



## Establishing a lawn from seed

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The establishment of a home lawn is a task that should not be taken lightly. Following proper procedures and planting high quality seed are the keys to successfully establishing a lawn.

### Time of Seeding

The best time to seed a lawn in central Iowa is between August 15 and September 30. In northern Iowa, seed should be planted by September 15, while in southern Iowa, lawns can usually be seeded in early October with good results. Fall planting is preferred to spring and summer seeding because seeds germinate and grow rapidly in the warm soil. The warm days and cool nights are ideal for seedling growth and there is also less weed competition in fall than in early spring.

Establishment in spring and summer is possible when irrigation is available. However, lawns established in spring and summer may become infested with annual weeds unless preventive steps are taken. The additional precaution that should be taken with spring seeding is to use the herbicide siduron. Siduron is a member of a group of herbicides that have the capability of killing crabgrass and other grass weed seedlings as they germinate in the spring without damaging the established turf. Unfortunately, most of these preemergent herbicides kill the seeds of the cool season lawn grasses and cannot be used at the time of seeding. Siduron is the only exception. Siduron can be applied with bluegrass, fescues, and ryegrass at the time of seeding. The seedlings of crabgrass, foxtail, and barnyardgrass will be selectively controlled and the desirable grasses will remain unaffected. Siduron is the active ingredient of many crabgrass preventer/starter fertilizer materials. Once the barrier of siduron has been established, the soil should not be further disturbed. Wherever the barrier is broken, annual weeds will emerge.

**Do not use crabgrass preventer unless it is labeled for new seedlings.**

### Fertilizer

Fertilization is very important at the time of seeding. This is the only time you will be able to incorporate required soil amendments or fertilizer into the root zone.

Prior to preparing the seedbed, broadcast fertilizer according to soil test recommendations, then incorporate to a depth of 4 to 6 inches. Soil testing information may be obtained from your County Extension Office.

Where a soil test has not been made, apply 10 to 15 pounds of 0-46-0 (triple superphosphate) or 20 to 25 pounds of 0-20-0 (ordinary superphosphate) per 1,000 square feet, and work into the soil to a 4 to 6 inch depth.

After the seedbed has been prepared and just before seeding, apply a commercial turfgrass starter fertilizer according to label directions. If a farm grade fertilizer is used, select one that is high in phosphorus, such as an 18-46-0. Apply the fertilizer at a rate to provide 1 to 1 ½ pounds of actual nitrogen per 1,000 square feet. Additional fertilizer at a rate of 1 pound of nitrogen per 1,000 square feet should be applied to the lawn 3 to 4 weeks after germination, when the grass is 1 to 1 ½ inches tall. See PM 1057, *Maintenance Fertilization of Turfgrass*, for more information on fertilization.

### Preparing the Seedbed

Preparing the seedbed is the most labor intensive and time consuming step in establishing your lawn, but it is also the most important. A well-prepared seedbed is essential for rapid, successful establishment of a lawn.

Using a rototiller or other cultivation equipment, work the soil to a depth of 4 to 6 inches, incorporating the fertilizer or other soil amendments recommended from soil test results. To prevent clodding, do not till a wet soil. Also, overtilling the soil will destroy soil structure and is undesirable.

Rake the area to finish-grade just prior to seeding. Light rolling will indicate any low spots or irregularities in the seedbed.

## Seeding

Select high quality seed of the grass species best adapted to the site. Perennial ryegrasses may be included in seed mixtures for spring and summer plantings to help the lawn establish quickly. However, for fall planting, a mixture of three or four Kentucky bluegrass varieties is preferred. The following table lists several seed mixtures and the seeding rate for each. See PM 1067, *Which Grass Is Best for Your Lawn*, for information on selecting lawn grasses and buying seed.

Seed mixture	Seed Rate	
	lb./1,000 sq. ft.	lb./acre
100% Kentucky bluegrass	1-1 ½	45-65
20% ryegrass + 80% bluegrass	2- 2 ½	85-110
50% ryegrass + 50% bluegrass	3-3 ½	130-150
50% red fescue + 50% bluegrass	2 ½-3	110-130
100% red fescue	3-4	130-175
100% tall fescue	5-7	215-300

Divide the total seed quantity in half. Sow one half in one direction and the other half at right angles to the first.

After the starter fertilizer and seed have been broadcast, lightly rake the area to cover the seed to a depth of no greater than ¼ inch. Roll the area lightly to firm the soil around the seed.

Grass seedlings are very susceptible to desiccation and the surface of a newly seeded lawn should not be allowed to dry. Water should be applied only in amounts necessary to keep the soil surface moist. Avoid overwatering and runoff.

## Mulching

Mulching the lawn with clean (weed free) straw will help conserve moisture and prevent erosion. One bale of straw per 1,000 square feet will give a light mulch covering that will not have to be removed after germination. Mulching with fresh grass is not recommended.

## Mowing

Kentucky bluegrass should be maintained at a mowing height of 2 to 2 ½ inches. As a rule, no more than one-third of the grass blade should be removed. The new grass should be mowed when it reaches 3 to 3 ½ inches in height. Mowing at this time will promote the spreading and thickening of the grass. New lawn grasses should not be allowed to grow excessively long before the first mowing. If this occurs, it will be necessary to mow the grass in stages, so as not to remove more than one-third.

## Broadleaf Weed Control

After you have completed the task of establishing your lawn, you will notice broadleaf weeds germinate along with the grass seedlings. Most broadleaf weeds can be easily controlled with a broad spectrum herbicide after the turf is established. It is safe to apply a herbicide after the lawn has been mowed at least two times. See PM 930, *Lawn Weed Control*, for more information on lawn weed control.

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