Virtual 70th Kansas Turfgrass Conference

The 71st Annual Kansas Turf & Landscape Conference will be held in-person this year on December 1 & 2 at the Hilton Garden Inn, Manhattan. The conference is an excellent way to learn about turf and landscape management, visit with old friends, network with new ones, and see all the latest products and supplies from local and national vendors.

The conference has been approved for commercial pesticide recertification hours:
- 1 Core hour
- 3A - 7 hours
- 3B - 7 hours

GCSAA education points and International Society of Arboriculture CEUS will also be available by attending the conference.

You can register online at https://www.eventbrite.com/e/2021-Kansas-Turf-Landscape-Conference-Registration-167328585303

Register before November 22 to receive a discounted rate.

REMINDERS
1. Work fallen tree leaves into the garden every two weeks to increase organic matter.
2. Drain hoses and irrigation systems before winter.
3. Fertilize cool-season lawns if you haven’t done so yet.
4. Dig up and store tender bulbs such as cannas, callas and glads after the leaves are browned by frost.
5. Remove annual flowers killed by frost.

Water Landscape Plants Before Winter if Needed

Watering now is important if you missed recent rains and soils are dry. It is important to prevent moisture stress through the winter months.

A good, deep watering with moisture reaching at least a foot down into the soil is much better than several light sprinklings that just wet the top portions of the soil. A deep watering will help ensure that the majority of roots have access to water. Regardless of the watering method used, soil should be wet at least 12 inches deep. Use a metal rod, wooden dowel, electric fence post turned upside down or something similar to check depth. Dry soil is much harder to push through than wet.

Although all perennial plants benefit from moist soils before winter, it is especially important for newly planted trees and shrubs due to limited root systems. Even trees and shrubs planted within the last 2 to 3 years are more sensitive to drought than a well-established plant. Evergreens are also more at risk because moisture is lost from the foliage during the winter months.

Trees or shrubs planted within the last year can be watered inexpensively with a 5-gallon bucket. Drill a small hole (1/8") in the side of the bucket near the bottom. Fill the bucket and let the water dribble out slowly next to the tree. Refill the bucket once more, and you have applied 10 gallons. Very large transplanted trees and trees that were transplanted two to three years ago will require more water.

A perforated soaker hose is a good way to water a newly established bed or foundation plantings. However, soaker hoses are notorious for non-uniform watering. In other words, you often receive too much water from one part of the hose and not enough from another. Hooking both the beginning and the end of the soaker hose to a Y-adapter helps equalize the pressure and therefore provide a more uniform watering. The specific parts you need are shown in the photo above and include the soaker hose, Y-adapter and female to female connector. It is also helpful if the Y-adapter has shut off valves so the volume of flow can be controlled. Too high a flow rate
can allow water to run off rather than soak in.

On larger trees, the soaker hose can circle the trunk at a distance within the dripline of the tree but at least ½ the distance to the dripline. The dripline of the tree is outermost reach of the branches. On smaller trees, you may circle the tree several times so that only soil which has tree roots will be watered.

If using a soaker hose, note the time watering was started. Check frequently to determine the amount of time it takes for water to reach 12 inches. From then on, you can water "by the clock." Use a kitchen oven timer so you remember to move the hose or shut off the faucet. If you are seeing surface runoff, reduce the flow, or build a berm with at least a 4-foot diameter around the base of the tree to allow the water to percolate down through the soil, instead of spreading out.

If we have a normal winter, watering once before spring should be adequate. However, if the winter is warm and dry, watering once a month may be needed. (Ward Upham)

**Natural Needle Drop on Spruce, Arborvitae and Pines**

We are seeing very noticeable natural needle drop on some evergreens such as arborvitae, pines and spruce. This is a process where 2- to 4-year-old interior needles turn yellow, then brown, and eventually drop off. Those who aren't familiar with this process often are concerned about the health of the tree. This is a natural phenomenon that occurs every year and does not hurt the tree. However, some years it is much more noticeable than others especially if trees have been under stress. In most summers, the stress is due to heat and drought but this may vary depending on the year.

Be sure to check that only the older, inner needles are affected. The needles on the tips of the branches should look fine. Also, there should be no spotting or banding on the needles that are turning yellow. If spotting or banding is noted, take a sample to your local county extension office for diagnosis. You can find the location of your local office at [http://www.ksre.ks-state.edu/about/stateandareamaps.html](http://www.ksre.ks-state.edu/about/stateandareamaps.html) (Ward Upham)

**Winterizing Roses**

Though most shrub roses are hardy in Kansas, other types of roses can be more tender. For example, the hybrid teas have certain species in their ancestry that originated in the warm climate of southern China. These roses need protection to reliably survive Kansas winters. Mound soil or compost about 8 to 10 inches high around each plant. If using soil, bring it in from another part of the garden. Do not pull it from between plants because this can damage the rose roots or make them more susceptible to cold.

Mounding is normally finished by Thanksgiving. After the ground has frozen, add a 4-inch mulch of straw, leaves or hay for further protection. More soil may be spread on top of the mulch to keep it in place. Do not add the mulch before the ground freezes or mice may invade and feed on the roses over the winter. The purpose of these coverings is not only to moderate the cold, but also to prevent warm days during the winter or early spring from stimulating growth that is tender to returning cold weather. Excessively tall canes should be pruned to a height of 36 inches and tied together to prevent them from being whipped by strong winter winds. Wind can damage the crown of the plant or loosen the surrounding soil.

Next spring, remove coverings before new growth starts. If soil was used for mounding, remove from the area so that the level of soil stays constant from year to year. Compost can be spread out around the plant and used as a mulch. Wait until after the ground thaws, or the tops may begin growing before the roots can provide water. (Ward Upham)

**Amaryllis Culture**

Now is the time to start amaryllis if you wish to have them in bloom for Christmas. The amaryllis is a tender bulb that is ready to bloom when purchased. The genus name for this plant is Hippeastrum, which means "horse star," an appropriate name for a plant that produces massive blooms
as much as 8 to 10 inches across. These plants can produce 3 to 4 blooms on a 1- to 2-foot stem. Often, a second flower stalk follows the first at about the time the flowers on the first stem fade. The leaves usually start to appear when the flowers begin to open.

Amaryllis bulbs can be huge – approaching the size of a grapefruit. The larger the bulb, the larger the flowers and the more expensive the bulb. Regardless of size, amaryllis likes tight quarters. Place in a pot only 1 to 2 inches larger in diameter than the bulb. About half of the bulb should remain exposed. Hold the bulb so the roots hang down into the pot, and add potting mix. Firm the mix around the roots carefully so that they are not snapped off. Water thoroughly and place the plant in a warm, sunny location. Amaryllis likes day temperatures in the 70s and night temperatures in the 60s. The flower bud may start to appear right away or the plant may remain dormant for a period of time, but eventually all mature bulbs do bloom. Move the plant to a cooler location and out of direct sunlight when the flower buds begin to show color so the flowers last longer. Amaryllis can remain in bloom for about a month.

Flowers should be cut off after blooming to keep the plant from expending energy to form seeds. Place the plant back in a sunny location until it is warm enough to be placed outside. Sink the pot in the soil in an area that has dappled shade. The plant can be gradually moved to sunnier locations until it receives full sun for a half day. Continue to fertilize with a balanced houseplant fertilizer as you would a normal houseplant. Bring the pot in before first frost and place in a dark location. Withhold all water so the leaves have a chance to dry completely. Leaves can then be cut off close to the top of the bulb. Amaryllis can often be left in the same pot for several years but will eventually need repotting. Again, choose a pot that is only 1 to 2 inches larger in diameter than the bulb and repeat the process described above. Offsets are normally produced by amaryllis and can be given their own pots if desired. These small bulbs have a concave side when removed but develop a round shape when given their own space. They grow quickly and can be mature enough to flower in a couple of years. (Ward Upham)

Garden Soil Preparation — It's Not Too Late

Autumn is an excellent time to add organic materials and till garden soils. Winter can still be a good time to take care of this chore as long as the soil isn't frozen. It is far wiser to till now than to wait until spring when cold, wet conditions can limit your ability to work soils easily. Working soil when it is wet destroys soil structure and results in hard clods that are very slow to break down. On the other hand, dry soil may need to be watered so it can be more easily tilled. Be sure to wait several days after watering to let soil moisture levels moderate. You want the soil moist, not wet or dry, when tilling.

There is a limit to how much organic material such as leaves can be added in one application. Normally, a layer 2 inches deep is adequate with 5 to 6 inches being the maximum that can be added at one time. Shredding the material before application encourages faster and more complete decomposition due to increased surface area. Remember, soil preparation is an important key to a successful garden. (Ward Upham)

Soil Prep Now for Peas Next Spring

Peas can be planted earlier in the spring than just about any other vegetable crop because they can grow well at a soil temperature of 40 degrees. Though other crops such as lettuce, parsnips and spinach can sprout at lower temperatures (35 degrees), they don't start growing well until the soil reaches about 45 degrees. However, soils are often too wet to work in the spring. Therefore, you may wish to prepare the soil now rather than next spring so that planting can take place as early as possible even if those spring soils are wet. Wait until soil temperatures reach 40 degrees next spring and sprinkle the seeds on the soil and push them in with your finger. Protection from rabbits and deer will probably be needed as they will be attracted to anything green coming up so early. (Ward Upham)
**Knotweed Control**

Knotweed thrives in compacted soils, so a thorough aeration is the first step in control. This weed will not compete in a healthy lawn. Chemically, there are two options. Knotweed is an annual that germinates in late February or early March, so a preemergence herbicide can be used in the late fall (about now). Pendimethalin (Scotts Halts), Surflan (Weed Impede), Barricade, Dimension and XL are labeled for knotweed. (Note: Pendimethalin, Barricade and Dimension can be used on all Kansas turfgrasses, while Surflan and XL can only be used on tall fescue and warm-season grasses such as buffalograss, zoysiagrass and bermuda).

The other option is to use a combination postemergence product such as Trimec, Weed-Out, Weed-B-Gon or Weed Free Zone after the knotweed has emerged in the spring but is still young.

If spring seeding of the lawn is planned, your options are more limited. Trimec and other combination postemergence herbicides require a month before overseeding to thicken up your lawn. Obviously, don't use a preemergence herbicide if you are trying to get new seed established. For homeowners seeding in the spring, tilling will control knotweed adequately without using a herbicide. If seeding without tilling (e.g., overseeding using a slicer-seeder), then use a combination product such as one mentioned above just after the knotweed comes up in the spring, and be sure to wait at least a month before seeding. (Ward Upham)

**Keep Compost Pile Moist**

This is the time of year when there are lots of materials available to compost. Remember that the compost needs to be kept moist so that the bacteria and fungi can break down the raw materials. If you haven't received rain recently, you may need to wet down the pile. Use a sprinkler to soak through the pile to the center. Allow the pile to drain. The goal is for the pile to remain moist; not waterlogged. Edges will dry out the quickest and may need a light sprinkling from time to time.

If you are interested in composting but don't know how it is done, see our video at [http://tinyurl.com/jn6yppo](http://tinyurl.com/jn6yppo).

We also have a series of publications on composting that can be accessed at [http://hnr.k-state.edu/extension/publications/horticulture-practices.html](http://hnr.k-state.edu/extension/publications/horticulture-practices.html) (Ward Upham)

**Garden Hoes**

There are a number of different designs for garden hoes. My favorite three are the traditional, circular and scuffle. The traditional hoe is used to chop weeds or to lightly scrape the soil surface to kill weeds that are just emerging. Even though it is the most popular garden hoe, it is the one I use the least.

The scuffle hoe is the most used hoe I own. It covers a lot of ground quickly and kills weeds without disturbing the soil as much as other hoes. Because little new soil is exposed, it is less likely to bring up weed seed that will then germinate. This type of hoe can be more difficult to find than the traditional hoe and a mail-order company may be needed if your local garden center doesn't handle them. There is a company in Kansas that makes these hoes in several different widths as well as a number of other hoe types. All are made out of recycled disc blades. That company is Prohoe Manufacturing, LLC ([https://www.prohoe.com/](https://www.prohoe.com/)) out of Munden, Kansas.

The circular hoe is more specialized. It features a circular "blade" in which only the bottom is sharpened. This allows you to hoe very close to existing plants without harming them as the sides of the circle are dull. This one was invented by an Oregon Extension Master Gardener in the late nineties. Though short-handled ones are relatively easy to find, the long-handled types are more difficult. As a matter of fact, the only source I could find was from Red Pig Tools. See [https://www.redpigtools.com/Circular-Hoe-Long-Handle_p_1405.html](https://www.redpigtools.com/Circular-Hoe-Long-Handle_p_1405.html).

Though these three types are my favorite, don't be afraid to try other types to see how they work for you. (Ward Upham)
Begin Rabbit Protection Now
Rabbits may begin to nibble on newly planted trees and shrubs through the winter. Protect your investment with at least 2-foot-tall cylinders of 1-inch-mesh, chicken wire, or similar barrier. Remove the barrier in the spring or it can be left in place for a time. Just remember to remove it before it starts to constrict the trunk.

Other control methods include plastic tree wraps and liquid rabbit repellents sprayed on the plants. Repellents will need to be reapplied each time it rains. (Ward Upham)

Apply Late-Season Nitrogen Application in November
November is the time to give Kentucky bluegrass and tall fescue lawns the last nitrogen application of the season. Why November? Because while top growth slows in response to cool temperatures, grass plants are still making food (carbohydrates) by photosynthesis. A November nitrogen application helps boost the photosynthesis rate. Carbohydrates that are not used in growth are stored in the crown and other storage tissues in the plant. These carbohydrate reserves help the turfgrass green up earlier in the spring and sustain growth into May without the need for early-spring (March or April) nitrogen. Those early-spring nitrogen applications are less desirable because they can lead to excessive shoot growth and reduced root growth. Other benefits of November-applied nitrogen for cool-season grasses include improved winter hardiness, root growth and shoot density.

How much should you apply? One to 1 to 1 ½ pounds actual nitrogen per 1,000 sq. ft. of lawn area is sufficient. In order for this application to be effective the nitrogen must be readily available to the plant because the growing season is nearly over. Therefore, for a November application, use a soluble (quickly-available) nitrogen carrier such as urea or ammonium sulfate. Many turfgrass fertilizers sold in garden centers and other retail outlets also contain soluble nitrogen and would work well at this time of year. Avoid products that contain water-insoluble nitrogen (slow-release) for this application. As always, sweep up any fertilizer that gets on driveways, sidewalks, or streets and reapply it to the lawn. (Ward Upham)