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HOME & GARDEN

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Home & Garden Mimeo # HG 37

Lawn Renovation

A thin and weedy lawn can sometimes be rescued by improving cultural care, but if the lawn is less than 50% desirable turf, complete renovation is practical. This involves eliminating existing grass and weeds and planting a high quality turfgrass.

The best time for lawn renovation is late summer or early fall. Spring seeded grass often suffers from the heat and drought of summer. Fall seeded grass has time to become established before the onset of summer extremes and weed competition.

Steps to Complete Renovation

1. **Assess the situation.**

   Check for these problems:

   - Poor drainage
   - Deep shade
   - Low fertility
   - Improper pH
   - Compacted soil
   - Erosion

   Failure to address these problems will reduce the chance of a successful renovation. The Home and Garden Information Center can answer your questions and provide fact sheets to help you deal with these problems. Call 1-800-342-2507. While planning lawn renovation, consider converting any excess lawn area to groundcover, perennials, shrubs, or trees. This can reduce maintenance and add interest to your landscape.

2. **Test Soil.** Results of a soil test taken within the past 3 years will provide adequate information for renovation. If you have not tested your soil recently, call the Home and Garden Information Center for a test kit.

3. **Select a grass variety**. Turf-type tall fescue is the best type of grass for Maryland's climate. See AM-77: "Turfgrass Cultivar Recommendations for Maryland", available from the Home and Garden Information Center, for help in choosing a grass variety. Calculate the square footage of the renovation area to determine how much seed you will need. Seeding rate depends on the type of grass and is usually indicated on the seed label.

4. **Eliminate existing vegetation**. Eliminate the grass and weeds in the renovation area with an herbicide such as glyphosate which has relatively low toxicity and no residual soil activity. It is most effective if applied in the late summer or early fall**. Do not spray or allow spray drift to contact any desirable plants. Glyphosate *is non-selective*, which means it damages or kills any plants it contacts.** Carefully follow the label directions. After the grass and weeds die, which takes about 2 weeks, mow the area short - 1/2 to 1 inch high.

5. **Remove Thatch.** Thatch is a layer of dead stems and roots of grass plants that builds up in a lawn. If a thick thatch layer is present, it must be removed before seeding. A dethatching rake works fine for small areas. For large areas, it is practical to use a motorized dethatcher, preferably a vertical mower (also called a verticutter). This is similar to a lawn mower but is designed to cut down through the thatch layer with rows of teeth. A vertical mower may be rented from rental shops and some hardware stores. To create a seedbed for the new grass, adjust the vertical mower to cut through the turf and into the soil 1/4 to 1/2 inch. Several passes will be necessary for complete thatch removal. If you use a vertical mower, the thatch will often be chopped finely enough to leave in place. Otherwise, rake up the thatch and clippings. Avoid removing soil from the renovation area.

Core Aeration

Aeration benefits lawns by loosening compacted soil. It also dethatches, but not as completely as vertical mowing. Several passes may be needed for thick thatch layers. The small holes left by an aerator provide good sites for seed germination. There are many types of aerators but the best type removes small cylinders of soil and deposits them on the surface rather than simply making holes in the ground.

6. **Prepare the Soil.** Apply lime and fertilizer following soil test recommendations. If soil test results are unavailable, apply a starter fertilizer, following the label instructions. Starter fertilizers have a relatively high percentage of phosphorus (the second number) compared to other major nutrients. Look for analysis numbers on the package such as 5-10-5 or 8-16-8. Soil pH should be between 6.0 and 7.0. **Poor fertility or improper pH will reduce the likelihood of successful renovation**.

Till or work the fertilizer and/or lime into the top 4 to 6 inches of soil. Rake the area level. If dethatching was done with a vertical mower, spread the fertilizer and/or lime directly on top of the furrows without raking.

7. **Seed**. Spread half the seed in a north-south direction and the remaining seed in an east-west direction. This will insure complete, even coverage. Good seed contact with the soil is essential for germination and growth of the seedlings. Lightly rake the area to work the seed into the soil. For even better seed contact, roll the area. A light covering of weed-free straw will reduce moisture loss and increase the survival rate of the seedlings.

8. **Water**. Keep the seed moist during germination. If rain is insufficient, water lightly and regularly until the grass germinates, then reduce the frequency of watering, but apply it more deeply until the grass is established.

Overseeding

This method can revive a marginal lawn or convert a lawn to an improved grass variety. The new grass will eventually take over, but complete conversion may require overseeding each fall for 2 or 3 years. Test your soil and begin to correct any of the cultural problems discussed in step one. Then follow these steps:

- Mow the lawn short (about 1 inch).
- Vigorously rake out grass clippings and thatch.
- Remove as many weeds as possible, either by digging or spot treatment of glyphosate herbicide.
- Sow the seed at 1/2 the normal seeding rate.
- After seeding, rake the area lightly.
- Water thoroughly to a depth of 4 to 6 inches. Then keep the seedbed moist until the seedlings appear.
- Do not mow until the new grass reaches its normal mowing height. (About 3 inches for most grasses)

Note: If you plan to overseed a large area, it is best to use a vertical mower and run it through the existing grass. The vertical mower will create a good seedbed.

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Reviewed by R. V. Bosmans.

Have a lawn or garden question?
call the Home and Garden Information Center
1-800-342-2507
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KEEP FERTILIZER OFF OF PAVED SURFACES