

D's Notes 08/23/21

REMINDERS

- Light pruning of shrubs and trees where 10% or less of the plant is removed can be done any time of year. Heavier pruning should be done in the spring if possible.
- Too late to spray for bagworms but can pull them off and dispose of them if practical.

Fall Lawn Seeding Tips

The keys to successful lawn seeding are proper rates, even dispersal, good seed to soil contact, and proper watering. Evenness is best achieved by carefully calibrating the seeder or by adjusting the seeder to a low setting and making several passes to ensure even distribution. Seeding a little on the heavy side with close overlapping is better than missing areas altogether, especially for the bunch-type tall fescue, which does not spread. Multiple seeder passes in opposite directions should help avoid this problem.

A more serious error in seeding is using the improper rate. For tall fescue, aim for 6 to 8 pounds of seed per 1,000 square feet for new areas and about half as much for overseeding or seeding areas in the shade.

Kentucky bluegrass is much smaller seed so less is needed for establishment. Use 2 to 3 pounds of seed per 1,000 square feet for a new lawn and half that for overseeding or shady areas.

Using too much seed results in a lawn more prone to disease and damage from stress. The best way to avoid such a mistake is to determine the square footage of the yard first, and then calculate the amount of seed. Using too little seed can also be detrimental and result in clumpy turf that is not as visually pleasing.

Establishing good seed to soil contact is essential for good germination rates. Slit seeders achieve good contact at the time of seeding by dropping seed directly behind the blade that slices a furrow into the soil. Packing wheels then follow to close the furrow. The same result can be accomplished by using a verticut before broadcasting the seed, and then verticutting in a different direction a second time.

Core aerators can also be used to seed grass. Go over an area at least three times in different directions, and then broadcast the seed. Germination will occur in the aeration holes. Because those holes stay moister than a traditional seedbed, this method requires less watering.

If the soil that has been worked by a rototiller, firm the soil with a roller or lawn tractor and use light hand raking to mix the seed into the soil. A leaf rake often works better than a garden rake because it mixes seed more shallowly.

Water newly planted areas lightly, but often. Keep soil constantly moist but not waterlogged. During hot days, a new lawn may need to be watered three times a day. If watered less, germination will be slowed. Cool, calm days may require watering only every couple of days. As the grass plants come up, gradually decrease watering to once a week if there is no rain. Let the plants tell you when to water. If you can push the blades down and they don't spring back up quickly, the lawn needs water. Once seed sprouts, try

to minimize traffic (foot, mower, dog, etc.) seeded areas receive until the seedlings are a little more robust and ready to be mowed. Begin mowing once seedlings reach 3 to 4 inches tall. (Ward Upham)

Overseeding a Lawn

Tall fescue lawns that have become thin over the summer can be thickened up by overseeding during September. Start by mowing the grass short (1 to 1.5 inches) and removing the clippings. This will make it easier to achieve good seed-soil contact and increase the amount of light that will reach the young seedlings.

Good seed-soil contact is vital if the overseeding is to be successful. Excess thatch can prevent seed from reaching the soil and germinating. Normally we want 1/4 inch of thatch or less when overseeding. If the thatch layer is 3/4 inch or more, it is usually easiest to use a sod cutter to remove it and start over with a new lawn. A power rake can be used to reduce a thatch layer that is less than 3/4 inch but more than a quarter inch.

Once thatch is under control, the soil should be prepared for the seed. This can be done in various ways. For small spots, a hand rake can be used to roughen up the soil before the seed is applied.

A verticut machine has solid vertical blades that can be set to cut furrows in the soil. It is best to go two different directions with the machine. A slit seeder is a verticut machine with a seed hopper added so the soil prep and seeding operation are combined. Another option is to use a core aerator.

The core aerator will punch holes in the soil and deposit the soil cores on the surface of the ground. Each hole produces an excellent environment for seed germination and growth. Make three to four passes with the core aerator to ensure enough holes for the seed. Using a core aerator has the additional benefit of reducing the amount of watering needed to get the seed germinated and growing. Aeration also increases the water infiltration rate, decreases compaction, and increases the amount of oxygen in the soil.

Of the three methods, I prefer the slit seeder for obtaining good seed/soil contact. However, if watering is difficult, core aeration may be a better option. Regardless of method used, fertilizer should be applied at the rate suggested by a soil test, or a starter fertilizer should be used at the rate suggested on the bag. (Ward Upham)

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)

Power Raking and Core-Aeration

September is the optimum time to power rake or core-aerate tall fescue and Kentucky bluegrass lawns. These grasses should be coming out of their summer doldrums and beginning to grow more vigorously. This is a good time to consider what we are trying to accomplish with these practices.

Power raking is primarily a thatch control operation. It can be excessively damaging to the turf if not done carefully. For lawns with one-half inch of thatch or less, I don't recommend power raking but rather core aeration. For those who are unsure what thatch is, it is a springy layer of light-brown organic matter that resembles peat moss and is located above the soil but below the grass foliage. Power raking pulls up an incredible amount of material that then must be dealt with by composting or discarding.

Core-aeration is a much better practice for most lawns. By removing cores of soil, core-aeration relieves compaction, hastens thatch decomposition, and improves water, nutrient, and oxygen movement into the soil profile. This operation should be performed when the soil is just moist enough so that it crumbles easily when worked between the fingers. Enough passes should be made so that the holes are spaced about 2 to 3 inches apart. Ideally, the holes should penetrate 2.5 to 3 inches deep. The cores can be left on the lawn to fall apart naturally (a process that usually takes two or three weeks, depending on soil-type), or they can be broken up with a power rake set just low enough to nick the cores, and then dragged with a section of chain-link fence or a steel doormat. The intermingling of soil and thatch is beneficial to the lawn. (Ward Upham)

Preparing the Vegetable Garden for Next Year

If there are areas of the garden that are done producing, chop and shred residue in preparation for tilling. If soils are wet, wait a few days so the soil is no longer muddy. Tilling in residue allows plant material to decompose and helps reduce insect and disease problems for the next year.

Also consider using a cover crop to hold the soil and increase the organic matter content of the soil. Small gains such as wheat should be seeded at 3/4 to 1 pound of seed per 1,000 square feet from mid-September to late October. Spring oats can also be seeded

until mid-September but the rate should be 2 to 4 pounds per 1,000 square feet. Spring oats will winter kill and can be tilled under in the spring.

Legume cover crops such as hairy vetch, alfalfa and sweetclover provide an additional benefit by 'fixing' nitrogen, thereby increasing fertility of the soil. Each of these should be seeded at about 1/4 to 1/2 pound of seed per 1,000 square feet of garden. Sweetclover should be seeded from August to early September and hairy vetch and alfalfa from mid-August to late September. (Ward Upham)

Fall Webworm

The second generation of the fall webworm, *Hyphantria cunea*, is now present throughout most of Kansas with webs present on certain trees such as hickory and walnut. Fall webworm nests are noticeable, with silk webbing enclosing the ends of branches and foliage or leaves. Fall webworm larvae or caterpillars are palegreen, yellow to nearly white, with two black spots on each abdominal segment. Caterpillars are covered with long, white hairs. Fall webworm caterpillars feed on a wide range of trees, including: birch, crabapple, maples, hickory, pecan, mulberry, and walnut. Fall webworm caterpillars, unlike caterpillars associated with the eastern tent caterpillar, *Malacosoma americanum*, remain within the enclosed webbing and do not venture out to feed.

Caterpillars consume leaves, resulting in naked branches with webbing attached, which contains fecal deposits (frass) or 'caterpillar poop'. These nests will eventually dry-up as the caterpillars transition into pupae, with adults eventually enclosing (emerging) from the pupae later on in the growing season.

Feeding by fall webworm caterpillars at this time of year is typically not directly harmful to trees—especially larger trees. The most effective method of dealing with fall webworm infestations is to prune out the webs that enclose the caterpillars, place into a plastic bag, and dispose of immediately. Insecticide sprays are not be effective because the caterpillars remain in the webbing while feeding; thus reducing exposure to spray residues. If insecticides need to be applied, use high-volume spray applications that penetrate the protective webbing, or use a rake to disrupt or open-up the webbing so that the insecticide spray contacts the caterpillars.

(Raymond Cloyd)

Composting Tips

Following are some tips for having a successful composting experience.

- The compost pile will heat up and then cool. Turn the pile by moving material from the outside of the pile to the inside. The pile will again heat and then cool. The compost is ready once the pile has cooled a second time.
- The top of the compost pile should be dish-shaped so that water soaks in.
- Try to place the compost pile near a water source so water can be easily added.
- Shredding materials before adding them to the pile will speed up the composting process.
- Do not add fats or meat as this will attract wildlife.

- Do not add grass clippings that have been treated with crabgrass killers. If treated with crabgrass preventers or dandelion killers, the clipping can be added to compost after three mowings. (Ward Upham)

2021 Wheat Variety Disease and Insect Rating publication

Variety selection is one of the most important decisions that a grower can make to ensure success on their farm. Now is the time when wheat producers across Kansas are reviewing yield data and making decisions about the varieties they will plant in the fall. Although yield is always a top priority, disease and insect resistance, along with appropriate agronomic traits, can buffer against crop losses. In addition, genetic resistance to diseases and insect pests can be the most effective, economical, and environmentally sound method for control.

Wheat Variety Disease and Insect Ratings 2021, from K-State Research and Extension, has now been released for this year. Agronomic characteristics, disease, and pest resistance information is included, as well as profiles that highlight some more common or new varieties for the state of Kansas.

Updates this year include the addition of variety profiles for varieties KS Hatchett, Rockstar, WB4699, and SY Wolverine, as well as disease, insect, and agronomic ratings for several other new varieties. As many producers are looking for tools to manage weed pressure, we have added additional varieties with Clearfield and CoAXium herbicide resistance traits.

Ratings in this publication represent results from field and greenhouse evaluations by public and private wheat researchers at multiple locations over multiple years.

An electronic version of the *Wheat Variety Disease and Insect Ratings 2021* publication MF991 can be found here: <https://www.bookstore.ksre.ksu.edu/pubs/MF991.pdf>

New publication on selecting the optimal wheat variety

In recent years, wheat producers are faced with an increasing number of varieties from which to choose. Producers can use different tools and publications to study each variety's strengths and weaknesses, selecting varieties that best match their needs.

A new publication from K-State Research and Extension aims to help producers choose wheat varieties that should perform well for various regions, soil types, weather, production systems, insect and disease pressure, maturity, and to meet the needs of millers and bakers.

This comprehensive resource is part of a new outreach program called [*Kansas Wheat Rx*](#) and is a partnership between Kansas Wheat and K-State Research and Extension to share the latest research recommendations for high-yielding and high-quality wheat to Kansas wheat farmers.

You can access this publication at: <https://bookstore.ksre.ksu.edu/pubs/MF3587.pdf>