





# NC STATE

# **EXTENSION**

# Master Gardener | Johnston County

## The Gardener's Dirt Newsletter

**June 2018** 



#### **Feature Article**

Why prune in summer when everything is in bloom?

By Beverly Futrell, Extension Master Gardener Volunteer Intern

Defined, "pruning involves the selective removal of specific plant parts"... As noted in the North Carolina Extension Gardener Handbook, ... "there are several reasons to prune"... "to train..., to maintain plant health, to improve ornamental aesthetics, to manage growth and size, to increase light... "as well as others. And, this applies whether it is plants or woody ornamentals. Bradley, L., B. Fair. 2018. Woody Ornamentals, Chpt. 11, In: K.A. Moore, and. L.K. Bradley (eds). North Carolina Extension Gardener Handbook. NC State Extension, Raleigh, NC, <a href="http://content.ces.ncsu.edu/11-woody-ornamentals">http://content.ces.ncsu.edu/11-woody-ornamentals</a>. As well, each season has specific requirements to care for your plants, shrubs and trees, including summer.

But, do you need a well thought out plan before tackling this important chore? I used to prune my plants to remove disease or whenever I decided they needed to be shaped-up usually summer going into late fall. I didn't really feel that time of year or what I cut necessarily made that much difference; was I wrong! I wondered why some years there was an abundance of flowers and fruit while in other years I virtually had none under very similar conditions. I have learned there is a discipline to pruning just as there is with many other gardening techniques.

Firstly, as with all things gardening, definitely start with a well thought out plan! This should always include a good, research based pruning schedule no matter time of year. A good place to start as a general guide is the NC State pruning calendar. This calendar breaks pruning tasks out by month

with the specific categories of plants included within each month. And, as the calendar and other resources demonstrate, timing can be everything in order to produce desired results such as shaping confers in summer to preferred size, preparing some flowering plants for re-blooming, and encouraging plants to put on thicker growth, etc. Read more at: "Pruning Calendar." NC State Extension News, <a href="https://www.ces.ncsu.edu/pruningcalendar/">www.ces.ncsu.edu/pruningcalendar/</a>.

Further, there is no replacement for knowing your plants as we learned during our Master Gardner classes to ensure proper identification and thereby the right treatment, including pruning. Always identify plants by their botanical name and common name. A good practice is to always keep a record of the plant as you obtain it including where it is planted. Using plant tags near the plant in addition to a journal is always a good idea. This will be extremely helpful to your success.

As an example, last year I planted hydrangeas and, one of my summer pruning chores is to prune to shape; invigorate blooms and have plenty to dry. Before my classes, I would have treated them all the same though I planted several varieties. Now I have learned that some species bloom on old wood while others boom from new wood; knowing what to prune on these plants is as critical as when to prune if you want blooms not only this summer but the following year as well. Unfortunately, improper summer pruning can have a long impact on your plants! A great planning guide is NC State's publication "How to Prune Specific Plants." NC State Extension Publications, content.ces.ncsu.edu/how-to-prune-specific-plants. This source breaks pruning down by a chart with the plants species (botanical name followed by common name), bloom time, function it is serving (hedge, ground cover, etc.,) primary features and pruning time. The article also covers important pruning terms to help better understand the purpose for pruning the species. It takes guess work out of pruning chores and the common mistakes. See the hydrangea example below and it shows why I had mixed results.

Species	Bloom Time			<b>Primary Feature</b>		Pruning Time and Type			
	Old Growth	New Growth	Function	Flower	Fruit	Spring	Summer	Fall	Winter
Hydrangea arborescens, smooth hydrangea		1	S, Sb, F	S	NI	Th, H, R	Dh		Th, R
Hydrangea macrophylla, bigleaf hydrangea	1	1	S, Sb, F	SP-S	NI	H, Dh	Dh		
Hydrangea paniculata, panicle hydrangea		1	S, Sb, F	S	NI	Th, H, R	Dh		Th, R
Hydrangea quercifolia, oakleaf hydrangea	√		H, Sc, S, Sb, F	SP-S	NI	Th, Dh	Th, Dh		

Just as knowing when to prune, you need to understand the whole process. The proper techniques and tools can make pruning chores much easier. To learn more about pruning, including techniques and tools, see the other publications in the "Pruning Trees & Shrubs" series listed below and linked in the original article. With these resources and proper planning, there should be few reasons to not be successful in tackling this chore whether summer or any other type of year!

- Before the Cut (AG-780-01)
- Tools to Make the Cut (AG-780-02)
- General Pruning Techniques (AG-780-03)



Photo Courtesy of Margery Pearl

#### **Grow Native**

Native Pitcher Plants Sarracenia spp.

plants. And you can, too!

By Margy Pearl, Extension Master Gardener Volunteer

Front to back: Sarracenia flava (yellow), Sarracenia leucophylla (white) and Sarracenia purpurea (purple) in Margy's Garden

If the beach, boardwalk and Britt's Doughnuts in Carolina Beach aren't enough incentive to visit, the beautiful State Park is one of the best places to see pitcher plants in the wild! A Carnivorous Plant Nature Hike with one of the Park Rangers in July of 2014 <a href="https://www.ncparks.gov/carolina-beach-state-park/events-and-programs/carnivorous-plant-hike">https://www.ncparks.gov/carolina-beach-state-park/events-and-programs/carnivorous-plant-hike</a> and a Sarracenia purpurea, the most tolerant and easiest to grow, bought on clearance that fall prompted me to grow these unique, beautiful native pitcher

https://plants.ces.ncsu.edu/plants/all/sarracenia-purpurea/

We have a section of landscape with natural springs and a small slope leading to a 150 gallon pond. The area between is perfect for *Sarracenia* in a residential garden, consistently moist, and boggy in full sun. As recommended, we removed much of the existing soil amending with equal parts peat and sand, We mulched with moss and with pine needles in winter.

Growing up to 20", *Sarracenia* produce fragrant flowers in April that last months, usually maroon, yellow or greenish, they attract butterflies. It may take more than one year for the new plants to produce flowers.

Use NO fertilizer! Nutrient poor, slightly acidic soil is their habitat. One of my plants actually died from fertilizer runoff after Hurricane Matthew!

Carnivorous pitcher plants trap insects; flies, ants, beetles, wasps, mites and spiders by luring them into trumpet-shaped pitchers, modified leaves, where they're trapped and die. Decayed insects produce nutrients absorbed through special cells at each pitcher base. New pitchers grow throughout summer but die back somewhat as winter approaches. Trim dead tissue from leaves as pitchers die and try to protect them from winter winds.

Another way to grow *Sarracenia* is in a container of equal parts peat and vermiculite/perlite, either in a water garden or a tray of water. Again, consistent moisture and full sun is key. Overwinter by placing them to the rim in soil. Dig up in the spring and place back in full sun.

Here's a great video by Craven County Extension! <a href="https://craven.ces.ncsu.edu/carnivorous-plants-with-the-croatan-explorer/">https://craven.ces.ncsu.edu/carnivorous-plants-with-the-croatan-explorer/</a>

#### References:

http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx? taxonid=256279&isprofile=0&

# SECRET

Photo Courtesy of Pixabay

# **Veggie Tales**

#### **Cryptic Codes**

By Tiffany Whichard, Extension Master Gardener Volunteer

Having spent a few years as a military brat and later, after marrying a career military man, I got accustomed to some of the branch-specific jargon, the shorthand abbreviations that make up the talk of the armed forces. It's not that these men and women wish to exclude anyone from conversation. No, on the contrary, it's simply easier for these folks to talk to their peers in familiar-to-them acronyms. Of course, there is military slang too. Lots of it.

To give you an example, when I first met my husband, his e-mail address began with the words 'sandysquid'. This name probably owed to the fact that he was a sailor stationed at Camp Lejeune. Squid, by the way, is an affectionate nickname, a military colloquialism, for those in the Navy. While on his last deployment, Darryl answered to his CO (Commanding Officer) at a FOB (Forward Operating Base, a created camp) located in Iraq. For those of us waiting back home, we commonly referred to Iraq as 'the sandbox'. The man responsible for introducing me to my husband, was someone in his unit. That man--his name is Chip--is now PCSing to Japan with his young family. PCS simply means they've been assigned a Permanent Change of Station, which is an order for the military person to move to a new base.

Is your head spinning? Do all of these abbreviations, this military lexicon, still sound like mumbo-jumbo to you? Well, that's how new gardeners can sometimes feel when they buy plants in a nursery or out of a catalog. After reading the description of a plant or seed, you may notice each maker or page is also peppered with cryptic codes like 'AB', 'BMV' or 'DM'. Have you ever thought, 'What in the world does that mean?' or an exasperated 'This is all too confusing. I'm not cut out for gardening'.

Well, never fear dear reader; there is a very simple explanation. Each of those are disease resistant codes. In other words, a quick way to tell you what the plant is protected against. By selecting a cultivar (kind) with one or more disease codes, you'll have a better chance of raising a healthy, thriving plant with larger yields.

Would you like to look at a few? Yes? Great!

Let's concentrate today on a couple of common ones for tomatoes, and then, if you have other questions, you are welcome to call us.

- \* A--Alternaria Stem Canker. This means it is safeguarded against a bacterial fungus that thrives in humid or rainy environments. This fungus causes leaves to turn yellow and then brown before finally dropping off. Fruit is riddled with cankers that render the tomato inedible and rings around the stem cause the plant to wither and collapse.
- \* F/FF/FFF--These all represent a defense against various strains of

Fusarium Wilt. This is a fungus that begins with yellowing and wilting on one side of the plant. Ultimately, this disease causes the water-carrying tissue to get clogged which starves the plant.

- \* **N-**-This means the plant is resistant to nematodes, an eel-like microscopic soil-dwelling worm that invades the root system of a plant and cripples its ability to take up water and nutrients.
- \* **ST**--This code means it is protected against Stemphylium, otherwise known as Grey Leaf Spot. This is yet another malady that causes spots to appear on leaves. These spots rapidly grow and always have a tan or grey center.
- \* T--Anything marked with this abbreviation means that it shields against Tobacco Mosaic Virus, which causes mottling and yellowing of leaves. It also creates smaller sometimes discolored fruit and lower overall yields.
- \* **TSWV**--This guards against Tomato Spotted Wilt Virus, which causes a multitude of issues including stunted growth, deformed fruit and unsual brown streaks or rings on leaves.
- \* V--Last but not least, we'll talk Verticillium Wilt. This toxin spreads throughout the plant resulting in yellow spots on leaves and browning of veins before the plant dies.

Again, if you'd like to learn other disease codes and how they can help you become a more successful gardener, feel free to give us a call!



## **Quick Tip**

#### **Pheromone Lures and Sticky Traps**

#### By Silvia Caracciolo, Extension Master Gardener Volunteer

Think of a spider web. Through design, it has the ability to lure the most unsuspecting pests. Using nature's idea, the insect trap was developed.

Flipping through several gardening catalogs you will find pheromone lures and traps. Research and development has yielded in one hundred fifty pheromone scents used globally. Pheromone traps are species specific and they attract male insects looking for mates or sometimes used for disrupting insect mating habits. I was excited about the idea until I realized that it would also attract these pests to my vegetable garden. Attracting more pests? Holy horticulture! No way! But after a little research, I discovered that they can be a beneficial tool to use in your Integrated Pest Management (IPM) strategy to determine when pests are present and when control measures need to be taken.

Sticky traps come in all shapes and sizes (blue and yellow are popular colors) and a multitude of containers. Yellow sticky traps attract whiteflies, aphids and other insects by color. Not all traps are equal and each are designed for certain pests.

Lures and traps have been used in large commercial farms to monitor the potential of damage to their crops. This IPM practice has been used to protect the food supply. However, they are a small part of IPM. Steps must be taken to make the environment uninhabitable for the pest. Use cultural,

mechanical, biological and chemical management as needed. Follow all label instructions.

Smart technology is being used in the UK. A technology devise is being developed to trap, count, and eventually be able to identify the species of insect due to its anatomy. The information will then be sent to the farmer from a server to determine infestation risks.

From nature's complex spider web to the electronic web - traps are evolving.

For more information on IPM see link: <a href="https://content.ces.ncsu.edu/extension-gardener-handbook/8-integrated-pest-management-ipm">https://content.ces.ncsu.edu/extension-gardener-handbook/8-integrated-pest-management-ipm</a>



Photo Courtesy NCSU

## **Horticultural Landscaping**

**Cold Temperature Damage and Spring Green-Up of Warm-Season Grasses** 

By Dr. Grady Miller and last updated by Kaki Carl

Green-up of some warm-season grasses started in February and then March hit hard. Early April was also below normal temperatures. We had indication by late April that warm-season grasses had been hit pretty hard from either low winter temperatures, extended periods of low temperatures, and/or early green-up in February followed by low temperatures.

Because of the conditions experienced this winter and spring, it seems that no warm-season turfgrass species totally escaped damage. We also have seen damage from the coast to the mountains-wherever warm-season grasses are grown. Turfgrasses that were installed in 2017 (especially late in the year) were more likely to be devastated due to maturity, but many of the damaged areas had mature turfgrass.

The most devastation I have seen has been with St. Augustinegrass in the Piedmont parts of the state. I have seen 100% winterkill of this grass in some areas. Centipedegrass in the Piedmont has also had widespread damage in some areas but seems to be greening up ok in some locations. Disease hit some centipedegrass during the green up periods that further set back some grass stands.

Bermudagrass is normally quite tolerant to most of our winters, but I have seen some moderately damaged bermudagrass and in a few cases, some heavily damaged bermudagrass stands. The worst damage on bermudagrass seems to be those grasses that greened up early (February) and then were more susceptible to low temperatures in March. This resulted in some cultivars that are normally very cold temperature tolerant getting hit harder than those cultivars generally considered less cold tolerant.

This year's zoysiagrass damage seems to have a strong relationship with its growing conditions and health status going into winter. Lawns areas that tend to stay wet and/or grasses that went into fall a bit weaker (traffic- or shade-stressed, poorly rooted), tended to have more winter damage. I have

also seen some pretty heavy large patch areas on some zoysiagrasses this spring. So, like centipedegrass other factors than just winter temperatures may come into play.

The end result for the warm-season grasses will be delayed greening and very slow fill in the "dead areas". In some cases, re-establishment may be necessary. Warm-season grasses have the ability to fill by rhizome and/or stolon growth but if the damaged area is extensive that could take weeks to months before full density is achieved. Until there is adequate fill of turf, weeds will have a greater opportunity to come into the stand. Post-emergence herbicide applications may be necessary to keep weeds in check. Turf managers should also monitor for disease and insect pressure during the early spring through the recovery period.

Dr. Grady Miller Professor Crop and Soil Sciences-NC State University

Kaki Carl Communications Specialist, Department of Crop and Soil Sciences NC State University



Photo Courtesy of Pixabay

# **Monthly Gardening Tasks**

#### **June Gardening Tasks**

#### **LAWN CARE**

- When do you water your lawn? When the grass blades are just starting to curl and your footprints remain on the lawn when you walk on it. Applying an inch of water in the early morning allows the lawn to dry during the day. When the ground is dry, cycling the irrigation, applying a little at a time will allow the water to soak deep into the soil. It's a good time to plant new sod in damaged areas. Get your soil tested first. Come by the Ag Center for a soil kit.
- Grasses vary in their needs for nutrients, mowing height and watering.
  To learn how to best care for your grass type check out the Lawn
  Maintenance Calendar for your grass and learn how best to care for it,
  month by month. This is NOT the time for planting or fertilizing fescue!
  Wait until the fall.
- Mow fescue at a height of 3-3 ½" to help it survive hot, dry periods. Fescue is a cool season grass that slows down in the summer and if cut too short the tender roots will be exposed to extreme heat which will certainly damage, if not kill, it. It is difficult for fescue to recover from being cut too short as it is not actively growing at this time.
- Check out Turffiles at <u>www.turffiles.ncsu.edu</u> to see the Maintenance Calendar for your particular grass. There is also a lawn care app available at the Apple App Store!

#### TREES, SHRUBS AND ORNAMENTALS

 Prune climbing roses after they bloom, then fertilize them to stimulate new growth. This summer's growth carries next year's buds, so keep

- the plants growing vigorously! Train long shoots horizontally to stimulate more branching.
- As soon as their foliage dies, dig bulb clumps of daffodils, crocus,
  Dutch iris, etc. that have become crowded. Divide and replant bulbs
  immediately, or store them in a cool, dry place for planting this fall.
  Please note that tulips and hyacinths generally don't perennialize in our
  area because our spring and winter is too warm.
- Give plants room to grow. Pull/transplant excess seedlings of marigold, cosmos, zinnias, etc. Growing plants need room to develop. Spacing plants properly reduces the risk of fungal diseases like powdery mildew.
- Remove faded flowers. Many annuals and perennials will stop blooming once they've started to set seed. Dead heading or removing spent flowers will prolong the bloom period.
- Pinch growing tips of ornamentals to encourage compact, sturdy, branched growth with lots of blooms.
- Protect plants from dehydration. Transplanting on overcast days, early in the morning, or late in the afternoon will reduce water loss in transplants. Keep newly planted ornamentals well watered for the first several days. Apply a 2-3" layer of mulch to conserve water and keep roots cool.

#### **VEGETABLES & FRUITS**

- Squash plants wilting? Squash vine borers may be the culprit. Check near the base of the plant for a small hole and a mass of greenishyellow excrement. Slitting open the stem may reveal the villain - a fat, white caterpillar. It may be possible to save the plant by removing the caterpillar, then covering the injured vine with moist soil to encourage rooting.
- Warmer temperatures and longer days send a signal to spring greens that it is time to flower (bolt). At this point leaves generally do not taste as good. Once this quick process starts, there is no turning back. To delay bolting try the following. Cover spring salad greens with a cardboard box in mid afternoon. Remove it after sunset and give the plants a slurp of water to cool them down. This procedure fools the plants into thinking the days are shorter than they actually are and can delay bolting by a couple of weeks.

#### LANDSCAPE IDEAS

- Tropical natives make excellent additions to our summer gardens, with colorful foliage, bright flowers, and heat-loving constitutions. They can't survive our winters, but we can try overwintering our favorites indoors. Ornamental peppers and Jerusalem cherries are also heat-lovers. More exotic tropicals, such as Alternanthera (Joseph's Coat), Plectranthus (with lovely gray felty leaves), and Acalypha (Copper Plant) are also available. Visit the J.C. Raulston Arboretum at NCSU to see first-hand how tropicals can spice up the summer garden.
- Mulch flower beds and vegetable gardens now to reduce watering chores later. Choose a mulch that will enhance the beauty of your garden.
- Keep outdoor potted plants watered as they lose a lot of moisture during the hot days. If you're going on vacation, ask a friend to check your plants regularly.



Photo Courtesy of Pixabay

### **Cool Connections**

#### **Helpful Links**

Read more»

# **Upcoming Events**



Photo Courtesy of NCEMGVA

# 2018 NCEMGVA Conference OPEN TO THE PUBLIC!

Greenville Convention Center 303 Greenville Blvd SW Greenville, NC

June 7, 8 & 9

For more information: <a href="https://ncemgva.org/">https://ncemgva.org/</a>

#### Jr. Master Gardeners Camp

#### **For ages 10-14**

Johnston County Agriculture Center 2736 NC Hwy 210 Smithfield, NC

July 2, 3, 5 & 6

Explore Exciting new foods, exotic plants and tropical fruits and veggies. Discover ways to recycle in the garden and get goofy with photosynthesis! Learn about wildlife in the garden as well as the basics of vegetable and fruit gardening.

To sign up in the 4-H system: <a href="https://nc.4honline.com">https://nc.4honline.com</a>

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