

POWER OVERSEEDING

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Lawn renovation is a practice used to improve a turf area which has been damaged or is of poor quality. The best time to renovate a turf area is the period from mid-August to mid-September. The second best time is in March as the frost comes out of the ground.

Reasons for Renovation

Turf areas are renovated for several reasons:

- Changing to improved grasses. Research at Purdue and other universities evaluates the new grass varieties and cultivars. These improved grasses are often better adapted to your management needs and environment.
- Improving turf damaged by traffic (compaction), insects (grubs), or diseases (summer patch).
- Reestablishing areas which are dead due to summer drought (dryness), winterkill or other situations related to the environment.
- Eliminating grassy weeds (nimblewill, orchardgrass, etc.). Apply a non-selective herbicide before reseeding.
- Reduce thatch to a reasonable depth (1/2 inch or less). Reseed with an improved variety or cultivar.
- Improving turf thinned by tree and shrub growth.

Reseeding

There are many situations where a weed-infested area or thinned turf needs to be reseeded. The steps to accomplish this are listed below:

1. Identify the weed problem in the turf area. Annual weeds such as crabgrass, spurge, or knotweed do not need to be controlled with a herbicide. Frost in the fall will kill them naturally. However, perennials such as nimblewill, creeping bentgrass, or quackgrass will need to be controlled with a non-selective herbicide containing glyphosate (Roundup* or KleenUp*). If broadcast herbicides (2,4-D, MCP, dicamba, triclopyr, etc.) are used in the fall, then delay seeding those areas for four weeks.
2. If no herbicide was sprayed, mow the area to be seeded as short (3/4 inch) as possible. If glyphosate is used, wait 7 to 10 days after the

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application before mowing. Remove the debris accumulated from this operation.

3. Thatch is a tightly intermingled organic layer that often develops above the soil surface. If this layer is more than 1/2 inch, make every effort to remove as much as possible.

- A dethatcher (vertical mower) will loosen the dead grass, weeds, and thatch. Dethatch the area in three to four directions to remove enough of the thatch so that at least 30% of the soil is exposed. The dethatcher should be set so that the knives penetrate into the soil to a depth of no more than 1/4 inch. Remove all of the debris. This operation will also leave shallow grooves or slits in the soil surface. Seeds falling into these slits are much more likely to germinate or survive.

- For a thatch layer over 3/4 inch, use a sod cutter for removal. Cut just above the soil surface so that the sod is light and easy to handle.

- If the turf area is compacted (traffic), use the dethatcher in combination with an aerator. Use the dethatcher and then the aerator. Pass the aerator over the turf in three or four different directions. Use the back of a rake or drag a steel mat over the area to break up the soil cores removed by the aerator.

- Using a machine like a slit seeder represents the best method to overseed an existing turf area.

4. Using a fertilizer high in phosphorus (P_2O_5) is recommended. Phosphorus is represented by the second number on a fertilizer analysis, i.e., 5-15-5 equals 10% P_2O_5 (phosphorus). A fertilizer for a new seeding is often called a "starter fertilizer". Examples of starter fertilizers include 5-15-5, 6-12-6, 10-10-10, 12-12-12, 18-46-0, 0-46-0 or 17-23-6. For 5-10-5, 6-12-6, 10-10-10 or 12-12-12, use 10 to 20 lb of product per 1,000 sq. ft. In the case of 18-46-0 or 0-46-0, use 2 to 3 lb. of product per 1,000 sq. ft. For 17-23-6, use 5 to 10 lb of produce per 1,000 sq. ft. Avoid the use of high nitrogen fertilizers with new seedings, since nitrogen could overstimulate the existing turf at the expense of the new seedlings. In addition, some nitrogen materials could burn new seedlings.

5. Buy high quality seed. Even coverage of the seed is important. The goal of the seeding operation is to achieve seed-soil contact.

6. Drag the area with the back of a rake, flexible doormat, or chain link fencing to work the seed and fertilizer into contact with the soil. A light rolling could be used to further press the seed into contact with the soil.

7. Keep the seed moist until the grass plants become established. This may require two to four waterings per day. Water lightly and frequently to keep the seedbed continually moist but not saturated. Insufficient soil moisture is the number one reason for failure of a new seeding.

8. Mulch the sloped areas with clean straw or salt hay. A mulch two or three straws deep, so you can see at least 50% of the soil through it, will help reduce moisture loss. Use one to two bales per 1,000 sq ft. This light covering will not need to be removed after the grass is established.

9. Mow the turf area regularly at 1 to 1-1/2 inches. Remove the clippings so that the sprouting grass is not smothered. As the seed germinates and reaches 1 to 1-1/2 inches, begin to raise the mowing height gradually. An ideal mowing height in the fall is 2 to 2 1/2 inches for most grasses.

10. After the new seedlings have required three mowings, apply a light application of nitrogen fertilizer to enhance the establishment process. A light application would be 1/2 to 3/4 lb. of nitrogen per 1,000 sq. ft. This application should be followed six weeks later with another application of 1 to 1-1/2 lb nitrogen per 1,000 sq ft. Do not apply a broadleaf herbicide to the newly seeded area until the new seedlings have been mowed at least three times.