August 2021-Vol.7, No.8

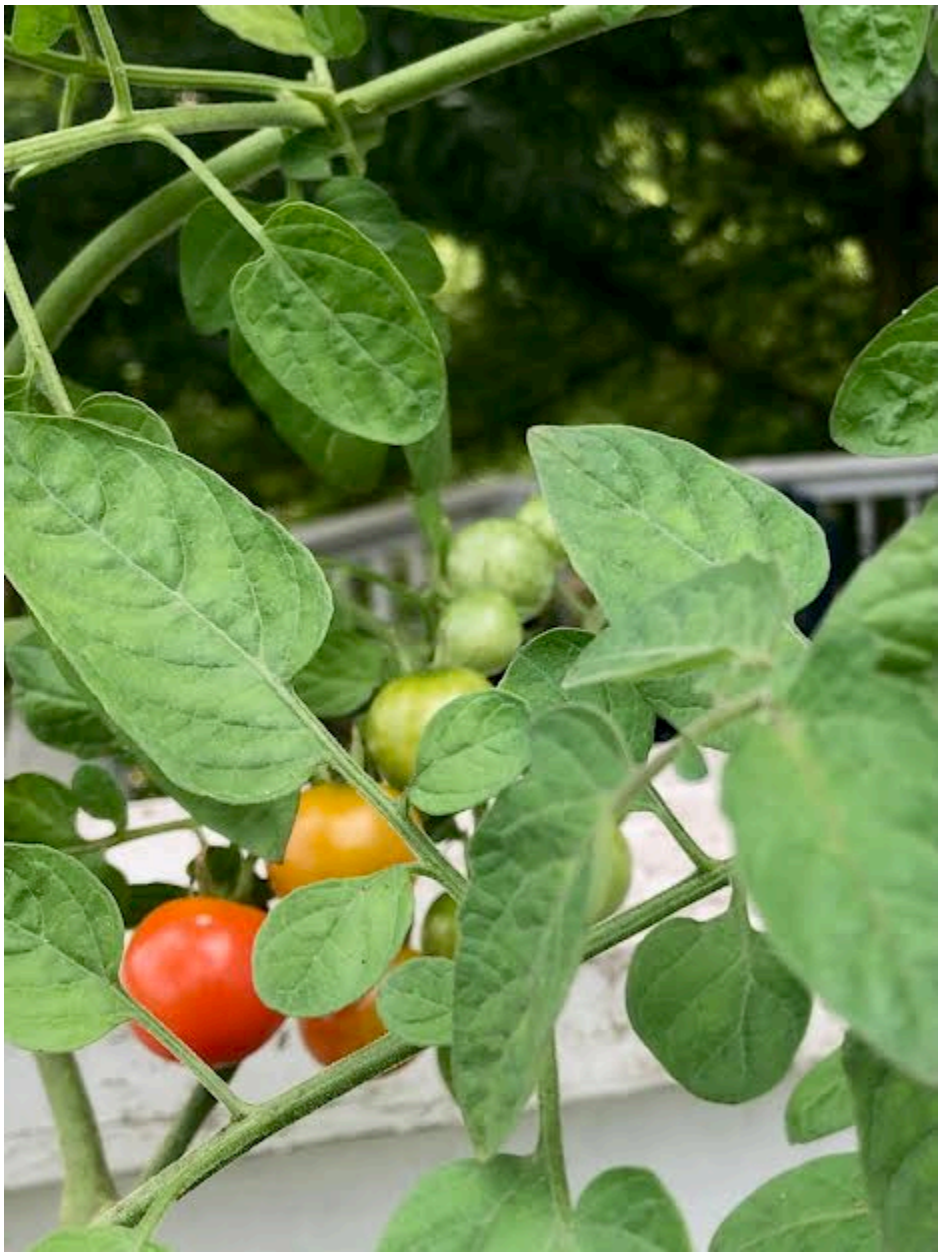


Table of Contents

Upcoming Events August 2021

By Susan Martin | August 2021-Vol.7, No.8

PIEDMONT MASTER GARDENERS
GARDEN BASICS CLASS VIA ZOOM
"LAWNS AND LAWN ALTERNATIVES"
Saturday, September 18
2:00 – 3:30 PM

Please check this LINK for information, and to register. **Register by September 13.**

IVY CREEK NATURAL AREA AND THE JEFFERSON CHAPTER, VIRGINIA NATIVE PLANT SOCIETY
WILDFLOWER WALK
IVY CREEK NATURAL AREA
1780 Earlysville Rd.
Charlottesville, VA 22903
Saturday, July 10
9:00 – 11:30 AM
Join Tana Herndon for a late summer plant walk. We will search the forest edge and a native grass field for common meadow plants, fruiting trees, and shrubs, and ladies' tresses orchids and then descend to the reservoir to find wetland plants such as cardinal flower and swamp milkweed. Meet at the kiosk at the Ivy Creek Natural Area at 9:00 AM.

HEARTFLAME GARDEN
OPEN TO VISITORS
650 Sandy Bottom Rd.
Near Elkton, Virginia 22827 (Adjacent to Shenandoah National Park)
Phone: (540) 298–8684
email: inanna@heartflamegarden.com

This three-season, breathtakingly beautiful garden stretches over 2 acres, and is open to the public free of charge. The garden owners, Inanna and Gabriel Garretson, ask that you call before visiting unless you plan on attending one of the **OPEN** days where everyone is invited without appointment. **The next open days are Saturday and Sunday, August 7 and 8, 10:00 AM – 4:00 PM.** Crape myrtles, hibiscus, and other large perennials will be in bloom. Please see this **LINK** for a list of the open days for fall, and look at recent photos. This garden is amazing!

CHARLOTTESVILLE AREA TREE STEWARDS
FREE WALKS AND TALKS IN SEPTEMBER
REGISTRATION IS REQUIRED

See this LINK for more information on each of these events, and directions. October events are also listed.

Pen Park Tree Identification Walk
Sunday, September 5, 11:00 a.m. to 12:00 p.m.
Pen Park Road, Charlottesville

Please use the following link to register: https://forms.gle/jpYgNy5oW6eLyPBfA

Directions: Pen Park is located off East Rio Road on Pen Park Road. After entering the park, take a left just before the tennis courts and park near shelter #2. The group will meet there.

Tree Basics Class: Trees and Wildlife (ZOOM)
Thursday, September 9, 7:00-8:30 p.m.

Please use the following link to register: https://forms.gle/9Hqra61aFTjcXYLa8

Botanical Garden of the Piedmont Tree Identification Walk
Saturday, September 11, 10:30 a.m. to 12:00 p.m.
950 Melbourne Road, Charlottesville

Please use the following link to register: https://forms.gle/C1EFBpowEM2HkpDc9

Directions: The Botanical Garden of the Piedmont is located at 950 Melbourne Road (Corner of Melbourne Rd and the John Warner Parkway). Parking is available within the Garden when the Gate on Melbourne Road is open. Parking is also available along either side of Melbourne Road. The walk will be approximately 90 minutes and cover 1.4 miles. If there has been any rain, the site tends to be wet so sturdy, waterproof shoes are recommended.

University of Virginia Campus Tree Identification Walk
Friday, September 24, 11:00 a.m. to about 12:30 p.m.
University Chapel, 145 McCormick Road, UVA, Charlottesville

Please use the following link to register: https://forms.gle/zNaURLf5v9ciBJfg9

Directions: Parking is available in the 14th Street Garage, Central Grounds Garage at 400 Emmet Street (the Bookstore Garage) and on the Street. Please meet at 10:55 am in front of the Chapel, which is on the west side of the Rotunda. The walk will be limited to 16 people.

VIRGINIA NATIVE PLANT SOCIETY
STATE AND CHAPTER EVENTS

See this LINK for a listing of both virtual and in-person August/September events hosted by different state and chapters of the VNPS.

THE NATURE FOUNDATION AT WINTERGREEN
3421 Wintergreen Drive, Roseland, VA 22967

August Guided Hikes

For information on guided hikes, difficulty ratings, and to register, please see this LINK to the August/September calendar.

NATIVE PLANTS FOR SALE AT THE NATURE FOUNDATION AT WINTERGREEN GREENHOUSE
725 Beech Grove Road, Roseland, VA 22967
Phone: 434-325-8169
Email: info@twnf.org

SPECIAL PLANT SALE

Saturday, September 4
9:00 AM – 12:00 Noon

The Greenhouse is closed Sunday and Monday; hours vary from Tuesday-Saturday. See this LINK for more information and to see a **listing of native plants available for purchase.** Plants can also be ordered online and picked up at an arranged time by emailing info@twnf.org

NEW DIRECTIONS IN THE AMERICAN LANDSCAPE (NDAL)
HOME GARDENER VIRTUAL SERIES VIA ZOOM

"NATIVE MEADOWS: LET'S GET REAL"
Thursday, August 12
1:00 – 2:30 PM

By planting site-adapted native perennials, managed according to the ecological processes that govern open field vegetation in the wild, long-lived vibrant meadows can be consistently achieved. In this presentation, plant selection criteria, planting procedures, and management techniques will be illustrated through a series of residential case studies, including some over two decades old.

See this LINK for more information and to register.

"LIKE PAINTING A PICTURE: GARDENS OF BLACK AMERICANS"
Tuesday, August 17
1:00 – 2:30 PM

From George Washington Carver to Zora Neale Hurston and more lesser-known self-taught horticulturists, Black Americans have laid out the blueprint for garden design in their own personal spaces. In this presentation and conversation we will discuss these historic legacies and the plants they used to beautify homes and communities.

See this LINK for more information and to register.

LEWIS GINTER BOTANICAL GARDEN
FALL PLANTFEST
1800 Lakeside Avenue
Richmond, Virginia 23228
Friday, September 17, 9:00 AM – 5:00 PM
Saturday, September 18, 9:00 AM – 3:00 PM

Fall PlantFest is held outside in Parking Lot C at the Garden (no admission fee or ticket necessary.) The Fall PlantFest features vendors selling plants ranging from well-known favorites to rare exotics. Knowledgeable garden volunteers help you choose your best plants! See this LINK for more information.

MONTICELLO'S TUFTON FARM
2021 FALL PLANT SALE AT THE THOMAS JEFFERSON CENTER FOR HISTORIC PLANTS
1354 Tufton Farm
Charlottesville, VA 22902
Saturday, October 9
9:00 AM – 3:00 PM

Preregistration will be required; check back for more information in late summer by visiting this LINK.

General information for Monticello is (434) 984-9800.

TUFTON FARM
HEIRLOOM APPLE TASTING EVENT
Saturday, October 23
9:30 – 11:00 AM

This popular annual event is a unique opportunity to explore the essence of heirloom apples. Supermarkets today provide only a limited sample of the thousands of apple varieties once available to 19th-century fruit lovers. Monticello fruit gardeners will provide numerous apple varieties and discuss their history and culture. Participants will taste, savor and rate each apple in this two-hour program.

Tickets available after August 1; spaces are limited to 75 participants. See this **LINK** for registration information.

BLUE RIDGE PRISM (PARTNERSHIP FOR INVASIVE REGIONAL SPECIES MANAGEMENT)
INVASIVE PLANT WORKSHOPS: IDENTIFICATION AND CONTROL
WORKSHOPS VIA ZOOM

See this LINK for general information on PRISM, research updates, invasive plant factsheets, and more.

CHARLOTTESVILLE AREA TREE STEWARDS

For information on upcoming Fall walks and classes, see this LINK.

ECOLOGICAL LANDSCAPE ALLIANCE (ELA)
WEBINAR
"Designing for Dry Stone Walling in the Landscape"
Wednesday, September 8, 3:00 – 4:00 PM

Traditional dry stone construction methods offer several advantages when used in sustainable landscape construction. This session will touch on the history, as well as some of the methods involved in dry stone construction. Learn the basic parameters for determining carbon footprint and other environmental implications when designing for dry stone walls.

For more information and to register, see this LINK.

Mt. CUBA CENTER VIRTUAL CLASSES, AUGUST/SEPTEMBER

"Instant Rain Garden"
Saturday, August 7, 10:30 AM – 12:00 PM

Prevent excess rainwater runoff by installing a hard-working yet beautiful rain garden on your property. Sam presents the basic elements of rain garden installation and maintenance, a list of perennials for wet and dry conditions, and designs that are aesthetically pleasing and highly functional.

For more information and to REGISTER, see this LINK.

"From Wolf Spiders to Orb Weavers: An Overview of Mid-Atlantic Spiders"
Tuesday, September 14, 6:00 – 7:30 PM

Spiders are ubiquitous creatures in our basements, meadows, and woodlots. While they inspire feelings of

fear among many, they are a source of wonderment and mystery to the nature enthusiast. Join entomologist Cathy Stragar for this interactive discussion on the natural history, identification, feeding strategies, and adaptations of the common spiders in the mid-Atlantic region.

For more information and to register, see this LINK.

"Seeds: Wild versus Commercial"
Thursday, September 16, 6:00 – 7:30 PM

For more information and to register, see this LINK.

We all know the importance of planting and promoting native plants, but what are the differences between wild seeds and those you can purchase from a commercial vendor? While seed farming is needed to meet the demand from restoration practitioners and homeowners, the end product can differ considerably from local, wild material. Join Native Plant Trust's Research Botanist, Jessa Finch, for this interactive online session to explore the impact of seed sourcing on commercially sold seed and to equip yourself with the information you need to be an informed purchaser of native plant seeds.

Mt. Cuba Center is a non-profit botanical garden located in Hockessin, Delaware near Wilmington. Its woodland gardens produce some of the most spectacular displays of wildflowers in the mid-Atlantic region. The botanical garden is now open to the public, see this **LINK** for info. **See this LINK for information on Mt. Cuba's world-famous trial garden and study results.**

MONARCH JOINT VENTURE
THE 2021 MONARCH CONSERVATION WEBINAR SERIES
4th Tuesday of the Month *
2:00 PM EST

The Monarch Joint Venture is partnering with the U.S. Fish and Wildlife Service National Conservation Training Center to put on another year full of informative and inspiring webinars on all things monarch. Webinars will be held live on the 4th Tuesday of the month at 2 PM EST. Each webinar will be recorded and for later viewing as well. Check on the session title to register.

Future Webinar Titles:

- **August 24th** – Conserving Grasslands for Birds and Monarchs
- **September 28th** – Protecting and Restoring California's Overwintering Groves
- **October 26th** – Recovery of the Monarch Butterfly: Federal and State Legislation that can Provide Hope for this Iconic Animal
- **November 16th** – The Monarch Butterfly Fund – Supporting Monarch Conservation in Mexico
- **December 21st** – Eco-literacy and Conservation: The Convergence of Research, Policy and Education

* The November and December dates have been moved to avoid conflicting with major holidays. Please note this list is subject to change. Their EVENTS PAGE will have the most up to date information on the webinar series, as well as a calendar of additional monarch-related events, and information on recordings of past webinars.

SIERRA CLUB VIRGINIA CHAPTER FREE VIRTUAL EVENT
"Proposals to Reintroduce Red Wolves to Virginia"
Tuesday, Sept 14

7:00 – 8:00 PM

Richmond-based journalist Stephen Nash has been looking into proposals to reintroduce red wolves, Canis lupus rufus, to Virginia. In the 1970s, the U.S. Fish and Wildlife Service caught the last 17 known representatives of this critically endangered species, whose range once extended from Florida to New York and the Atlantic states to Texas. The agency has worked to enlarge the captive population and reintroduce these animals to the wild, with varying success and gale-force political headwinds. Today, only a handful of red wolves remain in the wild in coastal North Carolina, and two hundred or so are in captive breeding facilities, nine of which are at Roanoke's Mill Mountain Zoo.

Register at this LINK for this free virtual event.

DOLLY MADISON GARDEN CLUB
LECTURE AND BRUNCH
MARIANNE WILLBURN, "BIG DREAMS, SMALL GARDEN"
THE BARN AT THE INN AT WILLOW GROVE, ORANGE, VA
Wednesday, November 10
10:00 AM – Noon

See this **LINK** for more information and to register. Space is limited. **REGISTRATION opens on AUGUST 15.**

VIRGINIA COOPERATIVE EXTENSION (VCE) VIDEO LIBRARY

VCE offers a variety of **YouTube videos** on topics geared to both beginner and more advanced gardeners. Examples of topics include:

Planning Your Fall Garden
Rose Rosette Disease, Parts 1 and 2
Plant Disease Clinic: IDs and Diagnoses
Weed Identification: IDs and Diagnoses
Soil Testing Lab: IDs and Diagnoses

For these and many more videos that address specific topics or those of more general interest, see this **LINK**.

Anise hyssop

By Cathy Caldwell | August 2021-Vol.7, No.8

I no longer remember what prompted me to purchase my first anise hyssop, and I'm pretty sure I had no idea what a trooper it would turn out to be as our summers have become hotter and drier and as deer browsing has increased. These days I wouldn't want to be without it, and you shouldn't be either.

Anise hyssop (*Agastache foeniculum*) is a perennial in the mint family that is native to much of the northern section of North America (northern Colorado to Wisconsin and in Canada from Ontario west to British Columbia). It goes by several common names: giant hyssop, lavender hyssop, and blue giant hyssop. However, it is NOT closely related to hyssop (*Hyssopus* spp.), a European plant traditionally used as a healing herb, nor to anise (*Pimpinella anisum)*, a completely different plant in the carrot family. It does have lovely purplish blue flower spikes that last a long time and fragrant leaves with a licorice scent. No doubt

that licorice scent deters deer, though my research indicates that rabbits may eat it. So far, neither pest has nibbled on my anise hyssop.

By the way, some humans consume the licorice-flavored leaves of *Agastache foeniculum*, usually in teas. As with any plant that's considered safe to eat, be sure you have the correct plant and that it was not grown in an area treated with pesticides. Univ.of Minnesota Extension.

Deer may not like this plant, but pollinators sure do. In fact, it has been identified by the Xerces Society as one of the top plants for pollinators. Bees are particularly fond of it, especially bumblebees. I'd observed this in my own garden, but I was amazed to learn that mass plantings of giant blue hyssop were at one time employed to support apiaries in the Midwest and Canada. Butterflies and hummingbirds are also regular visitors, and birds may eat the seeds.

Bumblebees love anise hyssop. Photo: Cathy Caldwell

Anise hyssop is easy to grow in either full sun or partial shade, and is not fussy about soil or moisture, though it does need decently-drained soil. Once it's established, it is drought tolerant — a trait that's becoming more and more important. Despite its height — 2 to 4 feet tall — it usually needs no staking. The period of bloom is long, starting here around the end of June and continuing to late summer or early fall. It is generally problem-free, though excess water can lead to root rot.

Another thing I love about anise hyssop is its tendency to self-sow and to spread by rhizomes, making for easy propagation. On top of all that, you can deadhead the flowers to promote additional blooms. By pruning the plant lightly during the growing season you can encourage branching as well as new flowers. It should come as no surprise that this too-good-to-be-true plant was named the 2019 Herb of the Year™ by the International Herb Association.

If you want to start it by **sowing seeds**, that's easily done, and the seeds are readily available online. Seeds can either be started indoors 5-8 weeks before the last frost in spring or sown directly in garden beds or containers. The seeds need light to germinate, and it's important to just barely cover the seeds with soil. Germination time is 1-4 weeks. Germination is reportedly improved with a 30-day period of cold, along with moist stratification before sowing.

Once you've got a colony going, you may want to start saving some seeds. To **save seeds**, cut off a mature seed head in fall and place it in a bag. Alternatively, you can place a bag over a fading flower to hold the seeds as they dry. Whichever method you choose, you'll need to allow plenty of time for drying in the bag. The small dark seeds can be difficult to separate from the dry seed heads, but one authority suggests you simply plant all the contents at the bottom of the bag — the small plant fragments, dust, seeds and all. I find that my plants do enough self-seeding to suit my needs.

I am very fond of the straight species, but there are **several cultivars.** Be aware that some cultivars are not as supportive of pollinators as the straight species. In addition, some of the cultivars are fussier about soil than the species, and require well-drained soil. For advice on the cultivars, I turned to Pat Chadwick, Master Gardener Extraordinaire and regular contributor to these pages. Pat has grown several of the following cultivars, and her comments are included below:

'Blue Fortune' — long bloom period because it does not set seed; recipient of the Royal Horticulture Society's Award of Garden Merit in 2003. 'Blue Fortune' is Pat Chadwick's favorite. She says," I can't do without this plant!! It's an absolute bee and butterfly magnet. I once tried to count all the insects that were flitting around the plant, but there were too many to count. I also like the fact that the calyxes show color long after the blossoms are finished, which gives this plant added value as an ornamental."

Agastache 'Blue Fortune'
Photo: Pat Chadwick

- 'Alabaster' – has creamy-white flowers on 3′ plants with lighter green foliage that is less bushy than the species.
- 'Black Adder' – a hybrid with dark buds and red-violet flowers, less robust than the species. This is another Pat Chadwick favorite even though it has not been long lived for her.
- 'Blue Blazes' – a tall hybrid of *A. foeniculum* and *Agastache* 'Desert Sunrise' introduced by High Country Gardens; lavender purple blooms.
- 'Blue Fountain'/'Blue Spike' – clear blue flowers.
- 'Golden Jubilee' – an All American Selection Winner (2003) with gold to lime-green foliage and lavender-blue flowers. Self-seedlings are mixed, some golden and some not. According to Pat Chadwick, this cultivar "pops up all over the place, so I pull out what I don't want and transplant the rest as needed to give a pop of chartreuse in the garden. Great plant and the pollinators love it."
- 'Purple Haze' – a hybrid with narrow flower spikes that are of less interest to large native bees but attracts many smaller pollinators.
- 'Red Fortune' – a hybrid with pink flowers that are not nearly as attractive to pollinators as the species.

'Apricot Sunrise' — an erect, shorter plant with tubular, orange-apricot flowers. It is sometimes identified as *Agastache aurantiaca* x *A. coccinea* and by the common name hummingbird mint. Pat Chadwick has noted that it "has much finer foliage than most of the other hybrids I've grown and is tough as nails."

Agastache 'Apricot Sunrise'. Image courtesy of Longwood Gardens.

If you’d like to try one or more of these hybrids, you may need to amend your soil to maximize drainage. Fall is the best time to plant. Be aware that pruning or cutting back in the fall or winter may adversely impact cold hardiness.

'Golden Jubilee' hybrid at Kingsbrae Garden in Saint Andrews, New Brunswick, Canada. Photo courtesy of Kingsbrae Garden

Whether you're looking to create a pollinator garden, to add a drought-tolerant long-bloomer to your perennial border, or simply love the shade of blue, you'll find that anise hyssop will fit the bill. I recently transplanted some of the seedlings from my garden into containers on my deck, where they not only look lovely all summer but also encourage the bees that are needed by my containerized tomato plants. What more could a gardener ask?

Anise hyssop and cherry tomato make good deck companions. Photo: Cathy Caldwell

SOURCES:

Featured photo: Cathy Caldwell

USDA Plants Database/Agastache foeniculum

"Anise hyssop, *Agastache foeniculum*," Univ.Wisconsin Ext.

"*Agastache foeniculum*," NC State Ext.

"Anise Hyssop for the Perennial Garden," Penn.State Ext.

"Agastache 'Blue Fortune', Missouri Botanical Garden PlantFinder

"Tulsi Basil and Anise Hyssop: Easy, Useful, and Adaptable," Maryland Grows BLOG/Univ.of Maryland Ext.

"Anise Hyssop hybrids almost too good to be true," University of Georgia Ext/CAAES Newswire (2004)

"Edible Flowers," University of Minnesota Extension

"The Genus Agastache as Bee Forage: An Analysis of Reader Returns," Iowa State University Digital Repository (George S. Ayers and Mark P. Widrlechner, 1994)

"Some Native Seeds Can Be Planted in the Spring,"Cornell Univ. Ext. (Blog, 2021)

"Agastaches for the Rock Garden,"Rock Garden Quarterly (Richard Dufresne, Summer 1999, p. 185)

August in the Edible Garden

By Ralph Morini | August 2021-Vol.7, No.8

A hot summer with spotty rain has defined edible garden management issues this year. Good mulching and watering practices can help keep warm weather crops healthy longer while reducing the labor to maintain them. In my garden, the fungal diseases that cause trouble during moist years haven't been much of a problem. Intensive planting and liberal use of leaf mulch has helped keep the soil shaded and minimized evaporative losses, but plants have still required more irrigation than normal. Nevertheless, I'm entering August with a pretty healthy vegetable patch.

Pest sentry. Photo: Ralph 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 and being a bit more generous when it is really hot helps. 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 fruits before they reach full maturity to keep plants producing.

August is the peak of tomato season, a summer highlight for many of us. Depending on variety and planting timing, some determinate varieties may be presenting a full harvest now. Indeterminate varieties however 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.

I'm happy to report that I selected my tomato seeds carefully this year to find cultivars that are resistant to the blights that hurt my plants last year, and the results have been positive. Rotating tomato location in the garden may also have helped, but I'm entering august with the best looking tomato plants I can remember.

On the other hand the fruits have been slow to ripen. It seems like the green tomatoes don't want to redden. The article Why Aren't My Tomatoes Ripening, from the Cornell Extension, explains that at temperatures above 85 degrees the plants don't produce the lycopene and carotene compounds that cause the reddish colors. We can take matters into our own hands however by picking tomatoes when the first blush of color

change occurs, storing the green tomatoes at 70-75 degrees, 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 good news is that the taste compromise is minimal compared to fully vine ripened fruits. This is also a good way to protect tomatoes from invading varmints and to save late season fruits that may be threatened by frost.

If diseases are a problem find help in identifying and addressing them in two articles from the Missouri Botanical Garden. The article Tomato Fruit Problems is helpful in identifying tomato diseases and Tomato Diseases and Disorders offers information for disease prevention and control. Also, note specific diseases you confront to guide you toward resistant seed and plant selections next year.

Tomato hornworm hosting parasitic wasp cocoons: Photo: R Morini

Pests can also hurt tomato harvest. Tomato hornworms are a common one. The key sign on their presence is denuded leaf stems. If you see one that looks like the one 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 when 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.

Tomato thief: Photo Ralph Morini

Mammals can also be tomato pests as the photo shows. Squirrels and chipmunks are more problematic than dogs for most gardeners. My best suggestion for keeping them at bay is wrapping netting around plants, being careful to tie top and bottom openings closed. Other possibilities include interspersing scented plants like mint in the vicinity, placing coffee grounds around the plant base and making sure other food sources, like bird feeders, are not near the garden.

Planting a fall crop

August is the time to plant fall crops. In Hardiness Zone 7a, the first frost is expected in the October 15-25 time period, roughly 70-80 days from August 1. When choosing seeds to plant, be conscious of time-to-harvest noted on the seed packs to be sure the crop has adequate time to mature prior to frost. Cool weather crops, including greens and cole crops, survive frost but growth will slow down as days shorten and temperatures cool. Getting them to a harvestable stage prior to frost is a good idea. In general, choosing varieties with a short time to maturity makes sense.

Per the VA Cooperative Extension publication Virginia's Home Garden Vegetable Planting Guide, now is the time to plant transplants of broccoli, cabbage, cauliflower, collards, kale, kohlrabi and mustard, while planting seeds for beets, carrots, lettuce, radish, spinach and turnips.

The fall gardening season can be very productive here in central VA. We can enjoy home-grown produce at least through frost, and many greens and cool weather crops remain harvestable well into winter if established prior to cold weather's arrival.

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 to moderate frost and look for those requiring 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 planting crops of different families than those grown in that garden section earlier in this growing season.
- When planting fall crops, **prepare the soil by restoring the nutrients removed by spring and summer crops**. A light layer of compost or application of a balanced organic fertilizer will provide the nutrients needed by fall crops.
- Dry soil can make working the soil difficult and can also inhibit seed germination during the late summer. **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 all 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.**
- When **mulching around young seedlings**, take care not to cover them. Young seedlings need as much sunlight as possible. Mulch should cover the soil, not the plants.

Cross striped cabbage worm 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 and pick worms off the plants when you see evidence of chewing or excrement on the plants. For extreme infestations, use Bacillus Thuringiensis (Bt), an organic and relatively safe 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.
- **Potatoes continue to grow as long as the tops are green**. Dig only as many as you need for immediate use. The tubers will keep better in the ground than in a warm, dry area.
- Garden vegetables that become over-ripe are easy targets for some pests. **Remove ripe vegetables as soon as possible.**
- 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 vegetable gardeners to begin to slack off in August. The 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*. We look forward to sharing experiences again next month.

Sources:

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

"August Monthly Tip Sheets
-Vegetables," https://albemarle.ext.vt.edu/programs/horticulture-natural-resources.html

Monthly Tips and Tasks, Missouri Botanical 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

Gardening to Save the Planet

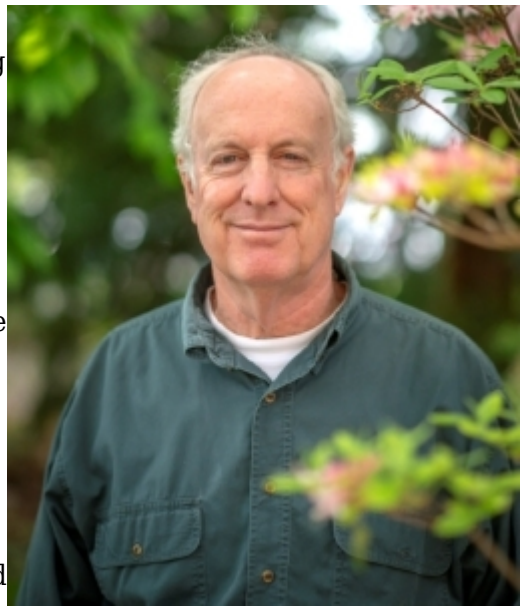
By Cathy Caldwell | August 2021-Vol.7, No.8

Editor's Note: William Cocke is a longtime gardener and native plant enthusiast with an interest in the relationship between gardening and the natural world. For more than 10 years, he wrote a monthly natural history column, "Blue Yonder," for Blue Ridge Outdoors. He also provided editorial assistance for the regional guide, *Piedmont Native Plants: A Guide for Landscapes and Gardens*.

In 2008, Douglas W. Tallamy, an unassuming professor of entomology and wildlife ecology at the University of Delaware, shook up the gardening community with a surprise hit, "Bringing Nature Home: How You Can Sustain Wildlife with Native Plants." In it, he made the case that the relationship between native plants and the insects that have evolved with them is the essential link in maintaining healthy ecosystems. Incorporating native plants into basic garden design is not only desirable, but also imperative, to reverse declining populations of insects and restore balance to an otherwise broken system.

More recently, in his 2019 book "Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard," Tallamy builds upon this idea, but he takes on a more activist tone. He wants to change the way we interact with and perceive the landscape around our homes. It's no longer enough to select a plant that is pleasing to the human eye, every choice we make must also support a complex web of life. He's now on a mission to save the world—one garden at a time.

Tallamy is an unlikely revolutionary. In person, his genial science guy demeanor has made him a favorite on the garden club speaking circuit. His writing style leans toward the professorial—a gently persuasive Socratic method punctuated by the occasional exclamatory statement. It's as if he can barely suppress his enthusiasm. As the book's title suggests, Tallamy maintains a generally sunny outlook, which is a welcome corrective to the book's dark underlying theme: the natural world is in big trouble, with many ecosystems in steep, possibly irreversible, decline. In the Anthropocene, humans are not part of the problem, they *are* the problem. Fortunately, in Tallamy's view, they can also be a part of the solution.



Doug Tallamy. Photo: Rob Cardillo, courtesy of Workman Publishing Co.

In "Nature's Best Hope," he aims to inspire a nationwide, grass roots movement he calls "Homegrown National Park." By awakening those of us who are disconnected from the natural world and changing the ingrained habits and practices of those who are already gardeners, Tallamy believes that, collectively, we can create a homeowner-driven patchwork of personal parks that could blanket the country. In doing so, each of us can play a role in mitigating the effects of habitat loss, fragmentation, and even climate change. If every landowner pledged to convert just half of his or her lawn into a functioning native plant community, Homegrown National Park could cover 20 million acres, weaving the fabric of a vast park system into every ecosystem in the continent.

It's a beguiling concept. But there is a lot of information to digest. The book devotes entire chapters to wildlife ecology concepts such as carrying capacity, ecosystem function, keystone genera, and interaction diversity. Fortunately, Tallamy is adept at explaining complex scientific concepts in lay terms. And as an entomologist by training, he devotes one of the lengthiest chapters in the book to how gardeners can become stewards of what E. O Wilson calls "the little things that run the world"—insects. In doing so, he makes a

compelling argument for what might be described as insect-driven garden design.

A recent study of native bee populations conducted at Delaware's Mt. Cuba Center, a public garden and conservation center dedicated to native plants, appears to support Tallamy's argument for a garden-centric approach to conservation. In conducting a survey of native bee populations on the 1,000-acre property, in both the natural areas and the cultivated gardens, its researchers found that bee diversity was highest in the gardens. So human-designed spaces acted as vital links to the larger landscape—providing oases of diversity that sustain the wild areas surrounding them.

Gardening for insects sounds a bit creepy. What about gardening for our own benefit, for the sake of a beautiful outdoor space we can call our own? Tallamy wants to upend our whole notion of what's considered beautiful to include a vision that transcends what looks good to humans and encompasses what sustains the other creatures we share the world with.

Yet, as a scientist, Tallamy can't help creating hierarchies—much of his and his students' research involves ranking various native plants and the insect species they support—and I quibble a bit over his preference for certain native plant species over others. While I certainly can't argue with the praise he lavishes on the oak tree (the subject of his latest book) nor with his point that including just one species of oak in the garden can support hundreds of beneficial insects, he risks giving short shrift to other native trees, such as the yellowwood, because they support fewer insects. We have two mature yellowwoods in our yard and they are unparalleled shade trees, bedecked with stunning displays of fragrant white flowers, aswarm with pollinators, in the years they choose to bloom. He also neglects to mention the several species of mountain mint that, in my observation, are late summer magnets for a diverse set of native bees and wasps.

Yellowwood blossom. Photo: William Cocke

Yellowwood tree (Cladrastis kentukea). Photo: William Cocke.

Paradigm shifts rarely happen without controversy. Tallamy has taken some heat for his insistence on the superiority of gardening with native plants and, particularly, his insistence that we make a point of eradicating invasive plants in the landscape. A mostly laudatory April 2020 article in *Smithsonian* magazine devoted space for a rebuttal to Tallamy's research from Arthur Shapiro, a professor of entomology at UC Davis. In the *Smithsonian* story and a later follow-up, Shapiro noted that non-native eucalyptus trees in California support overwintering monarch butterflies and that other introduced plant species do support insects that, in some cases, have found them to be acceptable and even superior food sources. He also presents evidence that some insect species can exhibit evolutionary adaptations to non-native plants in hundreds of generations, rather than the thousands posited by Tallamy. In other words,

> some insects, even so-called specialists, may adapt to feeding on plants that they haven't co-evolved with in something approaching a human lifetime.

This latter point is especially important when considering climate change, another ecological crisis—and perhaps the most pressing one—that Shapiro and his supporters believe Tallamy largely ignores. If native plants cannot compete in a changing climate and are displaced by more aggressive or better adapted invasives, then the wildlife associated with them either adapts or dies, Shapiro argues. Invasives are the consequence of climate change, not the cause of associated plant or animal extinctions.

That argument, though, seems to me to reinforce Tallamy's plea for a new conservation approach to gardening, one that gives native species a fighting chance to survive climate change. Leaving large-scale native plant restorations aside, Tallamy's one-garden-at-a-time approach to maintaining the habitats we've constructed, either on purpose or unintentionally, as productive for wildlife as possible, is eminently doable. Controlling invasives on a backyard basis can be achieved with a little sweat equity. Not planting them at all is even better. Placing a non-native azalea in the yard or allowing a monoculture of autumn olive to overtake your landscape may support a few insect species at certain times of the year, but it's a bit like asking a starving person to go on a diet in the middle of a famine. A healthy, balanced landscape is better able to sustain a greater variety of species in what is certain to be many challenging decades to come.

In an extensive Q&A section, Tallamy attempts to address questions and criticisms of his approach. After reading his book, my preferred habitat is somewhere out in the squishy middle ground. Trying to return the landscape to a misty prelapsarian paradise is an undertaking that would make Sisyphus despair. So it's okay to incorporate some non-native, noninvasive plants into your garden design. My personal preference is to incorporate about 80% natives into the garden with the rest of the space reserved for exotics. Planting early-blooming bulbs, for example, is a relatively benign way to bring in a welcome burst of color to the spring landscape. I love the structure, height, and heady purple of Tatarian asters in the late fall, so I've mixed them in with native asters and goldenrods, the superstars of the late season garden.

In *Nature's Best Hope,* one of Tallamy's aha moments comes when he observes three monarch butterflies flitting from milkweed to milkweed along the narrow strip of native plants on New York City's High Line. If these highly specialized insects could find their host plants in the middle of one of the world's most urban settings, then why not work with nature's resilience to create a matrix of life that begins with a humble backyard? The Homegrown National Park could incorporate window boxes overlooking Central Park, a postage stamp prairie in a Milwaukee yard, or a desert garden in the exurbs of Los Angeles. It's a vision—and a challenge—that Tallamy presents the home gardener, and one well worth considering.

Little things add up to big things, but in the end it's the little things that may save the world.

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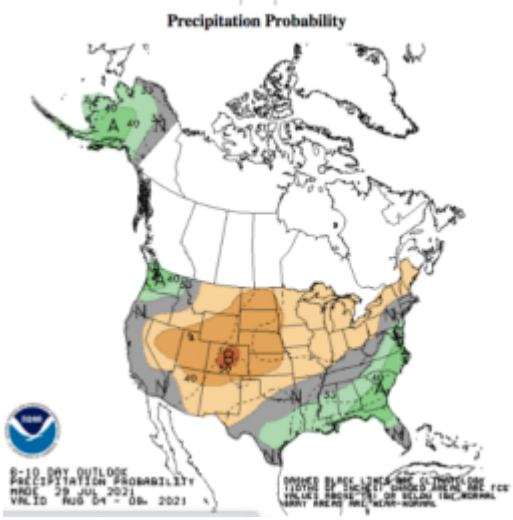
The August To-Do List

By Cathy Caldwell | August 2021-Vol.7, No.8

Will this hot, dry weather continue in August? That's the question I ask myself every day. As I write this, the National Weather Service is predicting that the answer to my question will be "no" — and that's grounds for celebration.

I only recently discovered HOW to try to answer the will-it-ever-rain question, and now I'm hooked. The National Weather Service has a division called the Climate Prediction Center, and it issues long term predictions for temperature and precipitation, among other things. These predictions come in the form of U.S. maps with regions shaded to indicate the probability that temperature and precipitation will deviate from the norm for a given time period. The 6-10 day Outlook, for example, illustrates the probability, that the observed total precipitation, over the upcoming days will be either below normal (B), median (N), or above normal (A). Take a look at the Temperature and Precipitation Outlook for August 4–8,2021 at 6-10 Day Outlook/Climate Prediction Center/NOAA.gov. These graphic maps are revised periodically, so by the time you read this, it may have been revised, but at the moment, a slight chance of above-normal rainfall is predicted for early August. Before we start cheering, keep in mind that these long term forecasts are labeled as "experimental" — a cautionary term indeed.



Precipitation Probability for Aug. 4–8, 2021, issued 7/29/21 by Climate Prediction Center

Watering may very well be your main task this month. If your water supply becomes limited due to restrictions or because your well is not adequate for the demands upon it, you'll need to prioritize the water needs of recently-planted trees and shrubs (those planted within the last 1-3 years). To avoid any waste, be sure to water early in the morning or late in the evening. which reduces the amount lost to evaporation and gives plants time to replenish. "Water early in the morning to allow plants to get moisture before dealing with the hot day or water late in the evening to allow plants to replenish after the day." "Heat and dry weather pose problems for landscape plants," Va.Tech,2020

Soaker hose. Photo: Cathy Caldwell

If we continue to suffer periods of above-average heat and drought, you may start to wonder, as I did in July, if there's anything that a gardener can do to help their plants survive — other than watering. Could some extra nutrients help? I was surprised to discover that the answer to that question is no. Why? Fertilizer encourages new growth, which will in turn, increase the plant's need for water. Here's the complete list of do's and don'ts to help your garden survive drought:

Tips for Mitigating Drought and Heat Stress on Landscape Plants:

- Do NOT encourage growth: **no fertilizing,** and **no pruning** (except to remove dead or dying branches).
- Add mulch around individual plants, as much as 3-4″.
- Remove weeds, which are competing with garden plants for moisture.
- Deadhead flowering plants early. Do not allow spent blooms to form into seeds. Plants going to seed use large amounts of energy and water, which is best used to maintain plant health during the dry period.
- Avoid using pesticides and herbicides. Applying an herbicide when it is too hot may turn the liquid into gas, which could cause drift onto your already-suffering garden plants. Also, weeds do not take up the herbicide as well during dry conditions. When it's hot and dry, pesticides can injure plants.

For a deeper understanding of **how drought impacts trees and shrubs**, I highly recommend "How Dry Seasons Affect Woody Plants," University of Kentucky/Coop.Ext./ID 89.

Since the National Weather Service is predicting an increase in precipitation for August, I have high hopes that we gardeners will be able to proceed with our usual seasonal tasks this month. A good place to start your to-do list is the Monthly Gardening Tips/August in the Gardening Resources section of the website.

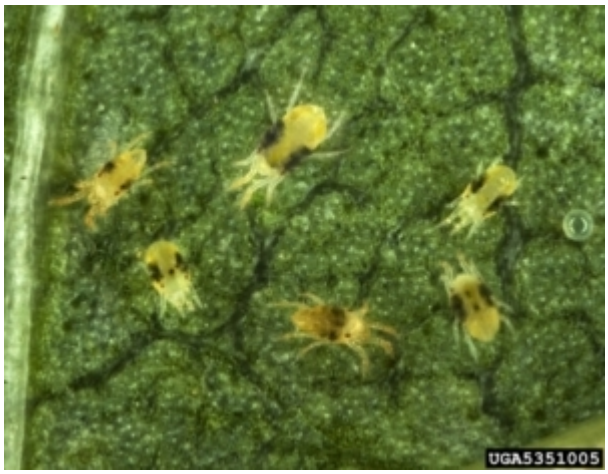
Deadheading will encourage new flowers on a number of plants, such as coneflower, garden phlox, salvia, asters, rose campion, and anise hyssop. If you have reblooming daylilies, cut back the spent flower stalks and snip off any seedpods to trigger the growth of new flowers.

If you are **pinching off spent canna blooms**, be careful. New buds usually form right next to the spent flowers. Some canna lilies produce big black seed pods, while others are sterile. Watch to see if seed pods develop. If they don't, deadheading the flowers isn't necessary, except for aesthetics.

Monitor for Diseases and Pests

Are you seeing more damage from pests and diseases? Drought and heat can render a plant more susceptible to both. Monitor regularly to stay on top of these issues. Removing diseased foliage as soon as you spot it can prevent spread. And a number of pests can be removed simply by handpicking or spraying them off with water. The water spray method works on both aphids and spider mites.

I just knocked a huge herd of **spider mites** off of my purple coneflowers, but the experts say this must be repeated frequently to keep the mites from climbing right back up the plants. Mid-season washing of the leaves can help reduce the potential for spider mite population booms.



Spider mites. Photo: David Cappaert, Bugwood.org, CC BY-NC.

If mites are well-established, you might be tempted to try a pesticide, but most insecticides are not effective on mites, and some, especially carbaryl, result in increased mite damage after their natural enemies have been killed. If you're desperate, you might consider **either an insecticidal soap or horticultural oil,** which are designed to coat the mite's exoskeleton and cause suffocation. Unfortunately, these products can also kill beneficial mites and insects upon contact, though they do not have residual impacts. For more information on spider mites, see Integrated Pest Management for Spider Mites, Clemson Coop.Ext.

Hot weather and high humidity encourage fungal diseases on many perennials, shrubs, and trees. Remove, bag, and dispose of diseased foliage, blossoms, and other plant litter that might harbor pathogens capable of re-infecting the plant.

If you're struggling to diagnose a problem, there are a number of sources that can help. For a comprehensive guide to diagnostic websites and apps, be sure to start with the *Garden Shed* article "Oh, No! Something's Wrong with my Plant!". If you're wondering what's wrong with a perennial, check out the Connecticut Agricultural Experiment Station publication entitled "Identification and Management of Diseases of Perennials in the Landscape," which provides a good basic overview accompanied by photographs of KEY diseases that the typical gardener might face. If it's a tree or shrub you're concerned

about, this Penn State article can help you in narrow down the possible diseases and pests based on the type of injury you're seeing: Penn.State Ext/Diagnosing Injury to Woody Ornamentals. Once you have a suspect or two, you'll find photographic guidance for many diseases and pests at the Plant Problem Image Gallery maintained by the Va Tech Plant Disease Clinic. In addition, Virginia Tech has a number of videos about common plant diseases, and you'll find these at this YouTube/VCE Master Gardener link.

If you've got a mystery disease and need expert diagnostic help, you'll be happy to know that the Virginia Tech Plant Disease Clinic has lifted its Covid restrictions on submitting samples of plants for analysis. Read about how to submit both photographic and live plant samples at https://spes.vt.edu/affiliated/plant-disease-clinic/submitting-samples.html. Contact the HELP DESK for details on getting your sample into the office and on its way to Virginia Tech. Call 434-872-4583 or send an email to albemarlevcehelpdesk@gmail.com.

To see a list of pesticides recommended by Virginia Tech scientists for each major plant disease — including organic and biopesticides, — see Table 4.1, Control of Ornamental Diseases, Pest Management Guide 2021.

August and September are good times to attack invasives like Japanese stiltgrass and autumn olive — before they drop seeds. Read about how to deal with autumn olive and Japanese stiltgrass and other invasive plants at the very helpful website of Blue Ridge Prism. Blue Ridge Partnership for Regional Invasive Species Management or PRISM is a Cooperative Weed Management Area serving Albemarle and several other area counties. If you've got invasive problems, you may want to sign up for their newsletters or one of their training sessions.

Mature autumn olive. Photo: Cathy Caldwell

Managing your lawn during a drought can be tricky. Should you let your lawn go dormant for a while? Consult the expert guidance of Virginia Tech via this podcast and article: Lawn Management During Heat and Drought/Va.Coop.Ext.

August-blooming blue mIst flower

Be sure to take a break now and then to enjoy your garden. And while you're at it, make some notes about which plants are doing well and where you'd like to add some more drought-tolerant plants in the fall. Climate change is turning us all into citizen scientists in our own yards as we learn from our own observations which plants can withstand the hotter, drier conditions of our summers.

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The Nutritional Value of Leafy Green Vegetables

By Penelope Fenner-Crisp | August 2021-Vol.7, No.8

What are Leafy Greens?

Swiss Chard
Photo: David K. Garth

Examples of leafy green vegetables include “loose” leafy greens such as kale, Swiss chard, and many kinds of lettuces. They also include other more dense veggies such as broccoli, cabbage and Brussels sprouts. There is little dispute these days that dark green vegetables should be at or near the top of the list when it comes to providing a nutritional big bang for the buck—and for their (low) calories. One cup of uncooked greens may top out at a whopping 10-20 calories, perhaps, a little higher for some of the denser veggies like broccoli.

Collards and kale. Photo: Pixabay

And, in return for those few calories, you get substantial amounts of vitamins such as A, C, K, and many of the B’s including folate (B9), plus minerals such as calcium, iron, magnesium, manganese, and potassium, along with some protein, lots of fiber made up of complex carbohydrates (the “good” carbs), and antioxidant phytonutrients such as beta-carotene, lutein, and zeaxanthin, BUT little or no fat!

The greens are clearly critical actors in support of a healthy lifestyle, playing a key role in the prevention, mitigation or slowing down of excessive body weight gain, cardiovascular disease, Type II diabetes, age-related cognitive decline, macular degeneration, and other diseases including cancer.

With all of those health benefits, there is little excuse not to have the greens on your menu every single day — for breakfast, lunch, or dinner. Their versatility is key: they are suitable for smoothies at breakfast, salads at lunch, and as flavor-enhancers, sides, or main dishes at dinner. And they may be less expensive than many meats and processed foods. What more could you ask for?

So, how many kinds of edible leafy green vegetables are there? To put it simply: a lot. The U.S. Department of Agriculture lists over 60 different varieties known to be imported or grown for commercial purposes in the U.S. Many other, perhaps less well-known, varieties are grown in home gardens or gathered in the wild.

These veggies come in a wide variety of textures and flavors, from very mild to nutty to spicy/peppery, to bitter. In other words, they have the capacity to serve every palette. Generally, maximum nutritional value comes from eating them raw, but cooking them properly does not cause them to lose their benefits Raw or cooked, they are the stars of many recipes.

Nutrient density

The leafy green vegetables are often discussed in terms of their nutrient density. In other words, the greater the multiplicity and magnitude of key nutrients, the greater the density. This is documented, in part, by the determination of Daily Values (DV), also known as Recommended Daily Intakes (RDIs). Daily Value is defined as the recommended amount of a nutrient to consume each day.

What are some of the more popular and accessible high density greens that you can easily integrate into your dietary habits? Following are a number of high-value examples:

Let's begin with **kale** which is at the top of the list. A single cup of raw kale contains the following percentages of Daily Values (DV):

- Vitamin A-206%
- Vitamin K -684%
- Vitamin C -134%
- Vitamin B6 -9%
- Manganese -26%
- Calcium – 9%
- Copper – 10%
- Potassium – 9%
- Magnesium – 6%

Kale also contains 3% or more of the DV for vitamin B1 (thiamin), vitamin B2 (riboflavin), vitamin B3 (niacin), iron and phosphorus. All of these nutrients are packed into about 35 calories, along with 6 grams of carbs (2 as fiber), 3 grams of protein, and high levels of antioxidants. What little fat is present is overwhelmingly an omega-3 fatty acid (the "good" fat).

Nipping at kale's heels is **spinach**. One cup of raw spinach provides:

- 181% of the DV for vitamin K
- 56% of the DV for vitamin A
- 13% of the DV for manganese

— all for under 10 calories. It, too, contains high levels of antioxidants. It is also high in folate (Vitamin B9), which may prevent neural tube defects, such as spina bifida, in the fetus during pregnancy.

Other "loose" leafy greens with good nutritional value and low calories include microgreens (which are the new, young shoots of many kinds of salad vegetables), beet, collard, and turnip greens, plus Swiss chard, and arugula, among others. Some other varieties like iceberg (head), Boston (butterhead) or Romaine lettuces may not match the aforementioned in the array and amounts of key nutrients, but they still offer nutritional value and provide variety in flavor and texture.

Freshly-harvested beets and their tasty greens. Photo: David Garth

Some members of the leafy green family aren't "loose" in structure like those discussed above. They are more tightly constructed and dense, but still are packed with nutrients and other important constituents. For instance, 1 cup of raw **green cabbage** contains:

- 22 calories
- 1 gram of protein
- 2 grams of fiber
- 85% of the DV of vitamin K
- 54% of the DV of vitamin C
- 10% of the DV for folate (vitamin B9)
- 10% of the DV for vitamin B6
- 7% of the DV of manganese
- 4% of the DVs for calcium and potassium
- 3% of the DV for magnesium.

Another example of a denser leafy green is broccoli. One cup of raw broccoli provides:

- 116% of your daily vitamin K DV,
- 135% of the DV for vitamin C and
- a good amount of folate, manganese and potassium.
- It also contains a compound called glucosinolate, as well as its by-product, sulforaphane. Sulforaphane has been shown, in whole animal and cell culture studies, to have a protective effect against some types of cancer and is being investigated as a potential prevention measure in humans.

Next steps

So, now that you are armed with all this good information, there is no reason to delay assembling and serving those leafy green-containing salads, sides, or main dishes as the centerpieces of -a healthy lifestyle. If you don't have any in your garden already, some are good candidates for fall gardening.

Happy eating!

Photo: Markus Winkler/Pexels

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Featured image Photo: Markus Winkler/Pexels. Some other photos courtesy of Unsplash.

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Stuffed Peppers

By Erin Hall | August 2021-Vol.7, No.8

Last month Chris Stroupe offered a fantastic article all about cultivating peppers. If you have followed his great advice, you are likely starting to consider what all you might cook with your harvest. This recipe highlights your peppers and also takes advantage of other vegetables and herbs you may have from your garden.

Stuffed Peppers

Adapted from The Best Book of Greek Cookery by Chrissy Paradissis

Serves: 4-6

Notes: This recipe is easily adapted to stuffed summer squash and you can stuff a combination of squash and peppers; cooking times remain the same. To minimize the dirty dishes, you can use the same saucepan to peel the tomatoes (using this method), cook the rice, and brown the butter for the breadcrumb topping. Similarly, you can cook the filling in a Dutch oven and then also use it as the baking dish.

Photo courtesy of Erin Hall & Michael Shveima

Ingredients

6 large peppers or equivalent

2 tablespoons olive oil plus more for roasting the peppers

Salt

Pepper

3 tablespoons butter, divided

1 onion, chopped

2-3 cloves garlic, chopped

1 jalapeño or another small hot pepper, diced

1 ¼ pounds ground beef

½ cup rice

2 tablespoons parsley, chopped

1-2 teaspoons fresh oregano, chopped

1 ½ cups tomatoes, peeled and chopped (from 1 pound fresh tomatoes)

¾ cup breadcrumbs

1 ½ cup tomato juice

Steps

1. Heat the oven to 450°. Cut the tops off your peppers and clean out the seeds and white pith from the insides. Arrange the peppers cut side up on a foil-lined baking sheet. Drizzle each with a bit of olive oil and a pinch of salt and peppers.

Photo courtesy of Erin Hall & Michael Shveima

2. Roast in the oven for 25 minutes. The peppers should have some brown spots but not be falling apart.
3. Remove from the oven and let cool. Reduce oven temperature to 350.
4. Rinse your rice until the water runs clear. In a small saucepan, combine rice and enough water to cover by an inch. Bring to a boil and then lower to a simmer until your rice is partially cooked. (I used basmati and this was about 7 minutes of simmering for me.) Drain in a colander, rinse with cold water, and reserve.
5. Heat 2 tablespoons of olive oil and 2 tablespoons of butter in a Dutch oven or another tall-sided skillet. Once the butter is melted and has finished foaming, add the onion and sauté until soft.
6. Add garlic and jalapeño and sauté for an additional minute.
7. Add ground beef and cook, stirring occasionally until the pink is gone.
8. Stir in parsley, oregano, 1 teaspoon salt, ½ teaspoon pepper, and tomatoes.
9. Simmer for 5 minutes, stirring occasionally.
10. Add additional salt and pepper to taste.
11. Melt 1 tablespoon of butter in a saucepan and cook until it just starts to brown. Remove from heat and mix in the breadcrumbs.
12. Pour the tomato juice in the bottom of a baking dish that will accommodate your peppers; snug is okay. Fill the peppers with the stuffing and replace the tops to serve as lids. Sprinkle the crumb mixture over the tops of the peppers.
13. Bake for about one hour. Remove from the oven, let rest for 10 minutes, and enjoy.

Bon appetit! Photo courtesy of Erin Hall & Michael Shveima