Horticulture 2024 Newsletter
No. 14 April 8, 2024

1712 Claflin, 2021 Throckmorton Plant Science Center
Manhattan, KS 66506 (785) 532-6173

Video of the Week: [Companion Planting] (K-State Garden Hour)

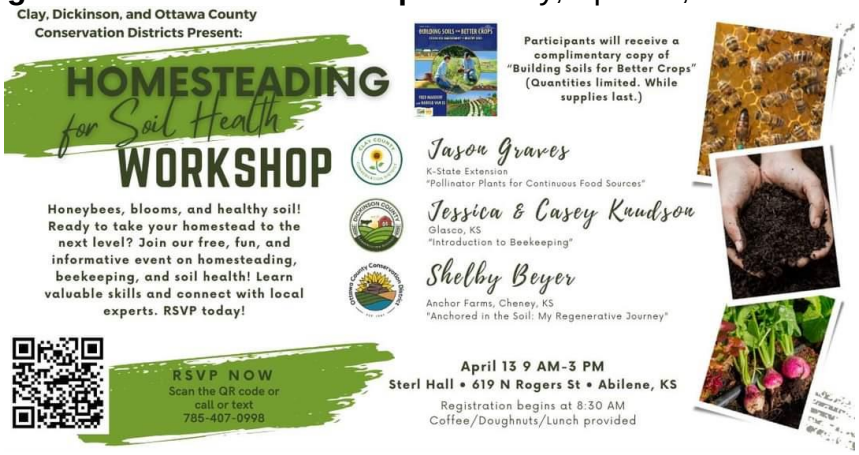
ANNOUNCEMENTS

Annual Butler County Lawn & Garden Show April 13, 9:00AM-5:00PM & April 14, 11:00AM-4:00PM

Professional presentations on garden-related topics including:

- Insects
- Starting a Vineyard
- Vegetable Container Gardening
- Soaker Hose and Drip Irrigation
- Gardening for Wildlife
- Changing Gardening Zones
- Improving Soil and Composting

Homesteading for Soil Health Workshop Saturday, April 13, 9:00AM-3:00PM



2024 Kansas Turf and Ornamentals Field Day
August 1, 2024, at Rocky Ford Turfgrass Research Center in Manhattan, KS.
https://www.k-state.edu/turf/events/2024TurfFieldDayProgram.pdf

GARDEN CALENDAR

New additions to the garden calendar this week include fertilizing fruit trees and grapes. There are also some additional crops to prepare for planting.

April Garden Calendar Fact Sheet

FRUIT

Fertilizing Fruit Trees

Before applying fertilizer in the spring, a soil test should be completed if one hasn't been done for several years. The best time to fertilize established fruit trees is when they enter the bloom period. Nitrogen is typically the focus which can be applied with a lawn fertilizer. Choose a high nitrogen fertilizer without herbicides or preemergence included.

Young trees require less fertilizer than established trees.

- 1-2-year-old tree = ¼ cup
- 3-4-year-old tree = ½ cup
- 5-10-year-old tree = 1 – 2 cups
- More than 10 years old = 2 – 3 cups

Spread the fertilizer on the soil surface, away from the trunk, but beneath the canopy. Water the fertilizer in well and evaluate the tree for further fertilization needs.

VEGETABLES

Cauliflower Care

Cauliflower transplants can be set in early to mid-April or early August for a fall harvest. Plants should be spaced 1.5 to 2 feet apart in rows that are 3 feet apart. Use a starter fertilizer when planting and every two to three weeks thereafter. Cauliflower requires water during dry periods and fertilizer every two to three weeks.

When the heads are the size of a quarter, pull a few leaves over them and secure with a rubber band (blanching). This will shade the heads from the sun and prevent them from turning yellow.

Environmental stress during transplant can negatively affect the development of cauliflower heads. “Buttoning” is a term to describe heads that stop developing beyond one-inch in diameter. Temperature fluctuations, inconsistent moisture, nutrient deficiencies and root bound transplants can all be susceptible to this condition. Row covers can be used to help regulate air and soil temperature as well as reduce infestations of insects.

Heads will be ready for harvest when they are five to six inches in diameter and still tight. As the head begins to separate, the flavor and texture declines significantly.

Is it Tomato Time Yet?

Tomatoes are the most popular home garden vegetable, and all spring gardeners are eager to get them into the garden. Optimal growing temperatures for tomatoes range from 70- to 75-degrees F during the day and 60- to 65-degrees F at night making late April to May a safer time to transplant. Cold garden soils do not promote growth in tomatoes and plants will have to be protected if there is a danger of frost when planted too early.

This *is* a great time to do some tomato *planning,* however. Remove any remaining plant debris from the garden. When the soil is not saturated work compost into the top six inches. Plan enough space in the garden to provide tomatoes up to two feet between plants. This will promote air flow and reduce the risk of disease. If possible, use an area of the garden where tomatoes, peppers, eggplant, potatoes and tomatillos have not been grown for the past three years. This is called “crop rotation” and will help prevent the spread of diseases/pests that have overwintered in the soil.

Plan for how you will support your plants. This depends in part on the type of tomato. Determinate varieties have more compact growth and can typically be supported by traditional tomato cages commonly sold at garden centers. Sturdy tomato cages can be made using wire fencing. Indeterminate varieties can reach over five feet tall. It is still important to provide support for these vines so they are not lying on the ground. In this case staking or trellising and pruning may be necessary.

Many problems with tomatoes are exacerbated by wet, humid conditions. Providing good airflow within each plant and between plants as well as consistent and properly-timed water minimizes this risk. Water on the leaves and water splashing onto plants from the soil are two occurrences that can spread disease. Using drip irrigation or a soaker hose reduces this problem and enables the gardener to provide consistent moisture to the targeted area.

When the time is right to purchase tomato transplants, select dark green, short, compact plants with sturdy stems about as thick as a pencil. Plants that outgrown their container may be root bound and suffer shock when transplanted. Planting guidelines will be highlighted later in the month, or you can read more by following the link to our KSRE Tomato Publication.

TURF

Best Practices for Lawn Maintenance

Lawns are growing which means many of us have resumed maintenance. Here are some guidelines for lawncare to minimize your costs and the environmental impact. Proper maintenance is a proactive approach to reduce weed growth and other stresses to the lawn.

Mowing

Optimal mowing height depends on the type of grass, lawn use and time of year. Mow at the high end of the recommended range for each species to improve drought resistance by encouraging deeper roots. Only one-third of the grass leaf should be cut at a time. Removing more results in physiological stress and possible heat or cold injury. If the lawn has become overgrown and needs more than one-third removed it will need to be done gradually with a few days between each mowing.

Mowing frequency should be based on the growth rate of the lawn. Following a set schedule may result in excessive clippings left on the grass. Proper timing of mowing means the grass clippings are shorter and can be returned to the lawn. This contributes nitrogen back to the lawn. Long clippings can block sunlight to the live turf and promote disease so they should be bagged and removed.

Maintaining a sharp blade on the mower is essential for a clean cut. A dull mower blade tears the grass and causes the tips to turn whitish.

Mow using a different pattern each time to prevent soil compaction and turf wear from the mower wheels. The grass blades lean the direction of the mower's path so changing the pattern each time allows the grass to stand more upright.

Trees can be severely damaged if bumped by the mower. Even what appears to be a minor wound can result in death for the tree. Cultivate the soil surrounding trees to prevent grass and weeds from growing up close to the trunk.

Watering

Apply water in the early morning. Nighttime watering promotes disease development. Wait as long as possible between watering. Signs the turf needs water include: darker bluish-green color and footprints remain in the lawn when someone walks across rather

than leaf blades bouncing back in place. Soak the soil to a depth of 6-8 inches and wait for signs more water is needed.

Fertilizing

Fertilize only to maintain a moderately green color during favorable weather and minimally or not at all during times of weather stress. Over-fertilizing increases the water and mowing requirements. Do not fertilize when heavy rain is expected and never dump excess fertilizer into storm drains or sewers. The timing of fertilizer applications should be based on turfgrass species.

- Fescue and bluegrass - September and November (optional in May)
- Bermudagrass and zoysiagrass - between May and August
- Buffalograss - June

MISCELLANEOUS

When to Work Soil

Compaction is problematic in lawn and garden soils because it can stunt plant growth, reduce yield, impact root formation and lead to soil erosion. Once the soil is compacted it is denser making it more difficult to cultivate.

Soil compaction can result from:

- high clay content in soil
- exposure to heavy/excessive rainfall
- over-tilling or cultivating wet soil
- heavy traffic (vehicles, mowers and even foot traffic)

Preventing compaction is recommended for the best soil health. This can be done by avoiding work on wet soils. Determine if the soil is safe to work by digging to the depth it will be tilled or cultivated and squeeze a handful of soil. If it can be formed into a ball and holds this shape it is too wet and should be allowed to dry before additional digging is done.

It is best to minimize traffic on exposed soils, especially when wet. When wheeling a cart through the landscape, vary the route so a trail is not defined. Carts with more than one wheel reduce the amount of pressure applied beneath each wheel to the soil below and consequently reduce compaction.

Practices for preventing soil compaction in the fall will be provided later in the season.

Watering the Landscape
Whether establishing a new landscape or enjoying mature trees and shrubs from years ago, water is a concern for gardens of all stages.

Considerations for the New Landscape

- Steep slopes encourage water runoff and erosion. Choose drought tolerant groundcovers, trees and shrubs for these locations. Consider terracing to further prevent erosion and water loss.
- Wind increases the amount of water loss through transpiration. Creating a screen with a fence or low water use trees and shrubs can protect more sensitive plants.
- Trees can shade the landscape and reduce the soil and air temperature thus reducing amount of water lost. Choose low water use trees. Research turfgrass species prior to planting to understand their water requirements. Avoid species that are high water users and design turf areas with efficient irrigation.

- Design the landscape so plants with similar water requirements are together. A low water use plant situated in a high-water area will result in the plant receiving too much water which can cause damage and waste.
- Choose drought tolerant plants for south or west-facing areas of the landscape where there is maximum sun exposure.

Considerations for the Established Landscape

- Water deeply, but no deeper than the root zone, and slowly to avoid runoff. Water infrequently to promote deeper root growth
- Loosen the soil and add mulch. Soil compaction decreases water absorption. Mulch can help prevent compaction. Mulch can also be used to create a basin around trees to help contain water near the root zone.
- Monitor irrigation system for leaks and malfunctions. If you don't have a smart irrigation system, be sure to turn the irrigation off when we have rain.
- Maintain weeds so there isn't competition for the water applied.

Find out more in our KSRE Publication Water and Conservation in the Home Landscape

COMMUNITY GARDEN CORNER

Manhattan, KS Community Garden

K-State Horticulture retired professor, Chuck Marr, recently gave me a tour of the Manhattan Community Gardens. He shared their procedures and offered lessons learned after years of gardening as a member of the community.

Learn from Chuck and his fellow community gardeners here: Manhattan, KS Community Garden

QUESTION of the WEEK

What's that smell?
On my morning walks I have noticed a very fragrant plant. Do you have any ideas what it could be?

There are a several likely suspects that bloom early spring and draw attention from passersby. Perhaps the most notable, and widely used, among them are Viburnum (*Viburnum sp*.) and Lilac (*Syringa sp.*).

Viburnum sp. is a versatile, woody shrub with approximately 225 species ranging in size from 4 to 30 feet. The opposite leaves vary in shape and there are deciduous and evergreen varieties. Research the available varieties prior to purchasing to know what attributes the species offers. Some present fragrant spring blooms, colorful berries, lovely fall color and make wonderful specimen plants. Certain varieties can be used as hedges or screens. Viburnum is a hardy, low maintenance plant with a place in every home landscape.

Lilac (*Syringa sp.*) is another fragrant woody shrub in bloom right now typically in purple or white. With thousands of cultivars available, size, shape, flower color and fragrance vary. Lilacs range from 5 to 25 feet tall. Once established, they tolerate dry weather. Lilacs do best with at least six hours of sunlight each day in order to bloom well and should not be pruned until after flowering in the spring. Recently planted lilacs may not bloom for several years after planting, though some varieties will bloom earlier.

Before adding plants to the landscape research which varieties are the best fit for your conditions. Also consider their susceptibility to diseases and pests.

COMING UP NEXT WEEK…

In our permaculture feature we will provide a guide for straw bale gardening. Plus, learn more about gardening for butterflies.

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http://hnr.k-state.edu/extension/info-center/newsletters/index.html

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