

Preparing Soil For New Sod

There is no better time to enhance a lawn's ultimate beauty and success than by improving the soil before any planting takes place.

Benefits of Proper and Complete Soil Preparation:

- Improved Uniformity • Increased Density • Faster Recovery
- Reduced Use of Water, Fertilizer, and Pesticides
- Reduced Maintenance



QUICK FACTS ABOUT SOIL PREP

Why is good soil important?

For optimum growth, turfgrass needs just four things (in proper balance): sunlight, air, water and nutrients. Reduce any of these, or provide too much of any one and the grass may suffer. In the right proportions, the grass will flourish, providing beauty to the landscape and a clean safe place to play, plus many benefits to the environment.

Grass obtains three of the four essential factors (air, water, and nutrients) from the soil, but many soils are less than ideal for growing grass. Some soils contain too much clay and may be very compacted...great for roads, but bad for grass because air and water are not available to the roots. Other soils may have too much sand...beautiful on a beach, but difficult to grow grass because water and nutrients won't stay in the root zone long enough for the plant to use. Another frequently observed problem with many soils is that its pH (the degree of acidity or alkalinity) is too high or low for optimum growth.

What is the best soil for turfgrass?

Loams, sandy loams and loamy sands, with a pH of 6.0 to 7.0 are the very best soils for producing a beautiful, high-use, low maintenance lawn. Unfortunately, this ideal soil mixture is seldom found on any property after construction.

How deep should the soil be for turfgrass?

The absolute minimum quality soil depth for a care-free lawn is 4 inches. However, for deeper root penetration and the benefits that brings, the accepted standard is 6 inches.

Can soils be improved?

Practically without exception, not only *can* most soils be improved, they usually *need* to be improved in order to get the maximum results with only a minimum of on-going effort.

The knowledge of what's necessary, the amount and availability of materials, and the immediate costs of time and money are the factors that typically deter people from taking the steps necessary to improve the soil.

The fact is that failing to improve the soil before planting is only inviting a much greater and continual investment of time and money that will never return its value as fully as good preparation.



New Sod Soil Preparation

STEP-BY-STEP SITE PREPARATION

“The beauty is in the blades, but the ‘action’ is in the roots,” is a good adage to remember when growing grass. Thus, the value of the proper site preparation and soil improvement, before any planting takes place, is that it will be easier for the grass roots to penetrate deeply and evenly. Deep roots will make the lawn more drought resistant, a more efficient water and nutrient user, and more dense as new grass plant shoots emerge. A dense lawn crowds out weeds and better resists insects and disease.

Follow these simple steps for a beautiful, healthy and trouble-free lawn:

1. Clear the site of all building materials as well as any buried stumps, rocks, stone or other debris that are larger than 2-3 inches in diameter.
2. Rough grade the entire area to eliminate any drainage problems on the property. This includes sloping the grade away from the building foundations, eliminating or reducing severe slopes and filling low-lying areas. A tractor mounted blade and/or box are most often used for rough grading, but if the area is small, it can be done with hand tools. The rough grading will probably uncover more debris that should be removed and not buried.
3. Initial tilling to a depth of at least 4 inches should be completed prior to adding any soil amendments. This will control most annual weeds, alleviate subsoil compaction, permit a bonding of the topsoil to the subsoil, and improve root penetration as well as air exchange and water movement.
4. Incorporate fully decomposed compost into the topsoil by roto-tilling. Use only a basic manure-based compost (either cattle or dairy) at 3-4 cubic yards of compost per 1000 square feet. You should achieve a total topsoil depth of 4-6 inches. *Do not add sand or topsoil to your soil.* Sand makes clay harder and adding compost will result in good topsoil.
5. *(optional)* Test the soil pH with chemical soil test to determine if any pH correcting materials are required.
- Acidic soils (pH 6 and below) can be improved with the addition of lime. The type (or source) and total amount of applied lime will be determined by the level of acidity and should be based on the recommendations of a reliable garden center, turf professional or soil scientist.
- Alkaline soils (pH of 7.5 and higher) can be improved with the addition of sulfur or gypsum. As with acidic soil correcting materials, the type and total amount of materials will be determined by the level of the alkalinity and should be based on a professional's recommendation.
6. Apply a basic lawn fertilizer to the soil. It is not necessary to rake it in. Use a 20-20-10-3 analysis.
7. Finish grading the entire site, maintaining the rough grade contours and slopes, with a tractor mounted box blade for large areas or a heavy-duty rake for smaller sites.
8. *(optional)* Roll the area with a lawn roller 1/3 full of water to firm and settle the surface. Low spots revealed by this step should be filled to match the surrounding grade surface. We recommend that the area be allowed to settle further with rainfall or by applying irrigation water at very short increments.

The site is now ready for turf. With this degree of careful and thoughtful soil and site preparation, the resulting lawn will be absolutely beautiful. It will require less maintenance (smaller quantities of water, fertilizer and pesticides) as it maintains a high degree of density and recovers rapidly from wear.



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