

## ***The Gardener's Dirt Newsletter***

***July 2019***

### ***Feature Article:***

## **Xeriscaping**

By Chris Alberti, Extension Master Gardener Volunteer



Xeriscaping refers to the planting of drought-tolerant trees, shrubs, plants and ground cover that are comfortable in their natural environment and need little if any water or fertilizer. Xeriscaping also includes using environmentally-friendly practices such as mulching around plants and trees, decorating with stones or pavers, building decks in areas that may traditionally be planted in turfgrass. Also, planting species with similar water requirements together in water-use zones allows for irrigation based on plants' needs during times of severe drought.

By using drought-tolerant plants and natural materials, yards can adapt perfectly to the environment, whether wet or dry. Xeriscaping means less mowing, less yardwork, and a yard with plants that naturally fit. By using xeriscaping methods in landscaping, homeowners can help keep North Carolina's lakes, reservoirs and aquifers full during wet and dry times.

Xeriscape is based on seven water-wise landscape principles:

## **Planning and Design**

On a piece of graph paper, draw to approximate scale any permanent features of your property, including the location of your house, other buildings, large rocks, slopes, existing trees or vegetation you plan to keep. Shade cast by trees or structures can cool the landscape by as much as 20 degrees, reducing heat buildup and water evaporation from the soil. Shade also reduces heat buildup from hard surfaces, such as driveways, walks and walls. Plan to shade these areas with trees and large shrubs, whenever possible. Trellises, arbors, walls or fences also can provide shade or scatter light. Identify the microclimates in your yard. Moisture, sun, shade, wind and heat - as well as the physical characteristics of your landscape - create different zones that require different amounts of water. Select plants that can survive and thrive within these zones without much watering.

## **Soil Improvement**

Carefully prepared plant beds can reduce water usage by almost half. Good soil absorbs and holds moisture better and encourages plants to grow deep roots so they can access moisture even when topsoil is dry. Good soil has organic material that holds water well, provides nutrients, is aerated to allow water to penetrate several inches to reach deep roots, has large particles that allow water flow and absorption. Dense soils such as clay are slow to absorb water, so they're prone to runoff.

## **Practical turf areas**

Instead of thinking of grass as the focal point of your yard, think of it as having a function: a play area, for example, or a visual frame for a larger natural setting. With good soil, the right grass selection, and the right maintenance, you can still have a beautiful lawn area that needs little or no watering once established. By choosing a low water-use grass suited to your region, enhancing the soil, and mowing high, you can grow healthy grass with a strong root system.

## **Efficient irrigation**

For hand watering, use a watering can and water each plant once, then repeat 15 minutes later after the water has soaked into the soil. Use sprinklers to cover large areas, set a timer, and then remember to shut off the flow to avoid waste. Water early in the morning to reduce the rate of evaporation. Use drip irrigation when practical to reduce water loss from evaporation and runoff. For lawns, water deeply but infrequently to encourage deep roots. The key to watering your grass is to apply enough water to soak down to the depth of the roots. The amount varies with soil type, but a good guide is to apply no more than one inch of water every time, which is enough to soak the soil to between six and 10 inches.

## **Mulch**

Think of mulch as sun block for plant roots. Just two to three inches of mulch can substantially retain soil moisture, slow evaporation, and protect roots from overheating, which is especially helpful to ornamentals and vegetables. Mulch can reduce or eliminate weeds that compete with landscape plants for moisture, nutrients, and sunlight. Mulch can be organic or inorganic material. Organic mulches, such as pine straw, pine bark, and shredded hardwood, are the best choices because they retain moisture and add nutrients to the soil as they decompose.

## **Low water-use plants**

More than any other factor, the plants you choose determine the look of your landscape, and they determine how water-wise your landscape can be. To achieve the most water-efficiency, choose plants adapted to your area, plant them in the right place using the principles of water-wise landscape design. Check out this link from NC State Extension for drought tolerant plants -

<https://extensiongardener.ces.ncsu.edu/extgardener-dealing-with-drought/>

## **Appropriate maintenance**

During the summer, never cut more than one-third of the height of your grass. Taller grass cools the soil, encourages deep roots, and reduces stress. If you mow your grass too short, root growth slows down, making the grass more susceptible to heat and drought. Weeds steal nutrients and water from your grass and other plants. Keep weeds under control by weeding early in the year and consistently throughout the growing season. Adding a light top dressing of compost or organic fertilizer does wonders. It reduces thatch buildup on lawns, improves soil texture and increases root mass and surface area. "Top dress" your lawn and plant areas early in the year when conditions are wet. Avoid heavy pruning. Pruning stimulates growth, so plants require more water. Make sure you prune your trees and shrubs in the dormant (winter) season before the weather gets hot and dry.

**Resources:**

<http://www.savewaternc.org/xeriscaping.php>

## ***Grow Native:***

### **Liatris Spicata ('Blazing Stars', 'Gay Feather')**

by Margy Pearl, Extension Master Gardener Volunteer



Liatris spicata Hedwig Storch CC-BY-SA-3.0

After a particularly dry summer a few years ago and with some research on the NCSU's *Go Native* site, <https://projects.ncsu.edu/goingnative/>, I decided to make planting natives a priority. It has been such a pleasure to establish tough, drought tolerant, disease and insect resistant native plants that support wildlife, particularly native pollinators. Their beauty and diversity is truly amazing!

*Liatris* has 37 species of beautiful, perennial wildflowers native to meadows and marsh margins but *spicata* is the most common for home gardens. The unusual, spike-like *Liatris* flower clusters open from the top down, the opposite of most plants.

Growing from corms or snake-like rhizomes that bloom the first year, *Liatris* plants that seed themselves will take longer to bloom. You can purchase *Liatris* corms in the spring, but I like to purchase them in bulk online in the fall. I hope the details below will convince you to give butterfly and bee loving *Liatris spicata* a try!

**Height:** 2 - 4 ft.

**Bloom Time:** July to August

**Flower:** Showy spikes do well dried or fresh cut.

**Bloom Description:** Blue, White, or Red-purple

**Cultivars:** 'Kobold' (dwarf, 2.5 ft.), Alba (white)

**Exposure:** Full to Partial Sun

**Water:** Medium

**Soil:** Easily grown in average, well-drained soils. Tolerates poor or clay soils. but prefers rich, moist soils.

**Tolerates:** Drought, summer heat and humidity.

**Maintenance:** Low, no disease or insect issues, but taller plants may need staking.

**Suggested Uses:** Showy, especially in mass plantings: perennial borders, native plant gardens, cottage gardens, prairie areas, rock and rain gardens.

**Wildlife Value:** Flowers attract butterflies, bees, and other pollinators. Goldfinches love the seeds!

#### Sources:

<https://plants.ces.ncsu.edu/plants/all/liatris-spicata/>

<http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=d780>

## Veggie Tales:

### Heat Tolerant Vegetables

by Griffin David Lockett, Johnston County Extension Master Gardener Volunteer

Yes, it really is getting hotter each year according to most scientists. According to the National Oceanic and Atmospheric Administration, "June, July, and August were the hottest ever in 2018". The scientific predictions based on a study for 2018-2022 indicate that it will get even hotter. Yes, it is due to global warming, "greenhouse gas emissions."

While we can remove ourselves from the heat, our plants cannot. Just like our productivity declines, so does that of our plants in our vegetable gardens. Scientists also predict the billions of dollars will be lost in productive hours because of the heat, and our plants may lose productivity

and yield as well. So, what is a gardener to do?

Some of things gardeners can do fall into the areas of planning, planting, watering, hoeing, weeding, mulching, and cooling. Carefully plan where your garden should be located and select heat-tolerant and drought-tolerant varieties. Seed companies as Johnny's, Urban Farmer, and Burpee's, to name a few, all offer varieties of vegetables that have these qualities. Plan to select those tested varieties that work in our region and temperatures. You can also plan to plant as early as possible to give your vegetables as much time as possible to get good roots established before the hot weather.

Plan your garden to include taller plants, such as corn which can take a lot of heat, on the south side to help shade other plants. This is the three-sisters concept of corn, beans, and squash. This year, I planted a row of tall sunflowers on the south side. Avoid planting in rows, but plant in clusters to help reduce evaporation and help with irrigation.

Water deeply and early for maximum benefit. But don't overwater, especially tomatoes because too much water will "suffocate the plants' roots. Avoid over fertilizing; too much fertilizer will make leafy plants without much fruit. When the temperature is very hot, your plants may develop more foliage that the root system can support. The extra growth especially for tomatoes can make them weak and more likely susceptible to insects and disease.

Mulching helps cool your plants, retains moisture, and suppresses weed growth. Weeds simply rob plants of needed moisture and nutrients needed for very hot weather. Consider straw, compost, or even grass clippings. You can use shade cloth to protect plants such as eggplants, peppers and tomatoes. It is estimated these can reduce temperature by approximately 5-15°. Avoid hoeing which can damage roots needed to sustain plants during our hot summers.

#### References:

<https://patch.com/minnesota/edina/bp--consider-these-heat-drought-tolerant-vegetables-f7d7816f372>

<https://www.johnnyseeds.com/featured/heat-tolerant/>

<https://www.ufseeds.com/tag/heat-tolerant/>

<https://www.burpee.com/search?q=drought+tolerant+vegetables>

## Quick Tip:

### Quick Gardening Tips

by Barb Barakat, Johnston County Extension Master Gardener Volunteer



**Powdery & Downy Mildew preventative** - liquid Copper soap - We've had a lot of rain . . . soon the fungus will be among us. According to NCSU publications, the only effective organic product available for controlling powdery and downy mildew disease is liquid copper. But there's a catch, its only effective when applied preventatively (before the fungus appears). It is suggested to mix the solution at ½ the recommended concentration and apply to cucurbits (cucumbers, squash, melons) every-other week. Organics lose potency quickly, so I recommend only mixing up a small amount (16oz) at a time in and dispensing in a spray bottle. Spray both sides of the leaves.

**Raleigh Yard Waste Facility:** My kids often joke that I bring home more from the dump than I drop off . . . This is certainly the case when I go to the Raleigh Yard Waste Facility. I'm in Johnston County, so I can't drop anything off; but . . . it's a virtual gold-mine for a gardener. I have a truck so I purchase by the bucket load - compost, leaf mulch and wood mulch are available for \$10-\$12/load. Alternatively you can fill your own 35-gallon bags or cans for \$2-3/bag. The facility is open Monday - Saturday 7 am-4 pm & is located at 900 N. New Hope Road, Raleigh. (919) 250-2728

### **Deer Fencing - a minimalist's strategy**

A few strands of fishing line on stakes wrapped around the garden can be incredibly effective at deterring deer: one strand 18" above the soil to confuse their feet and one strand at 3' to confuse their nose. (I used those green welded-wire fence posts) For the deer, it's confusing, 'I feel it, but can't see it' - foraging becomes easier to do elsewhere. Simple and effective. Use light fishing line 10-15# (as it's invisible to deer)

<https://practicalselfreliance.com/cheap-deer-fencing/>

## **Ask An Expert:**

### **Veggies: Garden to Freezer**

By: Cassidy Hall, Family and Consumer Science Agent for Johnston and Wilson County

July is a time where gardens often supply an overabundance of fresh produce. I can remember the summer after my senior year of high school- the family garden supplied far too much okra, squash, and zucchini. I was beginning to learn how to cut costs and live on a budget in preparation for going to college. I decided it would be a good idea to freeze as much produce as possible as it was harvested- that food was free to me and would save me money at college. My grandmother came over to visit, and her eyes widened when saw the kitchen full of freshly washed squash and okra. She showed up at a good time to help and an even better time to teach me how to freeze for best quality.

I had never heard the word "blanch" before. You can imagine my surprise when she asked me how long I was planning to "blanch" the vegetables. She told me that if I wanted my vegetables to stay of good quality for longer, they needed to be blanched by steaming or boiling water. The summer freezing tutorial began!

Blanching cleanses the vegetable of dirt and microorganism, brightens the color, helps retain vitamins, and reduces the action of enzymes that can destroy the vegetable's fresh flavor. Vegetables that will be frozen longer than four weeks must be blanched. If the food is not blanched for long enough, it will stimulate the enzymes and is surprisingly worse than no blanching at all. Overly blanching vegetables deteriorates the vitamins, minerals, flavor, and color. You can find correct blanching times here (<https://nchfp.uga.edu/how/freeze/blanching.html>).



Once your blanching time is complete, the vegetables should be cooled quickly, such as submerging in an ice bath, to stop the cooking process. The time spent cooling vegetables should not be longer than the blanch time. Immediately after being cooled, vegetables should be packed into airtight, moisture/vapor-proof containers. Follow these steps for best quality freezing to ensure delicious vegetables year-round.

Little did I know on that summer day, my grandmother was helping to prepare me for my future career in Extension.

## ***July Gardening Tasks:***



### **GENERAL IDEAS**

- Water deeply but infrequently, this will encourage deep rooting of plants for better drought resistance.
- Control fungal diseases which flourish in hot and humid weather by keeping irrigation water off foliage. The best time to water is early morning. This allows the sun to dry

water from foliage. Watering in early evening creates damp foliage all night which encourages the development of fungal diseases.

- Help reduce the mosquito population by emptying any containers with standing water. Mosquito larva can grow in shallow water, like plant saucers that do not dry completely.

## **LAWN CARE**

- When should 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. Watering too often encourages a lawn with a shallow root system that cannot handle drought well. Apply an inch of water, in the early morning. Set your timer for 4 am if you can.
- Grasses vary in their needs. Check out the Lawn Maintenance Calendar for your grass and learn how best to care for it, month by month.

***Click on each type of grass for link to maintenance schedule:***

[\*\*Bermuda\*\*](#) [\*\*Centipede\*\*](#) [\*\*Zoysiagrass\*\*](#) [\*\*St. Augustine Grass\*\*](#) [\*\*Tall Fescue\*\*](#)

- Keep fescue mowed at a height of 3 - 3 1/2 inches to help it survive hot, dry periods. It is a cool season grass that slows down in the summer. If it is cut too short, the tender roots will be exposed to extreme heat which will certainly damage, if not kill them. It is also difficult for fescue to recover from cutting too short as it is not actively growing at this time.
- Repair Warm-Season Lawns: Bermuda, Zoysia, and centipede are growing strong by now, making it easy to see spots that are weak or weedy. Pull weeds and patch bare spots if you haven't already.
- Established fescue lawns naturally go semi-dormant in the heat of July. Established fescue can survive up to three weeks without water, but will need a drink if it doesn't rain by then! Water only when grass shows sign of wilt (footprints show when grass is walked on). Fescue planted last fall will need watering every week. See the Fescue Lawn Maintenance Calendar (link above).

## **TREES, SHRUBS & ORNAMENTALS**

- When you visit your roses, clip off leaves that show early evidence of blackspot - a common fungal disease that causes black spots on leaves. Put the spotted leaves in the garbage (not in the compost pile.)
- When gathering cut flowers to bring indoors, cut stems early in the day. Bring them indoors and recut the ends while they are submerged in a sink of well water.
- Don't use Japanese beetle traps. The pheromones in the traps often attract beetles that would not otherwise visit the area. To control a particularly pesky group of beetles, go hunting for them in early morning and shake them into a bowl of soapy water to get rid of them.
- Keep potted plants watered! Plants in pots outside may need daily watering in the heat of summer.
- Pinch out the tips of garden mums to encourage lower, compact plants with many flowers.
- Start stem cuttings of geraniums and leaf cuttings of succulents to be potted for use as house plants this winter.
- Propagate shrubs by rooting cuttings. Semi-hardwood cuttings of Azalea, Camellia, and Holly can be taken this month. The wood should be hardened enough that the stem



breaks when bent. <http://www.ces.ncsu.edu/depts/hort/hil/hil-8702.html>

- Prune spent crape myrtle blossoms to prolong the flowering period.
- Sooty Mold on the crape myrtles will make the leaves appear dark and sooty or almost uniformly charcoal gray. Sooty mold grows on honeydew (the sticky leftovers) from aphids. Control the aphids, and the mold will wash off.
- Powdery Mildew makes leaves appear gray and powdery. It's a common problem which disfigures the foliage, but doesn't kill the tree.
- Hand-pick bagworms off evergreens. Pesticides are not effective once the caterpillars are safe in their bags.
- Remove vigorous upright sprouts growing from tree roots ("suckers"), or from the upper surfaces of tree branches ("water sprouts"). Pruning the sprouts out directs the tree's energy into desirable growth.
- Weed when it's easy. Weeds are easier to pull when the soil is moist, so wait until after a soaking rain or irrigate the area first. The roots of desirable plants can be injured by pulling large weeds nearby so pull those weeds in late afternoon or on cloudy days, and water the area afterward to help injured plants recover.
- Start seeds for cool-weather annuals indoors in July/August for fall planting. Try foxglove, pansy, alyssum, snapdragons, ornamental cabbage (kale), and primroses. Pansy seeds germinate well when stored in the refrigerator (not freezer) for 10-14 days before planting.

### **FRUITS & VEGGIES**

- Pinch out the tips of blackberry shoots when they reach about 4 feet tall. This helps form a tidier hedgerow for easy picking.
- Soon after tomatoes begin to set fruit, give them a boost of fertilizer to keep them vigorous and productive. Most of the new varieties are heavy producers if provided with good nutrition and adequate soil moisture.

### **LANDSCAPE IDEAS**

- Deckscape: Play with colors, textures, and the placement of furniture on your deck or patio. Use container-grown plants, windsocks and sculptures to change or fine-tune your color scheme and overall feel.
- Think strategy. Now that deciduous trees and shrubs are in leaf, survey your landscape critically. Do you have too much? too little? are plants too low where screening is needed? So tall a view is blocked? Take photographs and make plans to add or move shrubs this fall. Don't plant it now, wait until fall.

### **WILDLIFE**

- Put out a bird-bath. Keep it filled with freshwater. Change it once a week to minimize mosquitoes. Birds will pay you back by eating lots of insects!
- Think twice about squishing caterpillars; many turn into butterflies. Swallowtail caterpillars love parsley, so set out a few extra plants to share with them. A pan of moistened pebbles or sand will attract butterflies.

***Cool Connections:***



***Helpful Links from N.C. Cooperative Extension Johnston County***

**[Additional Informative Links](#)**

**[Basic Steps for Home Landscaping](#)**

**[Carolina Lawns](#)**

**[NC Extension Gardener Handbook](#)**

**[Vegetable Gardening: A Beginners Guide](#)**

**Upcoming Events:**



# BIRDS • BEES • BUTTERFLIES AND GROWING POLLINATOR GARDENS

HOSTED BY JOHNSTON COUNTY EXTENSION MASTER GARDENER VOLUNTEERS

**SATURDAY**  
**SEPT 14, 2019**  
**8:30AM - 4:00PM**



OPEN TO ALL  
GARDENERS &  
NATURE LOVERS

JOHNSTON COUNTY CENTER  
2736 210 HWY  
SMITHFIELD, NC 27577  
919-989-5380  
jocomastergardeners@gmail.com  
www.JoCoMGBBB.com

## SPEAKERS:

CHARLOTTE GLEN - EMCEE & GROWING NATIVE  
CHRIS MOORMAN - BIRDS  
DEBBIE ROOS - BEES  
COLLEEN BOCKHAHN - BUTTERFLIES  
ANNE SPAFFORD - GARDEN DESIGN

NC STATE

EXTENSION

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