Horticulture 2024 Newsletter
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Video of the Week: Growing Asparagus

ANNOUNCEMENTS

Kansas Forest Service Conservation Tree Sale
The Kansas Forest Service is selling conservation trees as bare root seedings (8-18 inches tall) while supplies last. Shipping begins March 11 and pick-up days begin March 15. Visit the website for more information and to place an order: https://kansas-forest-service-3749.myshopify.com/

Student Research Opportunity
Reminder: there are two weeks left to participate in the following survey: "The Perception and Environmental Impacts of Naturalistic and Manicured Lawns." These anonymous survey results will only be used for research purposes and will help build the knowledge base for naturalistic landscapes. The survey is easy to complete with an estimated time of 10-20 minutes and will be open for 2 more weeks. At the conclusion of the survey, participants will have the option to receive an incentive for the new K-State Extension publication of naturalistic landscaping scheduled for Fall 2024. Thank you for your time and we appreciate your consideration to participate!
https://kstate.qualtrics.com/jfe/form/SV_0kdlFqOKRybBiey

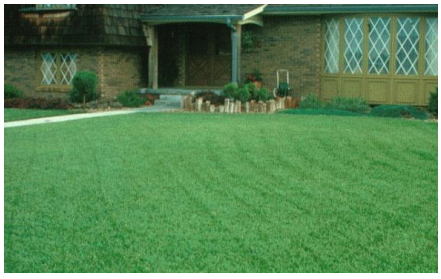
School Garden Spotlight Request
We are looking for school gardens to feature in an upcoming Hort Newsletter. Do you know an educator leading a school garden program? Please have them contact Cynthia at cdom@ksu.edu.

GARDEN CALENDAR

- Start seeds indoors: Cabbage, Broccoli, Cauliflower, Lettuce
- Prune fruit trees now through March
- Occultate garden areas as needed, see below for more information

TURF

Lawn Calendar for Cool Season Grasses



We've started receiving questions about treating and managing lawns which is an indicator that homeowners are preparing for spring. Understanding the timing for fertilizer and herbicide applications is important for an integrated pest management (IPM) approach. Applying incorrectly is not only a waste of money and time, but can also lead to chemicals running into our waterways. We will be making a

strong effort this year to educate proper management practices for lawns accommodating those who use chemicals as well as those taking an organic approach.

It's almost time to start lawn maintenance tasks for cool season grasses, such as Kentucky bluegrass and tall fescue. (Maintenance is different for warm season grasses such as Zoysiagrass, bermudagrass and buffalograss.)

March

- Scout and treat for broadleaf weeds. If using an herbicide, ensure the temperature is above 50 degrees F and rain is not in the forecast for at least 24 hours.
- Send soil in for analysis. This will inform fertilizer practices in the coming months. Contact your local extension office for information on how to test your soil. https://www.ksre.k-state.edu/about/statewide-locations/

Many of our lawn-related questions this time of year are about crabgrass treatment. As a general rule, watch for the redbud trees to bloom. When they reach full bloom (usually April) it's time to apply the crabgrass preventer. We will discuss this more in an upcoming newsletter as the time approaches.

FLOWERS

Caring for Spring-Flowering Bulbs

March through April and sometimes May we will receive our delayed gratification from the bulbs planted last fall. Get the most out of this reward with the following tips:

- Deadhead blooms as they fade to prevent seed development and allow bulbs to store more energy for future blooms.
- Leaves should be left intact until they die back naturally. Cutting leaves back while still green halts energy production and limits energy stored in the bulbs.
- Wait to transplant bulbs until after leaves have died back, if necessary.
- If you're noticing leaves emerging from the soil due to our warmer days lately don't be too concerned. When freezing temps return the leaves may develop some brown tips but the plants should be fine. If buds emerge you can cover them gently with mulch.

PERMACULTURE

Growing Native Plants

Restoration of biodiversity is key to permaculture design. Native plants are indigenous to a region rather than introduced through human interaction. They promote biodiversity by limiting the amount of maintenance needed while providing food and housing for wildlife.

Native plants are adapted to a specific area and consequently well-suited to the growing conditions there. A native landscape has balance between the animals and plants enabling them to co-exist. Once established, native plants require less supplemental water, fertilizer, pest management and overall maintenance than non-natives. Less human interference equals greater biodiversity.

Native habitats are beneficial as a food source for wildlife. Some species of wildlife are non-specific in what types of plants they prefer, while others require certain types of plants. Incorporating a variety of native plants will encourage more diversity of wildlife to your landscape. Here are a few natives to consider for a permaculture landscape. Always use caution when harvesting plants for edible use. Ensure proper identification and preparation to prevent a negative reaction.

Bee balm (*Monarda fistulosa*) grows two to three feet tall and wide. The tubular-shaped pink/purple blooms appear in June through August attracting bees, hummingbirds and butterflies. Leaves have been used for herbal teas.

Witch hazel (*Hamamelis virginiana*) has fall and winter interest with the bloom of yellow flowers which are great for feeding bees. This large shrub can reach 15-20 feet and prefers a moist, shaded location. The late fall blooms attract bees. The leaves and bark have medicinal value.

False indigo (*Baptisia australis*) is an herbaceous perennial that reaches over three feet in height and width. It prefers full sun and is a nitrogen fixer. The lovely summer blooms are inviting to butterflies and bees.

Serviceberry (*Amelanchier arborea*) is native to eastern Kansas and produces fruit that resembles the taste of blueberries in mid-summer. Reaching 20 feet in height, these trees make great specimens and can reach 15 to 25 feet tall producing white blooms in April.

When establishing native plants in the landscape consider these tips:

- Choose plants that naturally grow in the habitats available in your landscape. This includes consideration of the microclimates caused by shade, wind, slope, etc. as well.

- Use the local native plant organizations for region-specific advice.
- Purchase native plants locally from a reputable source.
- Manage the native landscape with as little interference as possible including:
    - No fertilizer
    - No herbicides
    - Water to establish and then limit.
    - Apply mulch at planting to reduce the amount of weed competition.

Balance is important. There is no need to remove exotic or alien plants from the permaculture landscape unless they are problematic to the goals of the area. There is certainly room for introduced plants that bring you joy alongside regional natives.

MISCELLANEOUS

Weeds – Ready or Not, Here They Come

For the purpose of the Hort Newsletter a weed is defined as a plant growing somewhere it is not wanted. For many gardeners, weeds are the downfall. Weeds create competition for nutrients and water. They can also restrict growth of desired plants by competing for space. The frustration with weeds leads some gardeners to turn to chemicals or give up on a garden plot altogether. Understanding weeds may be helpful in your gardening efforts.

Just like our garden plants, weeds can be annuals, perennials or biennials. Annual weeds, including henbit and spurge, germinate each year and complete their life cycle in one growing season. Perennial weeds such as, clover and bindweed, live at least two years and often reproduce by seed with the help of wind, water, animals and other means of dispersal. We all know a child, or perhaps you were the child, who loves blowing dandelion heads and making wishes as the wind disperses the seeds. Perennial weeds can sometimes spread by cuttings of roots or other vegetative plant parts as well. This capability can make managing these weeds a challenge.

Preventing weeds is the best management strategy. This includes using practices such as keeping the soil covered with a cover crop or mulch to prevent germination. Using drip irrigation to direct water to the desired plants rather than watering the entire garden area can also prevent weeds from germinating. Other prevention strategies include minimizing tillage. Deep tilling the garden damages the soil structure and brings weed seeds to the surface where conditions for germination are right. Occultation is the use of black tarps over the ground to kill weeds with the help of the sun. Depending on the persistence of the weeds this can take a couple weeks to months for successful eradication.

Weeds that have already established in a garden are often most effectively and safely removed by hand pulling. Though there are a couple of herbicides home gardeners can use there are consequences of using this method, including risk of damaging vegetable crops due to overspray. Cultivating the top one to two inches of soil can remove annual and young perennial weeds. If done on a regular basis this can effectively control their growth.

It is beneficial to knock out weeds before they are able to develop seeds to prevent reproduction. A single dandelion seed head has been reported to produce 150 to 200 seeds. (Something to remember next time you see the neighborhood child gathering stems in their yard!)

Integrated Pest Management (IPM) includes controlling weeds in the landscape. Using a variety of practices listed above will give the most effective management.

Gardening Over a Septic System

While it is still technically winter, the days are gradually getting longer and home gardeners are likely counting the days until spring. In this article, Dr. DeAnn Presley, Soil Management Extension Specialist, answers the question “Can I grow a garden on top of a septic system?”. Since there are an increasing number of suburban homes being built in Kansas, most of which are not on municipal sewer systems, this article was written to help educate the public about residential septic systems and how to manage them properly.

Septic systems, also referred to as onsite wastewater systems, treat and cycle wastewater back into the environment. There are many different kinds of systems, but except for lagoons, all depend on dispersing partially treated wastewater called effluent into the home’s lawn through a network of pipes called the drainfield or absorption field. Soil organisms, such as bacteria and fungi, play a critical role in decomposing the chemicals, compounds, and other organisms present in the wastewater. For this process to proceed efficiently the soil profile needs to be aerobic, meaning that the soil isn’t permanently saturated. Systems have the large footprint they do so water can be spread out across the dispersal field rather than one spot becoming overloaded with water.

Plants are beneficial for removing some of this water from the lateral field through transpiration (water moves from the roots and exits through the leaves). However, the very best plants for covering wastewater system components, such as the septic tank and the absorption field, are lawn grasses and other ornamental plants with a shallow root system. There are a few reasons for this.

1. It’s best to keep the area around the septic tank free of major landscaping or objects because the tank needs to be accessible for occasional pumping.

2. Plants with large roots, such as trees or shrubs, might cause damage and/or plug either the septic tank or lateral lines with roots.
3. According to the EPA, “It is not recommended to plant trees, shrubs, or vegetable gardens on the drainfield. Tree and shrub roots can ensnarl and damage drainfield pipes. Vegetables can potentially be exposed to sewage effluent and be unsafe to consume. Native grasses and ground covers are the most appropriate planting over your drainfield.”

Because there’s always a risk that a septic system might malfunction, it’s best to avoid consuming vegetables that could have been in contact with effluent.

For more information: https://www.epa.gov/septic/frequent-questions-septic-systems

https://www.epa.gov/sites/default/files/2015-06/documents/septicsmart-week-landscaping-final.pdf (DeAnn Presley)

QUESTION of the WEEK

“Last week in the newsletter you shared that peat moss can be incorporated into compost to help improve the soil quality. Is there an alternative to peat moss that can be used to prevent overharvesting of peat moss in bogs?”

I appreciate it when subscribers reach out with their questions and concerns especially when we can educate each other and grow more responsibly.

Peat moss is a common substrate used in soilless mixes because it is a lightweight source of organic matter with good aeration and drainage. However, as our reader pointed out, it should not be overused or wasted. Peat moss comes from decomposed sphagnum moss in bogs and wetlands. Harvesting can degrade the ecosystems which do not recover quickly.

Some growers may prefer alternatives such as compost, coir or vermiculite. Compost is full of nutrients and can be readily available especially if you set up a system onsite. For the square foot garden, this is the best option to improve the soil. For container gardening, coir and vermiculite are two alternatives. Coir comes from the husks of coconuts and is more sustainable than peat moss. Vermiculite is a lightweight mineral commonly used as an alternative to peat moss because it is better at holding nutrients. These are a few options to consider when you purchase soilless mixes or make your own.

COMING UP NEXT WEEK…

Next week will feature the return of the Garden Spotlight. We will also share propagation techniques to stretch your gardening budget. If you know a teacher, get

them signed up to receive the newsletter. The School Garden feature returns to the newsletter next week.

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This newsletter is also available online at:
http://hnr.k-state.edu/extension/info-center/newsletters/index.html

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