Horticulture 2012 Newsletter
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Video of the Week: Planting a Tree

UPCOMING EVENTS

Blueberry School Offered by Missouri State University
Missouri State University is holding a Blueberry School on October 19 & 20 at Springfield, Missouri. The Friday sessions (October 19) are composed of classes and tours are planned for Saturday. The school is designed to be valuable to everyone from the experienced commercial grower to the home gardener that wants to learn more about blueberries. Details can be found at http://mtngrv.missouristate.edu/assets/commercial/BlueberrySchoolFlyer2012.pdf and the registration form at http://mtngrv.missouristate.edu/assets/commercial/BlueberrySchoolRegistration2012.pdf

ORNAMENTALS

Summer Stresses on Pine, Spruce and Fir

Our heat and drought this year has been very tough on trees; especially some of the evergreens. Spruce, fir and pine are not well adapted to Kansas conditions, and high stress years like this one can lead to decline and death. However, there are natural conditions that can look like the tree is dying that actually are not harmful. How can you tell the difference?

If the needles are browning just on the inside of the tree, but the needles farthest out on the branches remain green, the tree is going through natural needle drop. Natural needle drop does not harm the health of the tree and is a normal process as two- and three-year-old needles are shed. Drought may increase needle drop but this, in itself, does not harm the tree. But in some cases we are seeing all the needles on a branch turn color. On pines, this may be due to pine wilt, a fatal disease that is found primarily on Scots pine. However, the heat and drought of this summer may have stressed some trees to the point...
that they may lose branches or die because of accumulated stress.

How can you tell if the tree will survive? First check to see if the branch with the browning needles is alive. Scrape off a small area of the "bark" of the branch with a sharp knife. There should be green tissue immediately under the bark. This green cambium layer is quite thin with the underlying woody tissue being white. If there is no green at all, the branch is dead.

Also check the ends of branches. Dry, brittle twigs are a sure sign that at least that part of the tree is dead. Dead branches should be removed. Major branch removal may destroy the aesthetics of the tree making tree removal the only viable option.

What can you do to reduce stress? Concentrate on good watering. During dry weather (including winter), water the trees to a depth of at least 10 inches, with deeper watering preferred. You can check the depth the water reaches by pushing a long screwdriver, metal rod or wooden dowel into the soil. It will stop when it reaches dry soil. During hot, dry weather, trees may need watered once a week. If we have an open, dry winter, water the trees once per month when the temperatures are above freezing. (WU)

Questions on Ornamental Grasses

We are starting to receive questions on whether it is best to cut back ornamental grasses in the fall or spring. As a rule, ornamental grasses should not be cut back while green because they need time to move the energy found in the foliage into the roots. Even when browned by cold weather, most gardeners will leave the foliage until spring because of the interest it adds to winter landscapes. Early March is the preferred time to cut back these plants. However, dry foliage is extremely flammable and should be removed in the fall from areas where it is a fire hazard.

Another question we often receive is whether we can divide ornamental grasses in the fall. Spring is the preferred time because divisions done in the fall may not root well enough to survive the winter. (WU)

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)

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 farther 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 temperatures increase 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 respires. 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. Although tall fescue is often damaged by hot, dry summers, it usually bounces back more quickly than Kentucky bluegrass. Even 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

Fertilize Spring-flowering Bulbs

October is the month that existing beds of spring-flowering bulbs such as daffodils and tulips are fertilized. If bulbs have been fertilized in the past, there is often plenty of phosphorus and potassium in the soil. It is best to use a soil test to be certain. If the soil needs phosphorus and potassium, use a complete fertilizer (such as 10-10-10, 9-9-6, etc.) at the rate of 2.5 lbs. per 100 square feet. This would equal 1 rounded teaspoon per square foot. If phosphorus and potassium are not needed, blood meal makes an excellent fertilizer. It should be applied at the rate of 2 pounds per 100 square feet or 1 teaspoon per square foot. Turf fertilizers such as a 27-3-3 or 30-3-3 can be used, but cut the rate by a third. (WU)

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)

MISCELLANEOUS

Call “Kansas One Call” Before Digging

Most people don’t know what is buried under their property. Always call Kansas One Call before planting or setting fence. You may reach them at 811.

Actually, people should never dig deeply enough by hand to hit a gas line while planting a tree unless a large tree spade is used. When hand digging, make the hole just deep enough so that the tree sits slightly above nursery level. To determine the depth of the hole, measure the distance from the root flare (point where trunk and roots meet) to the bottom of the root ball. If the flare isn't visible (very common), remove enough soil or media so that it is.

The width of the planting hole is also very important. It should be two to three times the width of the root ball. Loosening the soil outside the hole so it is five times the diameter of the root ball will allow the tree to spread its roots faster. (WU)

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To view Upcoming Events: http://tinyurl.com/fswqe

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