

## Lawn Seeding

September is the best month to reseed cool-season lawns such as tall fescue and Kentucky bluegrass. However, you can get by with an early to mid-October planting for tall fescue. October 15 is generally considered the last day for safely planting or overseeding a tall fescue lawn in the fall. If you do attempt a late seeding, take special care not to allow plants to dry out. Anything that slows growth will make it less likely that plants will mature enough to survive the winter. Seedings done after the cut-off date can be successful, but the success rate goes down the later the planting date. Late plantings that fail are usually not killed by cold temperatures but rather desiccation. The freezing and thawing of soils heave poorly rooted grass plants out of the ground, which then dry and die. Keeping plants watered will help maximize root growth before freezing weather arrives.

If your goal is to improve an existing lawn or fill bare spots, overseeding is a better practice than starting over. Start by mowing the lawn short (1-1 1/2 inches) to help move seed down through the canopy and allow light to reach it. A power rake or core aerator can be used to improve the soil. Seeder-slicer units are also available to cut through thatch and sow seed at the same time. Seed selection, sowing, watering and fertilization principles are the same as for new plantings. However, the seeding rate should be cut in half to account for existing turf. Too much new seed can create excess competition and weaken the lawn. If only a few spots need to be reseeded, they can be prepared with a hand rake. Sow the seed uniformly by hand. Spread a thin layer of soil over the seed or work it in with the rake.

Cool-season grasses—bluegrass, fescue and ryegrass—are best seeded in early September. Seeds germinate and grow rapidly in the warm soil with time to become well established before winter. Warm, fall days and cool nights are ideal for seedling growth. Plus, there is less weed competition than in the spring. Early October seeding can be successful if fall temperatures remain mild, but chances of the seedlings becoming well established before winter are not as likely as in September, and winter weeds can become a problem. October 15 is generally considered the last day for planting a lawn in the fall. Another option is dormant seeding during the winter. The seed does not germinate then but will the next spring when soil and weather become warm enough. Begin dormant seeding when soil temperatures average less than 40°F, normally mid to late November.

The first step in planting a lawn is to take a soil test to determine if any of the essential nutrients are deficient. Soil samples can be sent to the local K-State Research and Extension office or to a private soil testing lab. Take 10 to 12 random samples 3 inches deep and mix together. From this composite sample, take out 1 pint of soil for testing. If soil amendments are needed, incorporate them into the soil before planting at rates established by the soil test.

Preparing the seedbed is the most important step in establishing a healthy lawn, but this requires time, hard work and expense. Lawn soil preparation and cultivation is a permanent, one-time operation. After the grass is planted, the soil cannot be tilled, loosened, or improved as with vegetable crops. Therefore, the seedbed must be in proper condition before planting. A properly prepared seedbed is essential for rapid, uniform lawn establishment. A well-prepared soil allows grass to develop vigorous, deep roots for a healthy, easy-to-manage, problem-free lawn. Compacted soil severely limits root growth causing thin, weak turf that declines and is invaded by weeds. Chemicals, fertilizers, watering and reseeding will not make up for poor soil preparation. Soil compacted by trucks and equipment during construction should be loosened to 6 inches in depth. This will require heavy equipment. To avoid layering, loosen the soil surface before adding topsoil, and then blend it with the base soil. Never work or drive heavy equipment

over wet soil, because it compacts the soil and destroys its structure. Soil preparation is the same whether using seed, sod, plugs or sprigs. At least 4 to 6 inches of nutrient-rich and properly aerated soil is needed to grow a healthy lawn, although 10 to 12 inches is preferred. Soils with a high clay or silt content compact and become hard, while sandy soils require frequent watering and fertilizing. The properties of both soil types can be improved through the addition of weed-free organic matter such as peat moss, compost, sewage sludge, or well rotted or dehydrated manure. The soil should be prepared several weeks before it is time to plant. After grading, till the soil 10 to 12 inches deep, incorporating any recommended nutrients from the soil test. Sometimes soil conditions and/or equipment limitations make it difficult to till 10 to 12 inches deep. In these cases, till as deeply as possible—the deeper the better. Use a plow, disc, rototiller or other suitable equipment. After tilling and incorporating nutrients, allow soil to settle for a couple of days. Then do a final grading. If adequate power equipment is unavailable to prepare and improve the soil, hiring a professional service or renting the equipment is an option. Avoid overtilling the soil. A cloddy (1-inch diameter) soil is preferable to a powdery fine structure. With powdery soil, seed will stay on the ground's surface. Thus, the seed is unprotected and won't establish as well. If the footprints left by an adult walking across the seedbed are more than a half-inch deep, the soil is too fluffy. Also, overtilled soil will crust, creating a seal that air cannot get through. Overtilled soil needs to be firmed to avoid future settling, but never roll wet soil. Hand raking is usually necessary for the final phase of soil preparation before seeding. This is an important element in the appearance and ease of mowing an established lawn.

<http://www.shawnee.k-state.edu/lawn-garden/lawn.html>