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Lawn Renovation

There are many reasons why homeowners renovate their lawns. 1) The aesthetic quality cannot be achieved with the present species of grass. 2) The lawn was seriously injured by a disease or an insect pest. 3) Broadleaf weeds out populate the grass. 4) Desire for a lawn upgrade.

Renovating lawns today provides more favorable results compared to previous years, largely due to improved turf varieties offering improved appearance, requiring less maintenance and are more resistant to disease, drought and insects.

If the lawn has deteriorated beyond what normal maintenance can solve, then renovation may be the answer. First, determine why the lawn has deteriorated into its present condition. Common problems experienced by owners are poor drainage, thatch, compaction, excessive shade, and the wrong grass type for your maintenance and/or site, disease, and insects. Problems of this nature can usually be rectified by a combination of renovation and proper maintenance thereafter.

Before you begin, consider the following:

- One factor that makes lawn renovation unsuccessful is a thatch layer over **1-1/2** inches.
- Start with results from a soil test. A pH range from 5.8 to 7.5 indicates that lime is not needed.
- Plan ahead, it takes several weeks for results.
- The best time to seed your lawn is in late summer/early fall (mid-August through early October). Air temperatures are lower and soil temperatures are warm enough for good grass seed germination. Combined with adequate rainfall, this makes for a favorable lawn renovation environment.
- Consider overseeding with perennial rye grass for an overall thin lawn or bare spots rather than tilling the soil.

PARTIAL RENOVATION

Maybe you will only need to partially renovate your lawn. Lawns in this category are those containing at least 50 percent of desirable permanent grasses, they have no other noxious perennial grasses, and if thatch is present, it does not exceed 1-1/2 inches. This is a case for overseeding with perennial ryegrass.

Take care of existing weeds: First identify weeds occupying the lawn. In order to eliminate the competition these weeds present, a suitable herbicide is applied. Common weeds such as dandelions, broadleaf and buckhorn plantains are managed with broadleaf herbicide. Subtract at least two weeks from your desired seeding date to determine when to apply this herbicide. Be sure to read and follow all label instructions before using pesticides. This practice is best done in the fall.

Proper mowing before seeding: After the weeds are killed, mow the existing lawn as short as possible (scalp) with the mower blade set as low as possible. A bagging mower makes clean up a snap. Don't worry about cutting the grass this short. By scalping the lawn insures the new grass seedlings receive enough sunlight supporting their development into a revitalized lawn.

Remove excessive thatch: If thatch is a problem, remove it before proceeding. Lawns consisting of grass other than bluegrass may not require this step. Choose one of two methods. Power rakes or de-thatching machines may be rented to remove thatch layers. Run the machine

over the lawn in at least four directions (including diagonally). It is necessary to rake off the debris resulting from the de-thatching process. The second is aggressive hollow tine coring removal with at least 10 plugs per square foot. Leave the cores on the surface.

Remedy compacted soil: If the soil is compacted, aeration with a core aerator is recommended. This machine removes plugs of soil from the lawn and deposits them on the surface. The plugs can then be broken up by dragging a steel doormat or a piece of chain-link fence over the area. In additional to improving soil, aeration creates an excellent seedbed. Aerate the lawn in a minimum of six directions and alternate the direction each time.

Fertilize: Apply fertilizer based on the soil test results. Directly prior to seeding, apply a turf grade fertilizer in an approximate 2-0-1 ratio, which contains at least 35 percent of the total nitrogen as water insoluble or controlled release. These are often referred to as slow release fertilizers. If you core aerated the soil, the fertilizer can be applied prior to dragging so it can be mixed into the seedbed.

Seed: Choose a high-quality seed, dominated by the turf species that will provide you with the desired aesthetics and maintenance level, as well as tolerate the conditions of your particular site, i.e. shade. In order to achieve a high percentage of seed germination, you must provide adequate seed to soil contact. One of the best ways to accomplish this when renovating an existing lawn is to use a turf-type disk seeder. These machines can be rented or you may choose to hire a professional landscape gardener to do the seeding for you. This type of seeder has a series of stationary knives that cut grooves in the soil. The grooves are cut to the proper depth for seeding (approximately 1/8" into the soil). At the same time, seed drops down tubes from a seed-hopper located on the machine and is placed into these grooves. Finally, the groves are covered with soil by a series of disks located in the rear of the machine. Seeding should be done in several directions including diagonally insuring good coverage.

A verti-cutting machine can also be used. This machine cuts grooves in the soil. This is followed by spreading the seed in two directions with a drop-type or broadcast spreader.

The area is then dragged and/or worked so the seed falls into the grooves or seedbed. Water the area as needed to keep the topsoil where the seed is located moist. This should be done as needed to insure rapid germination.

A third machine is a slit/slicing seeder. Here, seed is dropped from the hopper on the front of the machine and rotating knives follow, slicing the seed into the soil.

Water: Proper watering is the key to success in getting seed established. Keep the soil surface constantly moist; use a soaker hose or mist irrigation. Apply water during the day as soon as the soil surface shows signs of beginning to dry. Keep irrigation going until a couple of hours before sunset, when necessary. For large areas, use a light covering of straw to ease the irrigation problem.

Mow: Mow a new lawn when the grass is 2 inches high. Be sure the lawn is dry when cut.

TOTAL RENOVATION

For those with lawns containing less than 50 percent of desirable turf, it is necessary to follow steps for a complete or total renovation. After omitting one regular mowing, apply a non-selective herbicide (glyphosate Roundup®), being sure to achieve thorough spray coverage of all existing grasses, weeds, etc., in the existing lawn. Allow at least seven days before renovation after applying glyphosate. Glyphosate kills the entire lawn. Thereafter, follow the steps of a Partial Renovation except the herbicide recommendations. **Be sure to read and follow all label instructions before using pesticides.**

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FS 809 Prepared 8/90; revised 5/93, 11/03, 3/09, 4/12, 12/15