



PURDUE
TURFGRASS
SCIENCE
PROGRAM

DEPARTMENT OF AGRONOMY

Seeding a Turf Area in the Spring

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The best time to seed a lawn is in the fall (mid-August to mid-September). Seeding in spring is very difficult and often unsuccessful. However, there are circumstances that warrant a spring seeding:

- Thin turf due to winter damage
- Poor turf density due to poor recovery from previous year's problems, i.e., grub damage, drought damage, etc.

To make your spring seeding most successful, you must:

- Seed as early in the spring as possible to maximize the competition of turfgrass over crabgrass. Dormant seeding or early April seeding is preferred.
- Maximize seed-soil contact through good soil preparation.
- Irrigate often as soon as temperatures favor germination (soil temperatures above 55°F). As root systems develop, gradually reduce frequency but increase duration of irrigation. Continue irrigation throughout the summer until an adequate root system is established.
- Control weeds in the lawn because spring germinating weeds will outcompete the desirable turfgrass and may kill the turfgrass.

Dormant Seeding

If a spring seeding is necessary, consider doing it before the frost comes out of the ground. This is defined as "dormant seeding" because the seed will lie dormant until the soil temperatures warm in April or May. Depending on your location in Indiana, dormant seeding can be done as early as Thanksgiving and as late as March. The benefit of dormant seeding is that as the soil heaves and cracks during the winter, crevices are created for the seeds which create ideal germination conditions. Additionally,

dormant seeding is easier to schedule than spring seeding, because spring rains make it difficult to seed after March in Indiana.

Weed Control Guidelines

- Perennial grassy weeds (nimblewill, creeping bentgrass, etc.) are not effectively controlled in the spring with glyphosate (Roundup or Kleen Up). Plan this type of renovation for the late summer.
- Avoid using broadleaf herbicides in newly-seeded areas until the new seedlings have been mowed at least three times.
- Avoid using preemergent crabgrass controls (except those containing siduron) at the same time as a spring seeding. As a general recommendation, delay the use of these materials until the new seedlings have been mowed four to eight times, depending on the herbicide. Check the label of the specific crabgrass control material for the exact recommendations. As mentioned earlier, siduron is an exception to this rule. It can be used at the time of seeding, but will only control crabgrass for 3 or 4 weeks.

Seeding into an Existing Lawn

- Mow the area to 1 or 1.5 inches to reduce competition from established grasses.
- Apply a starter fertilizer (high in phosphorus) over the entire lawn at 1.5 lbs P_2O_5 /1000 ft².
- Aerify the area punching at least 20 to 40 holes/ft² with the largest tines possible. This will increase the seed-soil contact and improve germination and establishment rate. You can never over-aerify at this time, so make many passes over the lawn. A power raking at this time will also help to increase the seed-soil contact.

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Table 1. Spring seeding rates and expected germination period once soil temperatures reach 55°F.

Seed Mix	lbs seed/ 1000 ft ²	days to germination
100% Kentucky bluegrass	2.0	18-28
80-90% Kentucky bluegrass + 10-20% perennial rye	4.0	18-28
50-70% Kentucky bluegrass + 30-50% fine fescue	5.0	18-28
100% tall fescue	8.0	14-21

- Apply the seed to the lawn with either a dropseeder or a power overseeder, which is a machine that will drop the seeds into small grooves that it cuts into the soil. Try to make 2 to 4 passes over the lawn in different directions with either the dropseeder or the power overseeder to insure a uniform seeding. Table 1 lists the suggested seeding rates.
- Water the newly seeded area three to four times daily to encourage germination after soil temperatures reach 55°F.
- Mow frequently to limit the competition from the established turf. Mow at 1.5 inches until new seedlings have been cut at least two times. After that, raise the mowing height in 1/2 inch intervals over the next three weeks until a normal mowing height of 2.5 to 3.5 inches is reached.
- Six weeks after germination, apply 0.75 lb N/1000 ft² with a fertilizer containing N, P, and K.

Seeding a New Lawn

- Depending on your lawn, you can use one of three methods to prepare the soil:
 1. On uncompacted soils with no thatch, an aerifier can be used to expose the

soil like previously mentioned. A powerrake set to cut 1/8 to 1/4 inch into the soil also will work well. Follow this with a power overseeder or drop seeding.

2. On compacted soils, till the soil to 4 inches or more, rake smooth, allow it to settle for a week or two with irrigation or a heavy rain fall, rake to the final finish, and then drop seed.

3. On lawns with significant thatch, a power rake should be used to loosen and remove as much of the thatch as possible. If the thatch is over 1 inch thick, either use a sod cutter to remove the thatch, or till the soil turning under the thatch. Follow this with drop seeding or power overseeding.

- Just before seeding, apply a starter fertilizer (high in phosphorus) over the entire lawn at 1.5 lbs P₂O₅/1000 ft².
- After seeding, roll the lawn with a light roller to insure seed-soil contact.
- Water the newly seeded area three to four times daily to encourage germination after soil temperatures reach 55°F.
- Mow as soon as the first few blades reach about 2 inches, and mow Kentucky bluegrass, perennial rye, and fine fescue at 1.5 inches and tall fescue at 2.0 inches. After the first three to four mowings, you can adjust your mower to the permanent mowing height which is 2.5 - 3.5 inches for Kentucky bluegrass, perennial rye, and fine fescue and 3.0 - 4.0 inches for tall fescue.
- Six weeks after germination, apply 0.75 lb N/1000 ft² with a fertilizer containing N, P, and K.

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STATE OF INDIANA, PURDUE UNIVERSITY,
AND U.S. DEPARTMENT OF AGRICULTURE
COOPERATING; H. A. WADSWORTH,
DIRECTOR, WEST LAFAYETTE, IN. ISSUED
IN FURTHERANCE OF THE ACTS OF MAY 8
AND JUNE 30, 1914. THE PURDUE
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