## Establishing a Lawn in Eastern Washington

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To have a green, healthy lawn, the homeowner should consider several points before planting the seed. It is much easier to plan ahead and avoid many problems that could arise after the seed has germinated. The following information will help solve problems in establishing your lawn.

Seeding can be done in late summer or early fall (especially if irrigation is available); however, in eastern Washington soil moisture and climatic conditions are generally more favorable in the spring. Seeding can be done in the spring after soil temperatures reach a minimum of 50°F.

One of the first things to consider for grass establishment is a good soil foundation. You may need additional topsoil, but be cautious buying it. Some is actually subsoil, or it may contain debris, toxic salts, noxious weeds, or roots of undesirable plants. Inspect the topsoil before purchasing.

It pays to purchase certified seed (comes with a blue tag). When you consider the years you use your lawn, the difference in cost between bargain seed and quality seed can be measured in pennies per year. Certification insures varietal purity and good quality.

## Select the Correct Cultivar (Variety)

The selection of a grass cultivar (variety) or cultivars for your home lawn is very important. Bluegrasses, in general, make the best lawns for eastern Washington. Mixtures of bluegrasses and fine-leaved fescues also make superior quality lawns. Fine-leaved fescues do not require as much maintenance or fertilizer as Kentucky bluegrasses and will perform better in the shade.

Consult with your county Cooperative Extension faculty for cultivar recommendations for your area. The National Turfgrass Evaluation Program (NTEP) conducts turfgrass evaluations across the U.S. and the performance of the many species and the newest cultivars can be obtained from their web site at www.NTEP.org. Turfgrass evaluations being conducted by WSU are also available at the NTEP web site.

Several Kentucky bluegrass cultivars will perform satisfactorily under good management conditions in eastern Washington. When 100 percent bluegrass seed is planted, good ground coverage can be achieved soon after seed germination by planting 3 pounds of seed per 1,000 square feet.

**Fine-leaved fescue** is most often used in mixtures with Kentucky bluegrass. If seeded alone, to achieve good ground coverage soon after seed germination, plant at the rate of 4 pounds per 1,000 square feet.

Bluegrass/fine-leaved fescue mixtures also make superior quality lawns. Where there is some shade in the area, it may be reasonable, but not absolutely necessary, to include 30 percent fine-leaved fescues in combination with bluegrass. This would mean approximately 2 pounds bluegrass and 1 pound fine-leaved fescue per 1,000 square feet of lawn area.

Turf-type perennial ryegrasses, comprising 10–15 percent of the seed mixture by weight, may be advantageous in achieving more rapid germination and ground cover. This would be especially true when wind is a problem. If seeded alone, seed at the rate of 5 pounds per 1,000 square feet. Annual ryegrass should be avoided unless it is being used for a specific purpose, such as a temporary cover.

**Turf-type tall fescue** is a narrow-bladed tall fescue (compared with the older forage types), moderately well adapted to wear, drought, and shade. Its cold tolerance is not as good as bluegrass. Blends of 2–4 tall fescue cultivars are generally recommended. If seeded alone, seed at the rate of 7 pounds per 1,000 square feet.

Read the seed tag. The seed analysis provides important information about germination, purity, crop seeds, weeds, and inert matter. After selecting a cultivar, check these important points to confirm the seed quality. For example, a low germination and a high percent crop seed will greatly reduce the quality of grass stand.

## Follow Proper Steps in New Lawn Seeding

If you use the following procedure, you should have good success in establishing a lawn, with fewer problems after the grass germinates.

**Seedbed.** Usually there are local garden service stores and rentals that have tillers, fertilizer spreaders, seeders, and other gardening equipment for rent on an hourly basis. Rototill the site to be seeded and remove rocks, sticks, clods, and other debris from the ground surface. Don't overdo with the tiller and don't wear yourself out spading. You only need to work the soil to a depth of 4–6 inches. Reminder: Do not work the seedbed when soil is wet, as clods will form.

If you have any perennial grassy weeds, such as bentgrass or quackgrass, which spread by

stolons or rhizomes, you should spray these with a non-selective herbicide that translocates (i.e., glyphosate or Roundup) in order to keep from spreading the vegetative parts of the grass when you rototill. Follow label recommendations for timing of application before rototilling.

Provide a smooth surface sloping away from house. To provide drainage, slope the surface soil away from the house—if possible, at least a 1-foot drop each 100 feet. Add topsoil when needed. Use a shovel to fill holes or low areas. After bringing the lawn to proper grade, level the entire surface with a hand rake or drag. An old ladder, or section of chain link fence, makes an excellent drag, or use 2 pieces of 2 x 4 nailed together with crosspieces. Roll and rake lightly several times for moderately firm seedbed preparation. The soil should be firm, but not packed.

Weed control. Water the area to be seeded until the soil is moist, 4–6 inches deep. Wait 7–14 days to allow weed seed to germinate. Remove the weeds with a hoe or tiller. Chemical weed control is not usually necessary, but if used, consult the label for any waiting period necessary before planting seed.

Fertilizing. If possible, soil testing should be done. (See University of Idaho Extension Bulletin 704, Soil Sampling.) Or, contact your local Cooperative Extension county office, Natural Resources Conservation Service, or Conservation District office for information on how to take a soil test and where to have it analyzed. If the soil test indicates the need for extra nutrients in the soil, the fertilizer should be tilled into the upper surface of the soil during seedbed preparation. An application of "starter" fertilizer is important. With the use of a fertilizer spreader, make a uniform application of 10 pounds 10-20-10, or similar analysis high in P2O5, per 1,000 square feet to be seeded. Fertilizer can damage seed and prevent germination unless applied uniformly. Hand rake the surface to the proper grade.

**Seeding procedure.** The best seeding time is mid-spring, provided soil has warmed to at

least 50°F, or late summer, but before mid-September. Divide the seed into two parts. Seed the first part with the use of a mechanical seeder back and forth across the lawn in one direction. Seed the second part at right angles to the first seeding. This procedure will give more uniform and complete coverage of the seed. Save a small amount of seed for re-seeding any thin areas.

Covering the seed. Since grass seeds are small, they should be lightly covered. Hand rake lightly and then firm the seedbed by rolling with a lightweight roller back and forth in the same direction. Although mulching is not essential, applying a one-fourth inch layer of peat moss or mulching material to the newly seeded lawn will reduce moisture loss due to evaporation and seed loss due to wind, erosion, and birds. When mulch is used, roll again lightly at right angles to the first rolling.

Germinating the seed. Newly seeded lawns must be kept moist until well established. To germinate, seed requires warm soil and a continuous supply of moisture. If you allow the top one-half inch of topsoil to dry after seed begins to germinate, the young plants will die. Do not saturate the lawn, since excessive water is favorable for the development of damping off, a fungus that attacks seedlings. The best technique is to use a fine spray to wet the surface several times daily—depending upon wind and temperature.

Not all the grass seed will germinate in the same length of time. For this reason, it may be necessary to continue sprinkling the seedbed at frequent intervals for 2 or more weeks before the seed sprouts.

The importance of proper watering in establishing a new lawn cannot be overstressed. Don't puddle the soil by overwatering, but never allow the soil to dry. Once a crust is formed, the young seedlings often will die. Be especially concerned about hand watering certain bordering areas of the lawn. They often dry quicker than those areas around sprinklers.

If you have followed this step-by-step procedure, exercised a bit of patience, and sweat-of-the-brow, you should have a green, healthy lawn within 4–6 weeks. Working with a definite plan in mind is your best insurance for success, and a successfully established lawn will be enjoyed for many years.

For more information on lawn care and management, request *Home Lawns*, EB0482, a Washington State University publication available at your county Cooperative Extension office or the Bulletins Office, Cooper Publications Building, WSU, Pullman, WA 99164-5912.



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**Warning.** Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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