

The Grapevine

Managing plants during heat and drought

The last month has been challenging for humans, plants and animals alike. The higher than average temperatures and lack of rainfall have led to some serious stress among plants across the county and the state. Luckily in Butler county we are not in as bad of shape as the western part of the state but now is the time to be proactive about caring for our plants to prevent issues down the road should drought conditions persist through summer or beyond.



Cool season lawns are starting to show some heat stress, even if they have been watered on a regular basis. Kentucky Bluegrass will start to turn brown and go dormant after 7 days of no water while fescue can make it up to 28 days without water before turning brown. Both grasses can go dormant for 4 to 6 weeks with no water before the grasses will start to die. If you are watering the lawn try to water it once or twice a week and water deeply to encourage the roots to go down in search of water. Watering for a short period of time everyday leads to a shallow root system that doesn't tolerate drought or heat. If you do decide to let your lawn go dormant still water it approximately a half an inch every week to two weeks to keep the crown and roots alive. That amount of water won't green up the grass but will keep it alive. Don't fertilize while the grass is dormant as the fertilizer won't be taken up by the grass plants. It's also important to reduce traffic on stressed lawns as much as possible and raise your mowing height to 3-4" for the best grass health.

Recently planted trees and shrubs, those planted within the last year, will need extra care to get established during hot and dry conditions. It takes a tree a minimum of 3-6 months per inch of trunk diameter to become established and the plants will need to be watered twice a week during that time period. Make sure to water the trees deeply and slowly, simply watering for 5-10 minutes with the full force of the garden hose will not be adequate for the tree's needs. One of the best watering options is to use a 5-gallon bucket with small holes drilled in the bottom to let the water slowly seep into the ground or a similar commercial product (such as pictured to the right) to do a similar task. A soaker hose in a ring around the tree will also work to water the plant slowly. Be sure to mulch newly planted trees and shrubs in, similar to the picture, to reduce the soil temperature and the amount of water that evaporates from the soil.



Mature trees and shrubs may also need water if hot and dry conditions persist. Keep an eye out for symptoms of drought stress including yellowing and dropping of leaves, dying limbs, leaf scorch, and wilting of leaves both temporarily in the afternoon and permanently in the morning. Another way to check if you need to water mature trees is to dig a hole 6-9 inches deep under the canopy of the tree, if the soil is still damp and cool there is no need to water but if the soil is dry it's time to consider supplemental water for that plant. The first plants that will likely need water are those that are less resistant to drought such as birch, willow, cottonwood or trees that are native to areas with more moisture. If you are limited on how many plants you can water, consider the value of the tree, both monetarily and emotionally and the size of the tree then water the priority plants first. When you water, be sure to water as much of the tree's dripline as possible and water deeply. Start by applying 1" of water to the area (use tuna cans with sprinkler systems to help measure how much water has been applied) then dig a 6" deep hole and see if the water has soaked down that far. If it hasn't, apply another half inch of water and check in another location. Continue to apply approximately 1" of water every week during periods of heat and drought. Morning is the best time to water if possible followed by the evening but avoid watering during the heat of the day to reduce evaporation.

The rains will hopefully return later this week but if they don't be sure to protect your lawns, gardens and trees during periods of dry conditions, even in the winter (as long as the ground isn't frozen) by watering them. Reducing the drought stress on your trees will go a long way to preventing future disease and insect issues. I hope you enjoy the upcoming cooler temperatures and rainfall. Happy Growing everyone!!!

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Pollinator Plant of the Week-

This week's pollinator of the week is the Zinnia. Zinnias are one of the most popular bedding plants around the world and it's not hard to see why. The National Garden Bureau even declared 2011 as the "Year of the Zinnia" for their popularity and versatility. Worldwide there are 13 different species of zinnia which all originated in Mexico and the surrounding areas before being spread worldwide. Zinnias range in height from 8" to over 3' tall and equally as wide. Zinnias come in a wide variety of colors, bloom shapes and sizes. Zinnia flowers can be single, double or semi double and range in shape from flat to almost beehive in shape. This annual plant thrives in full sun and hot conditions. A favorite of bees, butterflies and hummingbirds, zinnia's bloom relatively quickly after being planted and have a long bloom period. Use these colorful plants as a border, in cutting beds or as a backdrop in a larger mixed flower bed. Zinnias are prone to powdery mildew in areas with high humidity so be sure to water them at the base rather than on the leaves or select resistant cultivars when purchasing. These beautiful flowers are easy to start and are very sturdy plants so consider using zinnias as a seed starting project with kids.



Insect of the Week-

This week's insect is the Monarch Butterfly. Among the most recognized butterflies in the world, the Monarch makes an amazing journey of over 3,000 miles from southern Canada to Mexico every fall and back each spring. The Monarch is the only butterfly known to make this dual trip journey back and forth. This butterfly is distinct and easy to recognize with its dark orange wings with black stripes and white spots. The caterpillar is also very distinctive with its black, white and yellow alternating stripes and two pairs black antennae structures, one set of antennae in the front and a decoy set in the back to confuse predators. Monarch butterflies primarily feed on milkweed species and close relatives such as dogbane. The sap of milkweed plants is toxic to most animals, except the monarch which stores those toxins to make themselves taste bad so most animals won't eat them. Monarch butterflies were recently added to the endangered species list as the population has declined 22-72% over the last decade. There are several ways that you can help the Monarch butterfly population in your area. The first is to plant milkweed plants and there are several different varieties that work other than the Common Milkweed. If you have the room you can develop a Monarch Waystation. [More information on the Monarch Waystation project can be found here](#). Another way to help butterflies of all kinds is to add water sources in your backyard that are shallow enough for the butterflies to use and provide a mix of food sources. If you must use pesticides, try to do so early in the morning or late in the evening to avoid hurting pollinators as much as possible. Organic chemicals are no less harmful for pollinators when compared to synthetic chemicals. Monarchs are truly one of the jewels of the butterfly world and hopefully we can help stabilize or even increase their population by making a few changes in our own homes.



Reminders-

- Treat for Japanese Beetles as necessary.
- Time to start seeds for fall gardening. You can plant fall potatoes now along with carrots, beans and beets.
- Continue to pick bagworms off as you see them. Once bagworms reach 1-2" in length they are hard to control with a spray.
- Remove suckers from fruit trees.
- August 15th is the last day to fertilize warm season lawns for the year.
- Water lawns and flower beds 1-2 times or approximately 1" of moisture every week.
- Scout for Fall Armyworms. They haven't been spotted yet but early detection prevents more damage.
- Break open the webs of fall webworm to allow birds and natural predators to help remove those pests if needed.

Upcoming Events

- July 28th, 2022: Fall Gardening
Growing a garden doesn't just stop once the tomatoes and squash are planted in the spring as there are many crops that can be grown in the fall. Join us at the Augusta Community Garden to learn about planting a fall garden and get some tips on how to extend your gardening season later into the year. Class starts at 6:30, bring a chair. If it is raining, class will be postponed to August 9th at the same time.
- August 3, 2022: Landscaping for Wildlife
How you landscape your property and the plants you select can create a welcome invitation for wildlife to visit your property. Chuck Otte, Geary County Extension Agent, will discuss basic landscaping concepts that will encourage wildlife to visit your yard. Learn about recommended native plant material to utilize, as well as key management techniques that will provide benefits to many different wildlife species. The KSRE Garden hour sessions are held via Zoom starting at noon. For more information or to register [click here](#).
- August 4, 2022: Turf and Ornamentals's Field Day @ John Pair Research Center
The field day program is designed for all segments of the turf & ornamentals industry - lawn care, athletic fields, golf courses, landscape, nursery, and grounds maintenance. Included on the program are research presentations, problem diagnosis, commercial exhibitors, and equipment displays. There will be time to see current research, talk to the experts and get answers to your questions.
- August 6, 2022: John Pair Open House
For more than 50 years, the John C. Pair Horticultural Research Center in Haysville, KS has been studying trees, shrubs, flowers, turfgrass, fruits, vegetables -- and now even industrial hemp -- to see which varieties grow best in Kansas. K-State plant researchers at the Pair Center have looked for the greenest turf grasses, maple trees with the best fall color, the toughest evergreen trees, the most drought tolerant plants, and more in order to recommend the best plants to grow in the weather extremes of Southcentral Kansas. The John C. Pair Horticultural Research Center will host a public Open House on Saturday, Aug. 6 from 7 a.m. to 1 p.m.
- August 20, 2022: Nature in your Neighborhood- An Urban Conservation Workshop
This workshop will cover a variety of topics from how to choose the best tree or plant for your location to composting and improving your backyard for our native pollinators and birds. Join the Butler County Master Gardeners, the Butler County Conservation District and K-State Research and Extension for Nature in Your Neighborhood, an environmental stewardship partnership. Call our office at 316-321-9660 to register to make a rain barrel. Rain barrels are limited to the first 25 to register. Cost is \$15 for the rain barrel, workshops are free.