# A New Lawn Completes Any Building Project

Construction can be murder on a lot. A healthy lawn stabilizes the soil and looks like a million bucks.

BY ERIC NELSON

It doesn't matter if it is a new house or an addition, a deck, a patio, or a septic system. Construction projects often leave a site in poor condition. Existing lawns are flattened and torn, healthy topsoil is compacted and mixed with less desirable soils, and the grade is altered.

A new lawn will stabilize the soil and add a nice finishing touch. But growing a new lawn isn't as simple as broadcasting a sack of fertilizer pellets followed by a bag of grass seed. Before you get there, you need to make sure you have healthy soil, good drainage, the right grade, and plenty of water.

## Site work comes first

If you're planting a lawn and don't foresee tearing it up anytime soon, make sure you wait until all construction is complete, including landscaping projects like walks, patios, and plantings. If the site has an area that slopes toward the house, you should consider installing a curtain drain before installing the lawn. A curtain drain is a trench filled with gravel and a perforated pipe that drains water away from the foundation. The grass's roots will stop soil erosion on the surface, but a lawn will not prevent water from flowing underground to the house.

Also, make a plan for the rain-gutter downspouts. In some cases, you can connect them to an underground pipe that drains to daylight. Sometimes you have to connect a series of pipes to a dry well. In many cases, you can simply use stones to create a splash pan that prevents water from washing away the lawn.

## Good soil grows great turf

Before you start grading, evaluate the soil and decide if it is good enough to grow a healthy lawn. In a perfect world, all soil would be light, friable, well drained, and full of organic matter. Even when a lot starts off with nice topsoil, though, construction activity usually degrades the soil by mixing it with less desirable subsoils, hard-pan soil, and clay.

If I think the existing soil on a site is OK, I do a simple test. I take a handful, lightly squeeze it in my hand, and poke it with my finger. If it breaks apart easily, I go right to the pH test (more on pH later). If the soil stays compacted in my hand, it may not drain well, and I'll have to bring in new soil or amend the existing soil before planting grass seed. If you're reluctant to test your own

Soil compact test

***New topsoil is easy to grade and grows healthy grass.*** *Poor soil conditions often are left after construction (inset photo). A few inches of trucked-in topsoil provides a healthier growing medium and makes creating a finished grade an easier process.*

soil, you can have experts do it. Local cooperative extension services and some nurseries test soil for a minimal charge.

If you have poor topsoil, how you fix it depends on how important a great lawn is to you. I recommend 4 in. to 5 in. of new topsoil. Most of the time, trucked-in topsoil is fine for growing healthy grass, and it is not too expensive. For a little more money, you can amend the soil with compost, a good source of nutrients that improve soil structure. One part compost to 3 parts existing soil or new topsoil has worked well for me.

Well-draining soil also is important because puddles of water can rot a lawn. If the soil is predominantly clay, you can mix in sand with a tiller to create better drainage, but you still will need decent topsoil.

### There's more to grading than getting dirty

There are two goals for the finished grade. First, it should be a smooth, even surface without mounds or bellies; and it should be free of sticks, stones, or other debris. Leveling humps and filling low spots not only leaves the lawn pleasing to the eye but also allows water to drain evenly, preventing puddles.

In addition, the grade should be sloped away from the house for a minimum of 6 ft. to direct water away from the foundation. After that, the grade can be level.

Backhoes and bulldozers can speed up grading, but they don't pick up debris. With a little elbow grease, a steel rake is great for grading soil and separating debris in one step. With a lighter touch, the rake will pick up only sticks and stones, leaving behind the soil. Remember that stones left behind now will be found later by a lawn mower.

### Soil pH is as serious as it sounds

You can spend a bundle on soil, but if the pH is off, nutrients in or added to the soil are worthless to a new lawn. The good news is that testing pH is easy and inexpensive with disposable kits that are available at nurseries and home centers. The ideal pH for most grasses is between 6 and 7 (neutral to slightly acidic). In this range, the soil's nutrients are going to be readily available to the new grass. If the pH is much lower or higher, the nutrients in the soil become unavailable, and fertilizers have little effect. If the pH is off, you can use lime

## Choose the best grass for your neck of the woods

Growing a healthy lawn is a matter of preparation and maintenance. Regardless of how well you perform these tasks, if you choose the wrong seed, the lawn is doomed. Grasses that flourish in an open, sunny area may not survive in the shade. Some grasses are more durable than others and are better suited for high-traffic areas.

Grasses are separated into cool- and warm-season varieties. Cool-season grasses including bluegrass, annual and perennial ryegrass, and bent grass should be used in cooler climates.

Cool-season grasses are usually blended into a seed mix that can be applied with a broadcast spreader. In warm climates, use warm-season grasses including St. Augustine grass, Bermuda grass, centipede grass, and buffalo grass. Warm-season grasses are planted as single-species plugs (photo right).

Some seeds need more water than others, but in general, you can expect to do more watering if you live in an arid part of the country. And if you live in a mixed climate, you may need to blend warm- and cool-season grasses for a successful lawn.

Most likely, the seed sold in stores where you live will grow there. It also should be marked for use in sunny or shady areas. For more help, check with the local cooperative extension service or a nursery.

For an instant lawn, you can install sod. The preparations for sod are the same as they are for seeding, but the cost of materials is considerably higher.

Warm-season plugs

Photo bottom right: Jennifer Benner

***Machines to the rescue.*** *On a larger site, a box rake speeds up grading. In a single pass, it can smooth and loosen soil while also separating debris.*

to raise it or sulfur to lower it. Charts that come with the pH kit indicate the amount of lime or sulfur needed to adjust the pH.

With new topsoil and the right pH, you're ready to seed the lawn. Be mindful, though, that some times of the year are better than others for seeding. For grasses to germinate, the soil must be warm (at least 50°F), and moist. Because temperatures are adequate, you can start a lawn any time during the growing season, but moisture isn't as predictable. Even if you have the ability to water, it can be daunting trying to keep soil damp in July and August when it's hot and dry. I prefer to plant in the spring or in late summer through early fall.

pH test kit

In fact, I will install a new lawn right into November. If seedlings come up before the winter freeze, that's fine because cold temperatures won't kill the new lawn. If the seed doesn't have time to germinate, it'll be ready to grow first thing in the spring. In these cases, I add about 10% more seed to cover loss due to seed rotting over the winter.

### Overseed for insurance

Each type of seed or seed mix has a different spread rate. I've had good luck using the rate on the bag, then overseeding by another 25% to account for loss from erosion. If you're seeding only a small area, you can get away with not using a spreader. Just be sure to spread seed evenly by hand. A too-heavily seeded area first resembles a putting green, then rapidly declines as seedlings compete for room to grow.

Most bags of seed offer charts with spreader settings for the more common brands of



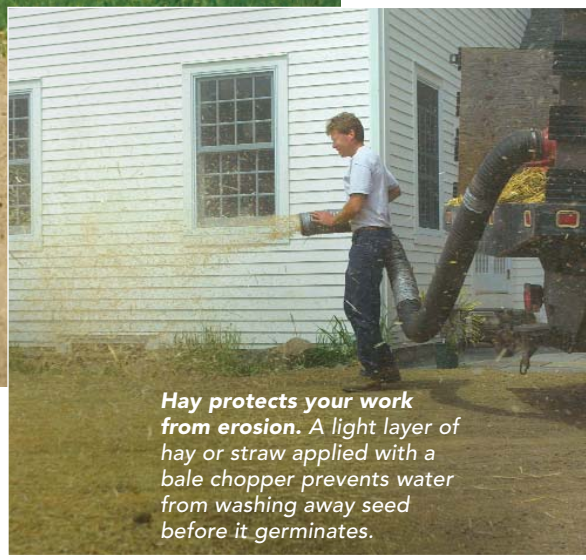
***Roll the grade away from the house.*** *Grading around the house is a critical step. The finished grade should slope away from the foundation for at least 6 ft. to prevent water from reaching the house.*

## Protect your existing lawn from the rigors of remodeling

During remodeling projects, you can take precautions to avoid tearing up or killing a lawn. If you're digging a trench for drainage or a hole for

***Distribute seed and fertilizer with a broadcast spreader.*** *How far a spreader will throw depends on how fast you walk. It is a good idea to keep a consistent pace and avoid overlapping areas of seed or fertilizer.*

***Rake in the seed.*** *A simple way to make sure seed has good contact with the soil is to run an upside-down spring rake over it. A roller works as well, but ganging up a few rakes covers the most ground in a single pass.*



***Hay protects your work from erosion.*** *A light layer of hay or straw applied with a bale chopper prevents water from washing away seed before it germinates.*

broadcast spreaders. For this reason, it is a good idea to buy a brand-name spreader even if it costs a little more. If the spreader setting can't be determined, measure the area you have to seed, fill the spreader with the recommended amount of seed for that area, set the spreader to a low setting, and seed in a checkerboard pattern until all the seed is used. Pay attention to the rate at which seed is being used, and adjust the spreader setting as you go.

To make sure the seed and soil have good contact, I walk the seeded area, dragging an upside-down spring rake behind me. I don't need to apply much pressure; the weight of the rake is enough. Finally, I overseed the lawn, but don't rake again.

## More fertilizer is not better

Grasses benefit from fertilization, but using chemical fertilizers is a balancing act. Used right, they'll promote a healthy, green lawn. Used wrong, they'll turn soil into a wasteland. In hot, dry weather, chemical fertilizers promote top growth that the roots can't support.

For maintaining a lawn, I prefer organic fertilizer, but for a new lawn, I use chemical starter fertilizer. The nutrients (nitrogen, phosphorous, and potassium) in the fertilizer are water-soluble and are immediately available to the new grasses. Like the seed, the starter fertilizer bag will be labeled with an application rate. I feed the new lawn with starter fertilizer twice: at full strength the day I spread the seed; and at half the recommended rate after the first mowing.

## Straw and water prevent erosion

Hay or straw should be spread over a seeded area to prevent erosion and to help keep soil moist until the new lawn is established. Straw is a bit more expensive than hay, but it has redeeming qualities. It is easier to spread by hand, and it doesn't carry the weed seeds that hay sometimes does. When buying straw, make sure it doesn't contain visible straw seeds.

In this case, more isn't better. Too much hay or straw smothers seedlings. If you are dealing with a steep slope where erosion is a major concern, you can spread straw a little more heavily. Wetting down the straw or hay keeps the wind from blowing it away.

Unless you can spread the hay or straw in a very thin layer, you'll have to remove it as soon as grass sprouts are showing. If you wait until the grass is growing through the straw, you will tear out the grass with the rake.

Keeping soil moist but not soggy during and for a while after germination is critical. Soggy soil, though, can rot the grass. Soil conditions and weather dictate how often you need to water. And it is a good idea to water so that the actual blades of grass are not soaking wet overnight. This will reduce the instance of fungal problems. □

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**footings, use a tarp or a piece of scrap plywood to hold the soils. Tarps also can be used around the house to catch debris from painting, siding, roofing, and other projects.**

**For landscape projects, where wheelbarrows and small tractors beat the same path, you can use planks to protect the lawn. Although it may sound impractical, laying down a series of boards to protect a path that will be used to cart heavy loads of stone has saved me from having to fix a lawn.**

**How long you can leave the lawn covered depends on the weather. During the winter or at other times when grass is dormant, you can leave plywood or a tarp down for days. In the summer heat, though, a lawn can burn up after only an hour of being covered with plastic or tarps. As a rule, remove the tarps, boards, or plywood as soon as possible. When you uncover the lawn, it is a good idea to rake the grass lightly and to water the area.**