

Horticulture 2011 Newsletter

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Video of the Week:

[Garlic: Easy to Grow and Store](#)

TURFGRASS

Why Tall Fescue Usually Does Better than Kentucky Bluegrass in Kansas



Kansas is in what is known as the transition zone. Cool-season grasses such as tall fescue and Kentucky bluegrass are better adapted further north than Kansas and warm-season grasses such as bermudagrass and zoysiagrass are better adapted south. It is difficult to grow a lawn that is attractive throughout the growing season in Kansas. In addition, there are differences among members of these two groups as well. Though tall fescue and Kentucky bluegrass are both cool-season grasses,

and both struggle during hot, dry summers, tall fescue is better adapted.

Why is the summer so hard on cool-season grasses? As temperature increases so does the photosynthetic rate but only up to a point. Cool-season grasses usually are most efficient at between 70 and 80 degrees F. Above that point, photosynthetic efficiency drops. Less efficient photosynthesis means less food (sugar) made for the plant to use.

Also, every living cell in a plant respire. In other words, each cell breaks down the energy captured in photosynthesis and uses it to fuel the cell. Respiration also increases with temperature, but it never stops. It continues day and night.

Hot days AND hot nights give cool-season plants a double whammy. Less efficient photosynthesis results in less food production, and high rates of respiration results in food being used very quickly. Eventually plants start to run out of energy. They weaken and possibly die. Both turfgrass species try to avoid this by going dormant.

Tall fescue has better heat and drought tolerance than Kentucky bluegrass and is better able to withstand these stresses. Though tall fescue is often damaged by hot, dry summers, it usually bounces back more quickly than Kentucky bluegrass. Though bluegrass has the ability to thicken up due to the presence of underground runners known as rhizomes, it often is slow to do so. Tall fescue is a bunch grass and must be thickened up by overseeding. (WU)

FLOWERS

Time to Plant Spring-flowering Bulbs



Late September through October is an excellent time to plant spring-flowering bulbs such as crocus, tulips, and daffodils. These plants need to develop roots in the fall and must meet a chilling requirement over the winter in order to bloom in the spring.

Choose a planting site that has full sun to partial shade. The ideal soil would be a sandy loam, but even poor soils can be used if organic material such as peat moss, compost, or aged bark is mixed in. For example, a heavy clay can be amended by mixing in one-third to one-half organic material. Soil pH should be between 6.0 and 7.0.

Bulbs need good aeration as well as good drainage for proper development. It is best if the bulbs are given 12 inches of prepared soil. If one-third organic material were added, this would require mixing 4 inches of organic material with 8 inches of soil. Incorporate about 3 pounds of a complete fertilizer such as a 5-10-5 per 100 square feet during preparation or fertilize according to soil test.

Planting depths vary depending on the size of the bulbs. For example, tulips and hyacinths are set about 6 inches deep, and daffodils are put 6 to 8 inches deep. Smaller bulbs are planted shallower. As a rule of thumb, bulbs are planted two to three times as deep as their width. Planting depth is the distance from the bottom of the bulb to the top of the soil.

Large bulbs are normally spaced 4 to 6 inches apart, and small bulbs about 1 to 2 inches. Planting in clumps or irregular masses produces a better display than planting singly.

After placing the bulbs at the proper depth, replace half the soil and add water. This will settle the soil around the bulbs and provide good bulb/soil contact. Add the remaining soil and water again. Although there will be no top growth in the fall, the roots are developing, so soil needs to be kept moist but not wet. Mulch can be added after the soil has frozen to prevent small bulbs from being heaved out of the soil by alternate freezing and thawing. There is no need to fertilize at planting. (WU)

Amaryllis, Bringing it Back Into Bloom



With proper care, amaryllis will bloom year after year. Bring the pot in before the first frost and place in a dark location. Withhold water so leaves have a chance to dry completely. Then cut them off close to the top of the bulb. Amaryllis needs to rest for at least a month before the plant is started back into growth. It takes an additional six to eight weeks for the plant to flower.

When you are ready for amaryllis to resume growth, water thoroughly and place the plant in a warm, sunny location. Do not water again until the roots are well developed because bulb rot is a concern. Amaryllis needs temperatures between 50 and 60 degrees during the period before flowering. Higher temperatures can weaken leaves. 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 if they have been given proper care during the growing season. Keep the plant in a cool location and out of direct sunlight when the flower buds begin to show color so flowers last longer. Amaryllis can remain in bloom for about a month. (WU)

ORNAMENTALS

Preventing Sunscald on Thin-Barked Trees



Many young, smooth, thin-barked trees such as honey locusts, fruit trees, ashes, oaks, maples, lindens, and willows are susceptible to sunscald and bark cracks. Sunscald normally develops on the south or southwest side of the tree during late winter. Sunny, warm winter days may heat the bark to relatively high temperatures. Research done in Georgia has shown that the southwest side of the trunk of a peach tree can be 40 degrees warmer than shaded bark. This warming action can cause a loss of cold hardiness of the bark tissue resulting in cells becoming active. These cells then become susceptible to lethal freezing when the temperature drops at night. The damaged bark tissue becomes sunken and discolored in late spring. Damaged bark will eventually crack and slough off. Trees often recover but need TLC — especially watering during dry weather. Applying tree wrap from the ground to the start of the first branches can protect recently planted trees. This should be done in October to November. (WU)

How to Water Trees



Trees are often a challenge to water. Following are some ideas on possible methods.

Small trees: Make sure the surrounding soil is moistened as well as the root ball to encourage roots to move out of the root ball. Soil should be moistened but not waterlogged. Water the root ball and the surrounding soil to a depth of 12 inches. This can be done in a number of ways.

- Set hose close to tree and run at a slow trickle.
- Drill a small hole near the base of a 5 gallon plastic bucket. Fill the bucket with water so that the trickle of water from the hole slowly moistens the soil.
- Use a rubber soaker hose. I usually do not recommend these because they put out different rates of water along their length. If they are coiled around the tree several times, the rates even out.
- Use a Tree Gator. This is a plastic watering bag that is placed around the tree. The bag is filled with water and slowly trickles out to water the tree.
- Drip irrigation can be used if watering a line or grouping of trees or shrubs.

Larger trees: Large trees are more often more difficult to water because the root system covers a large area. Concentrate on the area under the dripline. Though roots extend much further out than this, the greatest concentration of roots is found under the dripline.

- Sprinklers can be used if lower limbs don't interfere with the pattern.
- Set a hose at a trickle and move when needed.
- Soaker hoses can be used but remember that the application rate varies along the length of the hose. Spiral from the base of the tree outward.
- Drip irrigation is my favorite method because you- can make one set and water the tree. Also, the rate of application is uniform. Start at the base of the tree and spiral out to the dripline. Try to keep the tubing within 18 to 24 inches of the last spiral to make sure the entire area has been covered.

There is no set amount for how much to water because soils and application rate vary far too much. Gardeners can easily calculate this for their conditions. Record the time you started watering and check the depth the water reaches periodically. When the 12-inch depth is reached, note how many minutes (or hours) were required. From then on, you can water on the clock. You still may want to double check because the starting soil moisture level will vary. (WU)

Water Landscape Plants



To protect perennial plants from winter damage, it is important that they go into winter with moist soil. Many areas of Kansas have been exceptionally dry. Couple that with the record heat this summer and many plants are under high levels of stress. Watering now will help alleviate at least some of that stress. A second watering before winter may be needed if the weather remains dry. If these plants do not go into the winter with moist soil, many may not survive. Others may appear to survive the winter and leaf out but then die suddenly when the weather turns hot in June.

Although all perennial plants benefit from watering when soils are dry in the fall, it is especially important for evergreens because moisture is easily lost from the foliage. Newly planted trees and shrubs also are more at risk due to limited root systems. Even trees and shrubs planted the last 2 to 3 years are more sensitive to drought than a well-established plant.

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 ensure that the majority of roots have access to water. Roots that actually absorb water are killed when the soil temperature reaches 28 degrees F. Those near the surface do not last long in our Kansas winters. We must rely on roots that are deeper, and provide moisture for them to absorb. Watering depth can be checked with a metal rod or wooden dowel. Either instrument will easily penetrate moist soil but will stop when dry soil is reached. (WU)

MISCELLANEOUS

Garlic Planting Time



October is a good time to plant garlic (*Allium sativum*) if you want large quality cloves next summer. Apply 3 pounds of 10-10-10 fertilizer per 100 square feet and mix into the soil before planting, or fertilize according to soil test. Plant individual cloves point up and spaced 3 inches apart and 1 to 2 inches deep. The larger the clove planted, the larger the bulb at harvest. Water in well and mulch with straw to conserve soil warmth and encourage good establishment. Harvest will

not occur until next summer when most of the foliage has browned.

Elephant garlic (*Allium ampeloprasum*) also should be planted now. It is a plant with a milder garlic flavor and is actually a closer relative to the leek than to true garlic. (WU)

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