hardiness Zone 7A, but with the crazy weather we have had, it is important to protect sensitive plants if an unexpected freeze comes through.

Bed Preparation

As mentioned in previous articles, deep tilling is no longer a recommended practice, except for new beds where loosening compacted soils and integrating organic matter can make sense.

Trimmed winter cover crop at UAC CATEC Garden. Photo: R Morini

If you grew a cover crop over the winter, let it grow as long as possible, ideally cutting it after flowering, prior to seed formation (feature photo). Late cutting (adjacent photo) enables deepest root penetration to loosen soil and greatest photosynthetic carbon deposits and since it has spent big energy to flower and start creating seeds, plants are too weak to regrow after cutting. To remove the crop, cut it as close to flush with the soil as possible, with a string trimmer or mower. The residue is best left in place as a mulch or removed and composted. Give the roots a couple of weeks to start decomposition and then plant. If you want a smoother seed bed or can't wait long enough to remove the cover crops post flowering, use a stirrup hoe (some call it a scuffle hoe) to cut the crowns, just below soil level. Leave them as mulch or add to compost.

Occultation is a no-dig alternative for weed control. It involves covering beds with a black plastic tarp or landscape fabric for 4-6 weeks to starve weeds of sun and kill seeds with heat. Remove the tarp and plant transplants directly. If seeding, rake off residue and compost it.

Photo from video: "The Broadfork", Jean-Martin Fortier, The Market Gardener's Toolkit,"

To loosen compacted soil, drive a digging fork or broadfork as deeply into the soil as possible and rock it back and forth to loosen soil without destroying structure. Work your way across the beds. If adding an amendment like compost or manure, layer it on top and allow it to work into the soil during broadforking. Rake the surface smooth, and you are ready to seed.

Planting

If starting from seed, follow packet directions. For intensive or square foot gardening, ignore the row spacings and use seed-to-seed spacing in both directions. Goal is to space plants so that mature plants will just touch each other, shading the soil to reduce moisture and weed pressure while maximizing production for a given space.

Fertilization is important for best results. For guidance on what products to use and how and when to apply them, review Garden Shed article A Fertilization Primer.

According to Virginia Cooperative Extension's Virginia's Home Garden Vegetable Planting Guide, in Hardiness Zone 7a:

There is still time to plant cool weather crops, including: beets, broccoli, cabbage, carrots, cauliflower, greens and lettuces, potatoes, spinach, radishes, and turnips. They like it cool however, so get them in soon.

Late April is the earliest time to plant bush and pole beans, cucumbers, eggplant, melons, squash and tomatoes. However these guys are harmed by frost, so check the longer-term weather forecast before setting them out or planting. Be prepared to protect them if a late frost arrives.

A Few Tips

- Where possible, **rotate your crops**, on a 3-4 year cycle to minimize pressure from soil borne

diseases and pests.

- **Maintain a journal to** record crop locations, varieties planted, pest and disease issues, and growing success. You will be thankful when you plant next year.
- **Plant seeds at** a depth of about 2 times the seed width (not length). Moisten when planting and keep moist until germination.

Trellis. Photo: U of Minnesota Extension

- **Trellises are** a great way to save space and keep plants off the ground. VCE publication Vertical Gardening Using Trellises, Stakes and Cages offers guidance for a variety of space-saving plant supports.

Hardening-off seedlings. Photo: R Morini

- If you started seeds indoors, remember to **harden the plants off** by progressively exposing them to the outdoors for 1-2 weeks when outside temperatures are above 50 degrees, prior to transplanting.
- It is best to **transplant** on a cloudy day or in late afternoon to reduce shock to young plants. If transplanting **peat pots**, tear off the top of the pot to a point below the soil line to avoid wicking

water away from plant roots.

Mulching plants after transplanting or germination is a good thing but give the soil a chance to warm up before mulching to avoid slowing plant growth.

- When laying out **plant locations**, remember that leafy greens typically require 6 hours of sun per day while fruiting vegetables want at least 8 hours.
- **Consider intercropping**. Mixing different plant varieties uses space well, adds diversity to the garden environment, creates a variety of scents that can confuse pests, and attracts a broader array of beneficial predators, helping reduce pest damage.

Swiss Chard. Photo: Courtesy of Pixabay

- If you would like to extend the harvest season for your greens, **consider chard**. Chards have a lower tendency to bolt and can withstand summer heat longer than most other greens. In addition, rainbow chard makes a pretty presentation in the garden.
- Should a surprise **late frost** threaten your warm weather crops, a row cover can save the day. Review the Garden Shed article: Row Covers: A Garden Season Extender with Benefits for materials and construction tips.
- It isn't too late to plant asparagus or strawberry patches. For guidance on starting **asparagus** refer to the Garden Shed article Asparagus, and the VCE publication Asparagus, which specifies recommended cultivars for Virginia. For strawberries try Garden Shed article Strawberry Basics for the Home Garden.

April strawberries. Photo: R Morini

- For small fruits in general, check out the VCE publication Small Fruit in the Home Garden.
- If you are planning a **home orchard**, check out the VCE publication Tree Fruit in the Home Garden for help in site selection, tree selection and care for many popular fruits.
- Best **tree planting techniques** for both bare root and root ball trees is detailed in Planting Trees Correctly from the Clemson Extension.
- If you are curious about the weeds in the garden or its surroundings, for elimination or edibility, VCE's Weed Identification Guide is a good resource.

I hope you find this information helpful. Comments on content are welcome. In any case, enjoy your garden and please come back next month.

SOURCES:

Virginia's Home Garden Vegetable Planting Guide: Recommended Planting Dates and Amounts to Plant, Va.Coop.Ext.Pub. 426-331

Cover photo: Winter cover crop at UAC Garden at CATEC: Photo: Ralph Morini

August In The Edible Garden

By Ralph Morini | April 2023-Vol.9, No.4

August is busy in the edible garden as we enjoy harvesting summer vegetables while making new plantings of fall crops. As noted in Virginia's *Home Vegetable Garden Planting Guide*, August is harvest time for beans, cucumbers, eggplant, melons, okra, onions, peppers, potatoes, squash, corn and tomatoes. At the same time, we can plant beets, broccoli, brussels sprouts, cabbage, carrots, cauliflower, many greens, lettuce, radishes, rutabaga, squash and turnips. When planting, remember that in the Piedmont's hardiness zone 7a, our average first frost is October 15 to 25. Consider the time until harvest, and plant early enough to minimize frost damage risk.

Bluebird on guard for garden pests. Photo: R Morini

Summer Crops

Watering, hygiene, and harvest timing are key to extending yields on summer vegetables. The *1 inch of water per week* rule is a good guide. Be more generous when it is really hot and dry. Removing diseased and damaged vegetation from the garden and keeping garden tools disinfected is also essential. Since a plant's job is done when it has created viable seed, pick vegetables before they reach full maturity to keep plants producing.

August is the peak of tomato season. Depending on variety and planting timing, determinate varieties may be presenting a full harvest now. Indeterminate varieties can be kept productive until frost with good care. Pull off suckers, trim diseased leaves with disinfected tools, give a small fertilization boost if you haven't amended the soil since planting, and keep them well watered.

If your tomato plants have yellow, spotted or brown patches on leaves, they may have nutritional deficiencies or one of a variety of diseases. General advice is to remove discolored leaves with a disinfected shears, bag, and trash the damaged foliage. For help in identifying and treating possible causes, check out *The Garden Shed* article Tomato Diseases.

If the fruits are slow to ripen, the article Why Aren't My Tomatoes Ripening, from the Cornell Extension, explains why. At temperatures above 85° the plants don't produce the lycopene and carotene compounds that cause the reddish coloration. We can influence ripening by picking tomatoes when the first blush of color change occurs, storing them at 70-75° in a dark, enclosed environment (I use a paper bag), and maybe adding other fruit, like bananas, to generate the ethylene gas that causes ripening to happen. The taste compromise is minimal compared to vine-ripened fruits. This is also a good way to protect tomatoes from invading varmints and to save late season fruits that are threatened by frost.

If fruit damage is the issue, get help from the article Tomato Fruit Problems from the Missouri Botanical Garden.

Record identified problems in your journal so that next spring you can look for seeds or transplants that are resistant to the diseases identified, and note care advice that can help with nutritional or moisture-related issues that are traceable to the gardener.

Braconid wasp cocoons on hornworm. Photo: R Morini

Pests can also hurt your tomato harvest. Tomato hornworms are a common one. The key sign of their presence is denuded leaf stems. Pick and squish if you find a clean caterpillar. If it looks like the hornworm in the photo, leave it alone. The white cylinders on its back are beneficial braconid wasp cocoons. The adult wasp injects eggs into the hornworm. Larva feed on the worm's innards until ready to pupate, and then they exit and spin cocoons as shown. Tiny adult wasps emerge a short time later. The hornworm may live through the wasp cycle but will die before pupating.

A variety of other pests can attack our gardens in August. *The Garden Shed* article Eleven Common Garden Pests: Identification and Management can help identify specific pests and treatments.

Healthy kale crop. Photo: R Morini

Building a diverse ecology in the yard and garden is step one for creating a natural pest control system. I've been working over the past few years to add pollinator plantings, end chemical use, rotate crops, interplant, etc. This year the damage done by Japanese beetles and cabbage worms, previously extensive, has been close to zero. I attribute this to larger beneficial insect and bird populations on the property. Unfortunately, I maintained what I thought was a well-hidden feeder in the backyard to help keep the birds around. That led to a different kind of pest (momma bear and two cubs), as the photo below shows. Lesson learned.

Backyard bears. Photo: Diane Morini

In any case, we're enjoying the best kale crop in years.

More Gardening Tips and Tasks for August:

- When **choosing vegetables for the fall garden**, check seed packets or catalog, and select **semi-hardy varieties** that will tolerate a light frost and require fewest days to harvest.
- **Fall plants often have fewer insect problems** because they avoid the peak insect activity period of midsummer. However, some insects, such as cabbage worms and corn earworms, may be worse later in the year than in the summer. Avoid some pests and diseases by rotating crop families to different bed areas than those where they were planted in the spring.

Compost batch at 4 months. Photo: R Morini

- When planting fall crops, **prepare the soil by restoring the nutrients removed by spring and summer crops**. A well-tended spring compost batch should be ready to be screened and spread on beds with a light application of a balanced organic fertilizer to replenish soil for fall crops.
- Dry soil can make working the soil difficult and can inhibit seed germination. **Plant fall vegetables when the soil is moist,** either after a rain or after you've watered the area the day before planting. **Plant the seeds slightly deeper** than recommended for spring planting. Once planted, water them thoroughly.
- **Watering properly** is the key to conserving water and maintaining plant health in the heat of the late summer. One inch per week applied at one time will wet the soil 6 to 8 inches deep and ensure good yield from mature crops. Two inches of organic mulch such as leaves or straw will cool the soil and reduce surface evaporation. Water the garden early in the day so the foliage dries before nightfall. **Wet foliage at night increases susceptibility to fungal diseases.**

Two striped cabbage worms on kale. Photo: R Morini

- If you have a problem with **cabbage worms** on your cole crops (cabbage, kale, collards, broccoli, cauliflower, brussels sprouts), consider using floating or hoop-supported row covers. Pick worms off the plants when you see evidence of chewing or excrement on the plants. For extreme infestations, use Bacillus Thuringiensis (Bt), a relatively safe organic pesticide as per label directions. If you protect your plants until the first frost, you can enjoy harvesting many of these vegetables well into winter. For more detailed info on the problem and solutions, refer to *The Garden Shed* article OMG, What's Eating the Broccoli.
- If **vining crops** like squash and pumpkins are taking up too much of your garden space, it's ok to pinch off the growing tips. This causes the plant to put more energy into fruit maturity, less into vegetative growth.
- **Harvest potatoes** when the vines turn completely brown. Brush dirt off tubers when harvesting and don't wash until just before use. Cure for a couple of weeks in a cool, dark place to allow skins to harden. If tubers are damaged when harvesting, use them immediately since they tend to spoil quickly. Also, cut away any green parts of potatoes since they are bitter and can cause gastric distress if a large amount is eaten. More info is available from the article Homegrown Potatoes Tell You When to Harvest Them by the Michigan State Extension.
- **Bulbing onions** should be harvested when half their leaves are dried and fall to the ground. Harvest when soil is dry to minimize disease susceptibility. Allow them to cure for a few days. Remove dirt, cut off tops within 1-3" of the bulb, trim the roots, and leave the outer skin in place. Store them in a cool dry place.
- Garden vegetables that become over-ripe are easy targets for some pests. **Remove ripe vegetables promptly.**
- When harvesting, **don't let your produce sit in the hot sun**. Cover, or even better, keep them cool, to prevent loss of succulence, wilting, and conversion of natural sugars to starch.

Hang in There

It's easy for gardeners to slack off in August. Spring plants have expired, we've been fighting pests and the weather all summer and we're hot and tired. But if we stick it out, fall gardening can be really rewarding.

Refresh the soil, plant the fall crops you enjoy the most, and you'll be able to have fresh garden produce well into, if not through, the winter.

Thanks for visiting us in *The Garden Shed*. I hope to see you again next month.

Sources:

Monthly Gardening Tips, PMG
Website: https://pmgarchives.com/gardening-questions/monthly-gardening-tips/#August

"August Monthly Tip Sheets
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Garden: https://www.missouribotanicalgarden.org/gardens-gardening/your-garden/help-for-the-home-gardener/advice-tips-resources/gardening-by-month/august.aspx

Feature photo: R Morini