



Horticulture Newsletter

June 2, 2026

**KANSAS STATE
UNIVERSITY**

Horticulture and
Natural Resources

Video of the Week:



There are many ways to help support upright tomato plant growth during the growing season. From traditional caging to tying up plants, the various options help each gardener find the right option for their space. [This week's video discusses some of the reasons why tomatoes need support](#), and how keeping plants growing upright can maximize space and prevent disease: <https://kansashealthyyards.org/all-videos/video/tomatoes-need-support>

Announcements:

June K-State Garden Hour:

Join us tomorrow, Wednesday, June 3, 2026, for the next K-State Garden Hour webinar on "Maximizing Garden Success with Extension Resources". Discover practical tools and resources available through Extension that can help improve the success of your garden. The presentation will be live from Noon to 1pm, and will discuss the newsletters, websites, books, landscape designs, and apps available to aid your gardening efforts. Register to join us live, or view the recording afterwards online at: www.ksre-learn.com/KStateGardenHour

K-STATE GARDEN HOUR

Maximizing Garden Success with Extension Resources

Wednesday, June 3rd 12:00PM -1:00PM CST

Discover how to leverage Extension resources effectively to plan, manage, and trouble shoot problems in your landscape & garden. Join Cassie Thiessen and Matthew McKernan, K-State Extension Horticulturalists, as they explore practical tools and resources available through Extension that can help improve the success of your garden. Learn how to access research-based resources and utilize them to make informed decisions for your garden.

Register here!

Please register for this free Zoom Webinar at: ksre-learn.com/KStateGardenHour

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Garden Tours In Kansas:

Join us any of the first three weekends in June for Garden Tours showcasing vibrant blooms and creative landscapes across Kansas. Explore unique private gardens across the state each weekend to gain inspiration

2026 Garden Tour Locations

for your own garden. Visit with passionate gardeners, discover new plants, and have your gardening questions answered by trained Extension Master Gardener Volunteers. [See the full list of Garden Tours in Kansas and their respective dates online](#), at the bottom of our website: <https://extension.k-state.edu/master-gardener/explore-locally/gardens.html>



Garden Calendar:

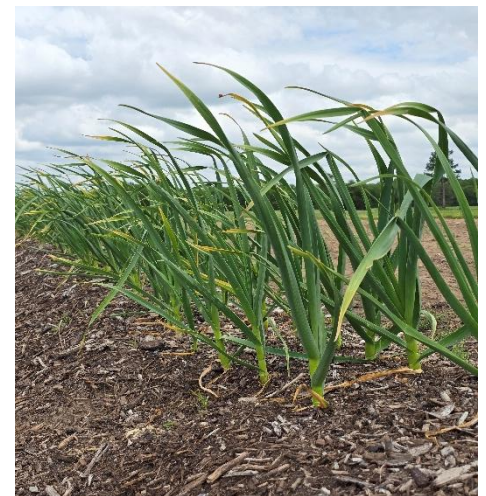
- Begin wrapping up harvest of leafy spring greens, such as lettuce, kale, Chinese cabbage, and bok choy.
- Watch tomatoes for foliar leaf disease development and treat as needed.
- Turn compost piles and keep them moist for a quicker breakdown of organic materials.
- Remove flower stalks from peonies and iris.
- Fertilize roses during their first flowering period with about 1 cup of low analysis fertilizer per plant.
- Establish new zoysia, bermudagrass, or buffalograss lawns by sod, plug, or sprigs. Fill in bare areas using the same technique.
- Water the established turfgrass sparingly to increase drought tolerance during the summer heat. Let turfgrass wilt slightly between waterings for best results.
- Mulch around the bases of trees and shrubs to conserve moisture and protect them from lawnmower and string trimmer damage. Do not pile mulch against the trunk of trees when mulching.
- Prune pines and spruces to shape and control size.
- Prune spring flowering shrubs now that flowering has completed.
- Take cuttings of houseplants to start new plants.

Vegetables:

Fertilizing And Watering Onions:

The amount of fertilizer and water onions receive will correspond to how large onions grow. Large, vigorous plants are essential for large onion bulbs. Onions have a shallow, poorly developed root system, so regular fertilization and watering are essential.

Onions should be first fertilized at planting. Onions respond well to a second fertilizer application or sidedressing about three weeks after plants start to grow. At that time, use a high-nitrogen fertilizer such as nitrate of soda (16-0-0) applying ½ cup of fertilizer per 10 feet of row. High-nitrogen lawn fertilizers such as a 27-3-3, 30-3-4, 29-5-4 or similar are also good as





long as they do NOT contain weed killers or weed preventers. For these higher nitrogen fertilizers, apply $\frac{1}{4}$ cup per 10 feet of row.

Sidedress onions again with a high nitrogen fertilizer when plants develop 6 to 8 leaves. When sidedressing, apply fertilizer to the soil alongside growing crops, specifically between plant rows or directly beside the root zone.

Sidedress onions for a third and final time with a high nitrogen fertilizer when plants have developed 9 to 11 leaves. If plants have already started to form bulbs, skip this third sidedressing.

Regular, uniform watering is also essential for high quality onions. Onions should receive one inch of water per week if not supplied by rainfall. Remove weeds regularly to prevent root competition for water. Watering can be reduced near the harvest period, as the onion tops begin to fall over.

[Visit our Onions publication](#) for more information on growing and fertilizing onions:

https://bookstore.ksre.ksu.edu/download/onions_MF761

Roly-Poly In The Garden:

Pillbugs (*Armadillium vulgare*) and Sowbugs (*Porcellio laevis*), often collectively called roly-poly, are crustaceans, and more closely related to shrimp, crayfish, and lobsters than insects.

Both pillbugs and sowbugs have a hard, shell-like covering that is made up of a series of segmented plates. They are oval and half-domed (convex) in shape, with colors that vary from black, to gray, to brown depending on age. Each have seven pairs of legs. Adults reach up to $\frac{1}{3}$ to $\frac{3}{4}$ inch long with antennae that are about one-quarter the body length. Although similar in appearance, sowbugs possess two small, tail-like appendages located at the end of the body, while pillbugs do not. Pillbugs are also able to roll up into a ball, while sowbugs cannot.



Both pillbugs and sowbugs are an important part of the garden ecosystem, as they primarily feed on decaying organic matter and are important decomposers. Occasionally, however, pillbugs and sowbugs can feed on seedlings, new roots, lower leaves, and fruits or vegetables touching the soil surface. This feeding damage occurs primarily at night, as both pillbugs and sowbugs are nocturnal. Daytime activity can sometimes be observed during cloudy conditions or after rains. Pillbugs and sowbugs cannot control moisture loss from their bodies and are always found in moist environments as a result. Pillbugs and sowbugs are most active in the spring when conditions are moist.

The primary means of dealing with pillbugs and sowbugs is through habitat manipulation. Begin by reducing the amount of decaying organic matter on the soil surface and minimizing soil wetness. Rake mulch and leaf debris away from young, tender plants. Reduce the frequency of irrigation as much as possible to create drier surface conditions around the plant. Irrigate early in the morning to allow surfaces to dry before nighttime.

Use drip or furrow irrigation instead of overhead sprinklers. Consider using plastic sheeting mulch instead of organic mulches. Black plastic sheet mulches may be more effective at discouraging pillbugs and sowbugs than white or clear plastics. Adjusting planting dates into drier weather and soil tillage can also help to reduce roly-poly populations.

Insecticide treatments are generally not recommended, as garden residue under which pillbugs and sowbugs live protects them from sprays. Pillbugs and sowbugs may also damage a significant number of seedling plants before consuming enough toxin to kill them.



Visit our [Pillbugs publication](https://bookstore.ksre.ksu.edu/pubs/pillbugs-kansas-crop-pests_MF2855.pdf) for more information: https://bookstore.ksre.ksu.edu/pubs/pillbugs-kansas-crop-pests_MF2855.pdf

Fruit:

Fire Blight Damage In Trees & Shrubs:



Fire blight is a disease that can attack many trees and shrubs in the spring and early summer months. Most commonly experienced in fruit trees, this disease can cause a wide range of damage from killing blossoms and new growth to killing entire tree branches and plants.

Fire Blight affects over 130 plant species in the Rosaceae (Rose) family, and in Kansas is commonly found on apple, crabapple, pear, raspberry, blackberry, pyracantha, hawthorn, cotoneaster, quince, and serviceberry.

Fire Blight is a disease caused by the bacterium, *Erwinia amylovora*, which overwinters in cankers in the branch canopy and trunk of trees and shrubs. In the spring, bacteria ooze from these cankers as a sweet, sticky liquid. These droplets contain millions of bacteria, which are spread by water droplets from rain or irrigation, and by pollinators, such as honeybees or flies. Blooming flowers are the most common entry point for the bacterium, however, natural openings and wounds caused by hail, strong winds, or storm damage can also serve as infection sites for fire blight. Warm, wet, and humid weather in the spring and early summer, favor fire blight infections. Temperatures between 65°F and 86°F and humidity above 60% provide the optimal conditions for the bacteria to reproduce and spread.

Once infected, the bacterium may move long distances within the living tissue and kill large portions of the tree or



shrub. Symptoms of fire blight are most noticeable on blossoms and succulent new growth. Infected blossoms become water-soaked and turn dark-green or brown. Young, infected shoots wilt rapidly, turning brown to black as if scorched by fire. The terminal end of the diseased shoot bends backwards, becoming hooked, and is commonly described as a shepherd's crook appearance.



When springtime weather conditions are conducive to fire blight infection, the disease can be difficult if not impossible to control. Several cultural practices, however, can help reduce or prevent the occurrence of fire blight. Start at planting by choosing tree varieties that are resistant to fire blight, and avoid planting susceptible cultivars of flowering crabapples, apples, or pears. Many plants will lack cultivars completely resistant to fire blight, however, some cultivars will be more resistant to fire blight disease than others. Avoid excess nitrogen fertilizations and heavy pruning of trees and shrubs, as fire blight is most severe on plants which have an abundance of succulent shoot growth. Reposition sprinklers to avoid plant contact and to reduce leaf wetting.

Over the late summer and winter months, remove all dead shoots, infected spurs, and cankers which harbor the fire blight bacterium. Pruning cuts should be made 6-10 inches below diseased tissue. Disinfect pruning tools between each cut using denatured alcohol or a 10% bleach solution. Never prune during wet weather, or in springtime when disease is spreading.



If fire blight has been a recurring problem, copper-based products or products with the active ingredients Streptomycin sulfate or Bacillus subtilis can be used preventatively to protect flowers from infection. These products must be applied in combination with the cultural practices recommended above and will have no effect on existing infections within the plant.

[Visit our Fire Blight on trees fact sheet](https://hnr.k-state.edu/extension/horticulture-resource-center/common-pest-problems/documents/Fireblight%20on%20Fruit%20Trees.pdf) for more information on this disease and its control: <https://hnr.k-state.edu/extension/horticulture-resource-center/common-pest-problems/documents/Fireblight%20on%20Fruit%20Trees.pdf>

Flowers:

Japanese Beetle Activity Begins For 2026:

Japanese beetles are a widespread and destructive pest affecting landscapes, gardens, and turfgrass across Kansas. Both larvae (grubs) and adults (beetles) cause plant damage. Originally introduced into the United States in 1916, Japanese beetles have since spread throughout much of the country and now attack more than 300 plant species, including roses, canna, linden, crabapple, crape myrtle, and many fruit and ornamental plants. In Kansas, Japanese beetles are a well-established pest in eastern and central sections of the state and continue to expand westward. Japanese beetles have a one-year life cycle that includes egg, larval (grub), pupal, and adult stages.





Adult Japanese beetles are easy to recognize by their metallic green bodies and copper-colored wing covers. The most distinguishing feature for the adult beetles is the four to five tufts of white hair on each side of the abdomen, with two more tufts located at the rear end of the abdomen. These white tufts of hair are unique to Japanese beetles and distinguish adults from other beetle species.

Adult Japanese beetles are active from June through September, depending on environmental conditions and geographic location. In south central Kansas, adult beetle activity began in late-May this year. When adult beetles emerge, they tend to gather in large numbers, mating and feeding on plant leaves and flowers. Their feeding creates a characteristic “skeletonized” appearance, where only leaf veins remain. Severe feeding can cause leaves to brown and drop prematurely, reducing plant vigor. Adult Japanese beetles live for 30 to 45 days, feeding on plants over this four-to-six-week period.

After Japanese Beetles mate, adult females lay eggs in moist soil during the summer months. The larvae hatch within two weeks and begin feeding on turfgrass roots. Grubs feed on plant roots during the summer and into the fall, damaging roots during the heat of summer. During the winter months larvae migrate deeper into the soil. As soil temperatures increase the following spring, grubs move closer to the soil surface and resume feeding. In late spring, larvae pupate and emerge from the soil as adult beetles.



Effective management of Japanese Beetles involves a combination of strategies, including:

- Maintaining healthy plants through proper watering, fertilization, and pruning to help reduce damage.
- Hand-removal of adult beetles into a bucket of soapy water early in the season can help limit population buildup. Hand picking will be easiest in early morning or late evening when beetles are least active. When disturbed, adults fold their legs and fall to the ground. Using a wide-mouthed jar or bucket placed below the beetle will help to capture adult beetles.
- Limit watering of turfgrass areas while Japanese beetle adults lay eggs. This will discourage females from laying eggs in the lawn and decrease survival of young grubs.
- Remove smartweed (*Polygonum* spp.) and other weeds in the area that are an attractive food source for adult Japanese beetles.
- Traps are generally not recommended, as they may attract more beetles than they capture.

Insecticides can be used when populations are high, but thorough coverage of plant surfaces is essential for control. Numerous insecticides can be used including pyrethroid products such as cyfluthrin, bifenthrin, and cyhalothrin, however, each pose risks to natural enemies (parasitoids and predators) and beneficial insects (such as bees). For grubs, soil-applied insecticides are most effective when applied while larvae are small and near the soil surface.

Visit the [Japanese Beetle: Insect Pest of Horticultural Plants and Turfgrass publication](https://bookstore.ksre.ksu.edu/download/japanese-beetle-insect-pest-of-horticultural-plants-and-turfgrass_MF3488) to learn more: https://bookstore.ksre.ksu.edu/download/japanese-beetle-insect-pest-of-horticultural-plants-and-turfgrass_MF3488

Turf:

Monitor & Control Thatch in Warm-Season Lawns:

Thatch is a light brown, fibrous accumulation of organic matter, made up of compressed surface roots, stems, and runners. It is located between the soil and grass blades and looks like peat moss. While thatch is something that most people never look for, it can be beneficial or detrimental in the success of our lawn, depending on the amount that is present.

In most healthy lawns, one-half inch of thatch helps to conserve water, cushion the turf from compaction, and insulate the soil surface from extreme temperatures. When more than half an inch of thatch forms, problems can occur. Excessive thatch buildup repels water and prevents it from penetrating to grass roots. Surface roots that try to grow into thatch dry out quickly and require frequent watering to prevent wilting. Fertilizers applied to the turf are caught and held by excess thatch layers, rather than reaching the soil. Excessive thatch causes the turf to be less cold, heat, and drought resistant, increasing the likelihood of winter injury. Excess thatch also provides a favorable environment for diseases and insects. For all these reasons and more, thatch levels should be monitored closely in our lawns, especially in zoysia, bermuda, and buffalograss lawns.



To determine the amount of thatch in a lawn, use a shovel or knife to cut a small wedge of turfgrass down 3-6 inches into the soil. The thatch will be the spongy layer above the soil surface and below the leaf blades. If the thatch accumulations are greater than one-half inch, additional action should be taken to either core aerate the lawn and/or verticut the lawn using a power-rake. These tools can often be rented locally, or a professional lawn service can be hired to complete the job.

For warm-season grasses, June or July is the best time to power-rake or core-aerate when the lawn is actively growing and can recover from thinning more efficiently. If the thatch levels are between $\frac{1}{2}$ to $\frac{3}{4}$ inch thick, core aerating can be used. Repeat passes with the aerator until the holes are about 2-inches apart. If thatch is thicker than $\frac{3}{4}$ -inches, it will need to be power-raked. Set the blades of the rake only deep enough to remove the thatch so the lawn is not severely damaged.

To prevent excess thatch buildup, it requires a combination of correct cultural practices to manage thatch effectively. This includes proper watering, fertilization, mowing heights, and soil aeration. Thatch control is not achieved with any one single practice.

Keep in mind that returning grass clippings to the lawn (or mulching mower clippings) does not contribute to thatch accumulation. This is a common misconception and is not true. Grass clippings are composed of 90% water and decompose rapidly, which does not contribute to thatch.

[Visit our Thatch – A Hidden Lawn Concern publication](https://bookstore.ksre.ksu.edu/pubs/thatch-a-hidden-lawn-concern_MF2131.pdf) for more information on thatch buildup and options for its control: https://bookstore.ksre.ksu.edu/pubs/thatch-a-hidden-lawn-concern_MF2131.pdf

Trees & Shrubs:

Vertical Frost Cracks In Trees:

Frost cracks are longitudinal splits in the bark and wood of trees, most frequently occurring vertically up the trunk. These cracks vary in length and may only be a few feet long or in some cases extend the entire length of the tree trunk, from the roots up into the canopy. The vertical openings of frost cracks can extend deep into the wood of the tree. These openings are not generally fatal to a tree. They can, however, provide opportunities for disease organisms and canker pathogens to enter the tree.

Young and thin barked trees are often more susceptible to developing frost cracks. Apple, ash, aspen, crabapple, cherry, cottonwood, dogwood, elm, golden rain tree, honey locust, linden, maple, oak, peach, and willow all can commonly be found impacted by frost cracking.

Frost cracks are most frequently associated with pre-existing wounds and flaws within the tree, such as old branch stubs or basal sprout stubs. During the winter months, the inner and outer wood in the trunk is exposed to various temperature extremes, and the temperatures create different contraction rates within the tree. This thermal contraction results in tension and splitting that leads to frost cracking along points of weakness in the wood, such as previous wounds and flaws.



Most trees will usually heal over, and close frost crack injury during the growing season. Avoid painting or sealing the frost crack with paints, shellacs, or tars, as these may slow the healing process. Watering during dry weather and installing a mulch ring around the tree may help speed healing. Fertilization in the early spring or in the fall after leaves begin to color may also boost tree health.

In future years, work to prevent frost cracks by ensuring trees are well watered going into winter. Wrap the tree trunks or otherwise protect trunks from direct or reflected sunlight during the winter months. This may help prevent frost cracks but will also prevent other winter injuries such as sunscald. Remember to remove the wraps each spring.

Visit our [Frost Cracks fact sheet](https://hnr.k-state.edu/extension/horticulture-resource-center/common-pest-problems/documents/Frost%20Cracks%20on%20Trees.pdf) for more information about this problem: <https://hnr.k-state.edu/extension/horticulture-resource-center/common-pest-problems/documents/Frost%20Cracks%20on%20Trees.pdf>

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Japanese Beetle Photographs Courtesy of: Department of Entomology, Kansas State University

Fire Blight Photos Courtesy of: Bugwood.org

For questions or additional information, contact: hortsupport@ksu.edu

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