Horticulture 2013 Newsletter  
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Video of the Week:  Yellow Nutsedge Control in Lawns

TURFGRASS

Give Cool-Season Grasses a Boost

September is almost here and that means it is prime time to fertilize your tall fescue or Kentucky bluegrass lawns. If you could only fertilize your cool-season grasses once per year, this would be the best time to do it.

These grasses are entering their fall growth cycle as days shorten and temperatures moderate (especially at night). Cool-season grasses naturally thicken up in the fall by tillering (forming new shoots at the base of existing plants) and, for bluegrass, spreading by underground stems called rhizomes. Consequently, September is the most important time to fertilize these grasses.

Apply 1 to 1.5 pounds of actual nitrogen per 1,000 square feet. The settings recommended on lawn fertilizer bags usually result in about 1 pound of nitrogen per 1,000 square feet. We recommend a quick-release source of nitrogen at this time. Most fertilizers sold in garden centers and department stores contain either quick-release nitrogen or a mixture of quick- and slow-release. Usually only lawn fertilizers recommended for summer use contain slow-release nitrogen. Any of the others should be quick-release.

The second most important fertilization of cool-season grasses also occurs during the fall. A November fertilizer application will help the grass green up earlier next spring and provide the nutrients needed until summer. It also should be quick-release applied at the rate of 1-pound actual nitrogen per 1,000 square feet. (Ward Upham)
Fall planting time is close at hand, so it's time to talk about grass seed. Many people have the idea that all grass seed is basically the same. Big mistake! Choosing quality seed is one of the most important steps in successfully planting or overseeding your lawn. If you don't know what to look for, you may be introducing unwanted intruders into that new stand. In particular, we are concerned with seed contaminated with orchardgrass and/or rough bluegrass (also known by its Latin name, Poa trivialis, or Poa triv for short). These are both perennial grassy weeds that cannot be selectively controlled once they are in a lawn. Orchardgrass is a problem because it is faster growing and lighter green than our turfgrasses. It is a bunch grass and so doesn’t spread, but infested areas are still unsightly due to small tufts of this species pockmarking the lawn. Rough bluegrass is fine-textured and forms circular patches in the lawn. It blends in fairly well until summertime heat causes it to turn brown rapidly. If the rough bluegrass would just die in the heat, it would only be a temporary problem. Unfortunately, it usually just goes dormant, turning green again with cooler temperatures and rain.

Buying quality seed starts with knowing how to decipher the seed label. One of the most important things to look for is listed as "% other crop." "Other crop" refers to any species that is intentionally grown for some purpose. That would include turfgrasses (those species other than the one you are buying) and pasture grasses. Orchardgrass and rough bluegrass both are listed as “other crop” seed.

Seed labels are required by law to show the percentage (by weight) of "other crop" in the bag, but unless a species constitutes 5% or more, the label doesn't have to list each species by name. How much "other crop" is too much? That’s a difficult question to answer, but the tolerance is very low. It depends on what the "other crop" actually is, and the quality expectations of the buyer. In practice, "other crop" may refer to something relatively harmless, like a small amount of perennial ryegrass in a bag of tall fescue, or it may refer to something bad, like rough bluegrass or orchardgrass. The homeowner really has no easy way of knowing what the "other crop" is, although there are some hints. If it is something bad, less than 1/2 of 1% can ruin a bag of seed. For example, if a bag of tall fescue seed contained 0.5% orchardgrass, the buyer would end up "planting" 12 to 16 orchardgrass seeds per square foot! Similarly, planting Kentucky bluegrass seed containing 0.5% rough bluegrass would result in about 25 to 35 rough bluegrass seeds per square foot of lawn. Obviously, if your expectations are high for the area you are planting, you would want the "other crop" to be as close to zero as possible. Good quality seed will often have 0.01% “other crop” or less. (Ward Upham)
FRUIT

When Are Apples Ready to Pick?

We are receiving a number of questions about picking apples early. 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. This process may be slower than usual due to the cooler weather this year.

**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. (Ward Upham)

PESTS

Mosquitoes

Everyone should be aware by now – mosquitoes are a severe problem – and it is not going to get any better in the near future. The 1st human case of West Nile Virus in Kansas has been diagnosed already and mosquitoes infected with the virus have been detected in other counties.
in the state. This mosquito explosion is no doubt due to all the rain and resultant standing water. So, please take the standard precautions when outside – wear repellent with the active compound DEET and try to drain all standing water when possible. For more information, see http://www.ksre.ksu.edu/bookstore/pubs/MF2571.pdf  (Jeff Whitworth & Holly Davis)

FLOWERS

Dividing Daylilies

Daylilies need to be divided every three to four years to maintain vigor. Though they may be divided in early spring before growth starts, it is more common to divide them at this time of year. Many gardeners cut back the tops to about half their original height to make plants easier to handle.

Daylilies have a very tough root system that can make them difficult to divide while in place. Dividing in place is practical if it hasn’t been long since the last division. In such cases, a spading fork can be used to peel fans from the existing clump. If the plants have been in place longer and are well grown together, it is more practical to divide them after the entire clump has been dug.

Use a spade to lift the entire clump out of the ground. Although it is possible to cut the clump apart with a sharp spade, you'll save more roots by using two spading forks back-to-back to divide the clump into sections. Each section should be about the size of a head of cauliflower. An easier method involves using a stream of water from a garden hose to wash the soil from the clump, and then rolling the clump back and forth until the individual divisions separate.

Space divisions 24 to 30 inches apart, and set each at its original depth. The number of flowers will be reduced the first year after division but will return to normal until the plants need to be divided again. (Ward Upham)

MISCELLANEOUS

Flooding Damage

Waterlogged soils push out oxygen that roots need to survive. Every living cell in a plant must have oxygen or it dies. Some plants have mechanisms to provide oxygen to the roots even under saturated conditions but most of our vegetables and flowers do not. The longer these plants are subjected to saturated soils, the more likely damage will occur. Usually, as long as water drains away within 24
hours, the impact on plant health is minimal. However, shallow, stagnant water under hot, sunny conditions can literally cook plants, reducing survival time to as little as a few hours.

**Vegetables:** What about safety regarding eating produce from a garden that has been flooded? Standing water should not cause a safety problem as long as the aboveground portions of the plant remain healthy. Do not use produce from plants that have yellowed. Also, using produce flooded with water contaminated with sewage (lagoon) or animal manure can also be dangerous. The safest approach is to discard all garden crops that have been in contact with such water. Certainly, leafy vegetables should always be discarded. However, you may eat fruit from such crops as tomatoes, peppers, eggplants, sweet corn, squash, cucumbers, and similar vegetables that develops after the waters have subsided as long as the fruit is not cracked or soft. Always wash vegetables thoroughly before eating.

**Lawns:** Under the cool conditions of early spring, turfgrasses can often survive several days of flooding. However, during hot, sunny conditions with shallow, stagnant water, lawns may be damaged quickly, sometimes in a few hours. This situation often occurs when shallow depressions in a lawn allow water to pool. Note such areas and fill in with additional soil once the waters have subsided.

**Trees:** Trees differ markedly in their ability to withstand flooding. Some trees have mechanisms in place to provide oxygen to the roots of plants with water saturated soils and others do not. However, most trees will maintain health if flood waters recede in 7 days or less. It also helps if water is flowing rather than stagnant as flowing water contains more oxygen. If the roots of sensitive trees are flooded for long periods of time, damage will occur including leaf drop, iron chlorosis, leaf curl, branch dieback, and in some cases, tree death. Another danger of flooding is the deposition of sediment. An additional layer of silt 3 inches or more can also restrict oxygen to the roots. If possible, remove deep layers of sediment as soon as conditions permit. This is especially important for small or recently transplanted trees.

Try to avoid any additional stress to the trees this growing season. Ironically, one of the most important practices is to water trees if the weather turns dry. Flooding damages roots and therefore the root system is less efficient in making use of available soil water. Timely waterings are vital to a tree’s recovery. Also be diligent in removing any dead or dying branches which may serve as a point of entry for disease organisms or insect pests. The following information on tree survival came from the US forest Service.

**Trees Tolerant of Flooding:** Can survive one growing season under flooded conditions. Red maple, silver maple, pecan, hackberry, persimmon, white ash, green ash, sweetgum, sycamore, eastern cottonwood, pin oak and baldcypress.

**Trees Moderately Tolerant of Flooding:** Can survive 30 consecutive days under flooded conditions. River birch, downy hawthorn, honeylocust, swamp white oak, southern red oak, bur oak, willow oak and American elm.

**Trees Sensitive to Flooding:** Unable to survive more than a few days of flooding during the growing season. Redbud, flowering dogwood, black walnut, red mulberry, most pines, white oak, blackjack oak, red oak and black oak.
After the Flood: Soils often become compacted and crusted after a heavy rainfall. This also can restrict oxygen to the roots. Lightly scraping the soil to break this crust will help maintain a healthy root system and therefore, a healthy plant. Be careful not to cultivate too deeply as shallow roots may be damaged. If you think the excessively wet weather will continue, bedding up the rows before planting even just a couple of inches, will improve drainage and allow for better aeration. (Ward Upham)

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