How Much to Water a Lawn

We have received several questions on how much to water a lawn. Homeowners usually want to know how much and how long to leave the sprinklers on. There are too many variables to give a solid answer. You will need to do some experimentation to determine what is needed for your lawn.

The key is to make sure water reaches about 8 inches deep. This can be checked with a wooden dowel or a metal rod (rebar or electric fence post). Pushing it into the soil will tell you how deeply water has reached as it will stop when it hits dry soil.

Start by placing a tuna can or something similar in the lawn to see how much water is applied. Then water for 15 minutes and check the depth of watering. If the soil is only moist 4 inches deep, then you will need to water another 15 minutes. Check again after the second watering to be sure moisture reaches your desired depth. Watch for runoff. If you see any before the soil is wet to the desired depth, you may have to run two cycles back to back to allow time for the water to soak in from the first cycle before adding additional water for the second cycle. If there is still runoff before water reaches the desired depth, more waterings per week may be needed to make up for the shallow depth the water is reaching. On such lawns, core aeration during September would be highly recommended to help increase the rate at which the soil absorbs water.

That brings up how often should we water. During most of the growing season, once per week will be adequate. However, during extreme heat or on heavy soils where runoff occurs quickly, twice a week may be needed. (WU)
Recommended Tall Fescue Cultivars

Though several cool-season grasses are grown in Kansas, tall fescue is considered the best adapted and is recommended for home lawns. The cultivar K-31 is the old standby and has been used for years. However, there are a myriad of newer cultivars that have improved color, density and a finer leaf texture. Most of these newer varieties are very close to one another in quality.

Each year we rate tall fescue varieties for color, greenup, quality and texture. We have 113 different cultivars of tall fescue in our Tall Fescue Cultivar Trial near Wichita. This planting was seeded in 2006 with results being tabulated from 2007 through 2012. Quality ratings are taken once a month from March through October. K-31 consistently rates at the bottom. The recommended cultivars were 3rd Millennium, Apache III, Avenger, Biltmore, Blackwatch, Braveheart, Cayenne, Cochise IV, Crossfire 3, Dynasty, Falcon NG, Fidelity, Finelawn Xpress, Forte, Guardian 21, Hunter, Inferno, Kalahari, Matador, Picasso, Regiment II, Rembrant, Reunion, Speedway, Talladega, Tar Heel, Titanium LS, Ultimate, Watchdog, and Wolfpack II. Keep in mind that mixes of several varieties may allow you to take advantage of differing strengths. It is not necessary for mixes to contain only the varieties mentioned above.

Though K-31 may still be a good choice for large, open areas, the new cultivars will give better performance for those who desire a high-quality turf. (WU)

Kentucky Bluegrass Variety Selection for Cool-Season Lawns

Though Kentucky bluegrass is not as heat and drought tolerant as tall fescue and the warm-season grasses, it is commonly used in northeastern Kansas, where there is sufficient annual rainfall. It is also grown under irrigation in northwestern Kansas where the higher elevation allows for cooler summer night temperatures.

The following cultivars have performed well compared to other bluegrasses in this region. Use this list as a guide. Omission does not necessarily mean that a cultivar will not perform well. Recommended cultivars for high-quality lawns, where visual appearance is the prime concern, include Midnight, Beyond, Bluestone, Courtyard, Diva, Everest, Everglade, Glenmont, Impact, NuGlade, NU Destiny, Rambo, Champlain, Award, Liberator, Awesome, Princeton 105, Champagne, Excursion, and Total Eclipse. Such lawns should receive 4 to 5 pounds nitrogen per 1,000 square feet per year and would typically be irrigated during dry periods to prevent drought stress.
Cultivars that do relatively well under a low-maintenance program with limited watering often differ from those that do well under higher inputs. Good choices for low maintenance include Baron, Baronie, Caliber, Canterbury, Dragon, Eagleton, Envipta, Kenblue, North Star, and South Dakota. Instead of the 4 to 5 pounds of nitrogen per 1,000 square feet per year, low-maintenance program would include 1 to 2 pounds of nitrogen per 1,000 square feet per year. Obviously, a low-input lawn will not be as attractive as a higher-input lawn, but you can expect the cultivars listed above to look fairly good in the spring and fall, while going dormant in the summer. (WU)

FRUIT

When Are Apples Ready to Pick?

Though nearly mature apples can ripen off the tree, there must be a certain level of maturity for this to happen. Here are some guides to help you decide when to pick your apples.

Color change: As apples mature, the skin color in areas of the stem and the calyx basin at the bottom of the apple turns from an immature green to a light-yellow color. Some apples will develop a red skin color before they are ripe, so this is not a reliable indication of maturity.

Flavor: This is a good guide if you are familiar with the apples you have and know how they should taste. Even if you do not know the characteristic flavor of the kind of apple you have, you can still sample slices of a few apples and decide if they have a sweet flavor. If they are not ready to harvest, they will taste starchy or immature. If apples have already fallen and taste a bit starchy, store them for a period to see if they become sweeter.

Flesh color: As apples mature and starches change to sugars, the flesh changes from very light green to white. When you cut a thin slice and hold it up to the light you can see the difference.

Days from bloom: The number of days from bloom is a reliable guide for general maturity time, but weather conditions will have some influence. Some kinds of apples and approximate days from bloom to maturity are Jonathan, 135, Delicious, 145, Golden Delicious, 145, and Winesap, 155 days.

Seed color: The seeds of most apples change from light green to brown as the fruit ripens. This indicator should be combined with other changes since it is not absolute. The flavor of the apples, the change in color of the stem and calyx basins and flesh color are important in deciding if apples are ready to harvest. (WU)
VEGETABLES

Tomato Fruit Sunscald

Extreme heat and bright sunlight can sunscald tomato fruit as evidenced by a light yellow to white sunken spot that resembles a blister. This most often happens to fruit that is exposed to full sun due to loss of foliage from disease or hail. Remove damaged fruit to encourage more fruit set. Sunburned fruit are rarely usable. (WU)

PESTS

Cicada Killers

With dog day cicada (Tibicen pruinosus) populations singing in trees we should start noticing hordes of large wasps flying around. These are primarily the eastern cicada killer, Sphecius speciosus, which is actually considered a beneficial insect because it regulates cicada populations. This wasp gets its common name from the fact that it hunts and provisions each cell within its nest with a cicada, which is the food source for young cicada killers or larvae. Cicada killers are an urban nuisance pest, especially when nesting, sometimes in large numbers, in a bare area or area around a structure. People get concerned because cicada killers resemble giant yellowjackets.

Cicada killers are approximately 2.0 inches in length and black to red in color, with yellow-banded markings on the abdomen. The head and transparent wings are reddish brown. They are not dangerous, but they are intimidating. Cicada killers are ground-nesting solitary wasps, with the female digging a 6 to 10-inch burrow (½ inch in diameter) in the ground, which is usually present in sandy or loose soil. A pile of soil or sand, depending on the soil type, typically surrounds the entrance. The female locates and stings a large insect such as a cicada or katydid and then brings the “prize” back to the burrow. Observing a cicada killer female dragging a large, immobilized cicada across the ground to a nest is a very impressive natural event.

The female then places the paralyzed insect into a chamber and lays an egg on the surface of the paralyzed insect; sometimes she places two paralyzed insects in a burrow but lays an egg on only one. The female cicada killer eventually covers the burrow, digs another, and repeats the process. The egg hatches into a grub-like, legless larva that consumes the paralyzed insect. Full-grown
larvae overwinter in the burrow, pupate in the spring, and emerge as an adult during the summer—usually July and August.

Male cicada killers establish aerial territories and patrol for intruders. A male cicada killer wards off other males that enter his territory and attempt to mate with females. Anyone else, such as a human, walking into the territory is typically confronted by a very large wasp, which hovers in front of the face and “zips” to the side and back. However, after determining that the “intruder” is not a rival, the male cicada killer ignores the individual. Unfortunately, as a person walks across a lawn, fairway, or other area where these wasps are nesting, the process is repeated through each male’s territory. Cicada killers are unlikely to sting a person. Wasp and bee stingers are modified egg-laying devices (ovipositors), so males are unable to sting. Females may sting if crushed, either by being stepped on with bare feet or grabbed with bare hands.

Cicada killers are more common in areas with bare soil, so mulching, planting groundcovers, or sodding may reduce associated problems. However, they can also be a problem in well-maintained (e.g., irrigated and fertilized regularly) turfgrass. Cicada killers become a major problem when nesting in areas accessible to or frequented by the public. Applying carbaryl (Sevin) or a pyrethroid-based insecticide containing the active ingredient permethrin, bifenthrin, cyfluthrin, and/or lambda-cyhalothrin to the burrowed area should kill females in golf course sand traps. Once the females are gone, males eventually leave. In home yards, sandboxes should be covered with a tarp when not in use since this deters cicada killers (and also keeps cats out). Sand below swings, jungle gyms, or other playground equipment can be replaced with bark mulch or shredded tires.

Managing cicada killers in sand volleyball courts and baseball infields is more of a challenge because people with minimal clothing and exposed skin are diving and sliding onto the ground. This makes it difficult to recommend using an insecticide. In these cases, the use of a geotextile fabric placed beneath the sand may create enough of a barrier to prevent cicada killers from creating burrows. Of course the recommendations mentioned above will only be effective if cicada killer populations are not excessive. Significant populations can be difficult to manage. One individual informed me he had to discontinue working at a golf course because of the difficulty associated with managing the excessive populations of cicada killers. (RC)

Crickets

Crickets have begun appearing in most areas. They are evident at night, especially in lighted areas. The most familiar crickets are the relatively large “field” crickets, which can be up to an inch in length. With their long ovipositors, females can measure up to 1¾-inches. Most are black, but some appear lighter because of their coppery-colored wings.

Field crickets seldom cause concern until the onset of cold weather when they seek indoor shelter. Suddenly, their outdoor night music becomes an annoying indoor distraction.

The crickets causing a disturbance now are striped ground crickets. Compared to “field” crickets, these are tiny (approximately ½-inch in length). Brown to brownish-red in color, they are aptly
named for their prominent body stripes.

Why are these crickets suddenly such a nuisance? The problem originated last fall when the 2009 generation of striped ground crickets deposited eggs for overwintering. The 2010 hatch probably occurred in early June. Since then hidden nymphs have been developing in abundantly moist environments such as poorly drained marsh and pasture areas, and grassy sites along creeks/streams/leaves and lakes and ponds. By the end of July, nymphs underwent their final molt and became winged adults.

These highly mobile adults are attracted to illuminated areas. Large movements of crickets gravitate toward brightly lit areas such as store and business fronts, which are protected by security lights.

Porch lights are not as attractive, so homeowners may not be confronted with large numbers of crickets unless they take a trip to the gas pump at night. The first thing storeowners or employees may do in the morning is clear sidewalks and entryways of dying or dead crickets. Live crickets find cover to hide from the light of day.

There is not much you can do to prevent crickets from gathering. This time of year, movement indoors is minimal. Crickets are not seeking heated quarters as they will later this fall when cooler temperatures approach. (BB)

**Emerald Ash Borer and Thousand Cankers Disease — Welcome To Tennessee!!**

If you have not heard, the state of Tennessee received a double dose of bad news with both emerald ash borer (EAB) and thousand cankers disease (TCD) detected in the state the same week. The emerald ash borer also was detected in two more counties in New York: Steuben and Ulster. This proves that although we think we can regulate these two organisms with quarantines or other measures, they do exactly what they want.

Detection of thousand cankers disease is a concern because the farthest west the disease had previously been found was Rocky Ford, Colo., in Otero County. Based on the extent of the Tennessee infestation, it appears that the disease may have been present in the state for more than a decade. This suggests that in the future it will likely be detected beyond the western portions of Colorado.

With the latest discovery, the emerald ash borer has been detected and positively identified in 15 states (Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin) and two Canadian provinces. This invasive insect pest has caused the death or decline of more than 40 million ash trees since it was found in Michigan in 2002. The insect attacks green, white, blue, and black ash trees, and can kill trees within three years, depending on their health and the larvae density inside the tree.

Thousand cankers disease is a disease of black walnut (Juglans nigra) caused by a fungus (Geosmithia morbida) vectored by the walnut twig beetle (Pityophthorus juglandis). The beetle is
native to North America, and has been detected in Arizona, Colorado, Idaho, New Mexico, Oregon, Utah, and Washington. The disease has been confirmed in California, Colorado, Idaho, New Mexico, Oregon, Utah, and Washington. When the beetle tunnels into black walnut trees it introduces the fungus, and the fungus expands in advance of beetle feeding. Beetle larvae reside in the phloem (food-conducting tissues) and bark tissues. Beetles overwinter as adults, and a generation may be completed in 6 to 7 weeks. The cankers caused by the disease eventually coalesce and girdle branches, restricting movement of water and nutrients and eventually starving the tree. Infested black walnut trees may die within two to three years after external symptoms (e.g., leaf yellowing and thinning of the upper crown of the tree) have been observed.

The primary means by which these two organisms are spread is the movement of infested wood products (e.g., firewood or fresh logs with bark). As a result, more restrictive quarantines and intensive monitoring may be required to prevent or slow the spread of both emerald ash borer and thousand cankers disease, which have not yet been detected in Kansas. (RC)

Contributors:
Ward Upham, Extension Associate; Bob Bauernfeind, Entomologist; Ray Cloyd, Entomologist

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

Horticulture 2010  E-mail Subscription

For questions or further information contact: Hort WebMeister.

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

“Knowledge for Life”
Kansas State University Agricultural Experiment Station and Cooperative Extension Service