



YARD

Renovating the Home Lawn

no. 7.241

by A.J. Koski and C. Wilson¹

Quick Facts...

Lawns that are thin from drought, pests or increasing shade may benefit from renovation.

Take advantage of total lawn renovation to introduce a species or variety that gives better drought resistance and water use efficiency, increased pest resistance, and better lawn appearance.

Only certain grass types are compatible for overseeding existing lawns.

Newly seeded areas require different care than established lawns.

What is lawn renovation?

Lawn renovation involves killing existing turf and replacing it with new grass without tilling or changing the grade which is normally done during the establishment of a new lawn. Partial lawn renovation may also include the items listed below.

- Introduce a new or improved variety of the same turfgrass species into an existing lawn. For example, seeding a new bluegrass variety into an existing bluegrass lawn.
- Introduce a similar-looking species into an existing lawn such as perennial ryegrass in a bluegrass lawn.

Why renovate a lawn?

You may want to consider renovating a home lawn if:

- the lawn species or variety is frequently attacked by disease or insects and it has caused the lawn to thin out,
- the landscape has become increasingly shady over time and the original lawn is thin and unhealthy,
- the lawn was severely injured or totally killed by disease, insects, or drought, or if it was winterkilled, or if
- you want to completely convert from one turf species to another.

When is the best time to renovate a lawn?

The timing for lawn renovation varies according to grass type and elevation of the site. For the most success, follow the guidelines below.

- Seed cool-season grasses (bluegrass, ryegrass, fescues) anytime from March through September. Along the Front Range and Western Slope the optimal time is mid-August to mid-September.
- Seed warm-season grasses (buffalograss, blue grama) April through July. Seeding after July is not recommended.
- At high elevations (greater than 7,000 feet) do not use warm-season grasses. Cool-season grasses can be seeded in the spring, as soon as temperatures begin to warm.
- Seeding after the first fall frost is not recommended, as young seedlings may be winterkilled. It is better to wait until the following spring to practice lawn renovation.

How to Renovate a Lawn

Follow these steps to renovate a lawn.

1. Kill existing grass and weeds using a non-selective herbicide. The most effective products contain glyphosate.



Putting Knowledge to Work

© Colorado State University
Cooperative Extension. 1/04.
www.ext.colostate.edu

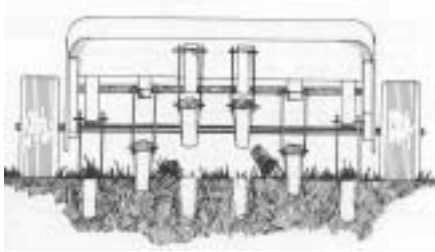


Figure 1. Core cultivation holes should be 2 inches apart and 1 to 3 inches deep.

2. Glyphosate is only effective on actively growing grass and weeds, so the area should be well-irrigated to encourage plant growth before applying the herbicide.
3. Allow the spray to dry for one day following application. Resume watering for 10 days. Spot spray areas or weeds that are still green.
4. When the existing vegetation is dead, mow the site to 1/2 inch and remove the debris by hand raking or using the bagging unit on your lawn mower.
5. If there is an existing thatch layer (a matted layer of organic matter on the soil surface) thicker than 1 inch, remove it from the lawn (a sod cutter makes thatch removal easier).
6. A thatch layer less than 1 inch is okay, but the soil must be exposed.
 - Core cultivating provides an excellent seed germination environment. Holes should be 1 to 3 inches deep and 2 inches apart in all directions.
 - A power rake, set deep enough to expose the soil, can also be run over the lawn in two different directions. Remove loose debris by raking or using a bagging unit attached to your lawn mower.
7. Spread seed on exposed soil to allow for good seed to soil contact.
8. Seed at the label's recommended rate with a drop spreader in two different directions. Follow with a light raking to work the seed into the soil. Adding topsoil or sand after seeding is NOT recommended.

How to Care for New Seed

Newly seeded areas require different care than established lawns. Follow the recommendations below.

- Apply starter fertilizer at the rate recommended on the label.
- Irrigate the area should to maintain a consistently moist (but not saturated) soil.
- Check moisture levels in the underlying soil to prevent excessive irrigation.
- Grass will germinate and grow more vigorously in aerification holes or slits made by the power rake.
- Begin mowing the lawn when it has grown to about 2 1/2 inches.
- Keep traffic, including children and pets, off of the lawn as much as possible, until the lawn has been mowed a few times and the new grass begins to mature.

Things to Avoid

Some practices result in little benefit for the time and effort required.

- Don't scatter seed on an unprepared lawn surface. Poor soil preparation is one of the chief reasons for seeding to fail.
- Don't buy cheap (low quality, weedy) seed.
- Don't use preemergent herbicides before, during or after the renovation process. It's best to wait one year before doing this.
- Don't spray herbicides for the control of visible weeds on the new lawn until it is mowed five to six times.
- Don't over-fertilize to make the new lawn grow faster.
- Don't let new grass get too tall before mowing. Begin mowing when it reaches 2 1/2 to 3 inches tall and mow it to a height of 2 to 3 inches.

Lawn Renovation Checklist

- *Decide if the lawn requires total renovation (killing with glyphosate) or only overseeding.*
- *Determine what species and varieties will be used.*
- *Apply glyphosate to actively-growing grass and weeds two weeks prior to the target seeding date.*
- *If a thatch layer is not a problem, mow dead lawn vegetation to 1/2 to 3/4 inch and remove all loose vegetation.*
- *If a thick thatch layer (thicker than 1 inch) is present, remove with a sod cutter.*
- *Aerate the lawn heavily, so the holes are approximately 2 inches apart and 1 to 3 inches deep; **OR** run a power rake over the lawn in at least two different directions to expose the soil for seeding.*
- *Use a drop seeder to apply seed at the recommended rate. Spread seed in two different directions.*
- *Lightly rake the seeded surface, or run over the lawn with a power rake.*
- *Apply a starter fertilizer at the recommended rate.*
- *Irrigate to keep the soil surface consistently moist, but not saturated.*
- *Keep traffic to a minimum.*
- *Avoid using herbicides after the lawn is seeded and until it has been mowed five to six times.*
- *Begin mowing the new lawn as soon as the grass has grown to 2 to 3 inches.*

Types of Seed

- If the old lawn grass is still alive, the overseeded grass should be somewhat similar in appearance to the existing species.
 - ✓ Seeding ryegrass into bluegrass is okay.
 - ✓ Seeding fine fescue into bluegrass is okay.
 - ✓ Don't seed tall fescue into bluegrass.
 - ✓ Don't seed buffalograss into bluegrass, ryegrass or tall fescue.
 - ✓ Don't seed bluegrass, tall fescue or ryegrass into buffalograss.
- When the old lawn dies, use the best adapted grass for the situation. Contact your local Colorado State University Cooperative Extension county office for advice on species and variety selection.
- Purchase seed that shows 0 percent weed seed on the label.

How Much Seed to Use

Too much or too little seed produces inferior results. Grass species should be seeded at the following rates.

- Kentucky bluegrass: 3 to 4 pounds/1,000 square feet
- Perennial ryegrass: 7 pounds/1,000 square feet
- Turf-type tall fescue: 7 pounds/1,000 square feet
- Fine fescues: 5 pounds/1,000 square feet
- Buffalograss: 3 to 5 pounds/1,000 square feet

Sod vs. Seed

Sod is best used to establish new lawns, but it can be used for renovation if existing vegetation is removed and the underlying soil is tilled or core cultivated (aerified). Successful sodding requires good soil to sod contact, which promotes better sod rooting.

- Do not lay sod on an existing lawn or where there is a thatch layer.
- Sod should not be laid on heavily-compacted soil.

¹A.J. Koski, Colorado State University Cooperative Extension turfgrass specialist and professor, horticulture and landscape architecture; and C. Wilson, Extension turfgrass specialist and horticulture agent, Denver County.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Milan A. Rewerts, Director of Cooperative Extension, Colorado State University, Fort Collins, Colorado. Cooperative Extension programs are available to all without discrimination. No endorsement of products mentioned is intended nor is criticism implied of products not mentioned.