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## Sodding A Lawn

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Using sod to establish lawns is a common practice. When compared to seeding, sodding offers both advantages and disadvantages that should be considered.

## Advantages are:

1. Fast establishment.
2. Sod can be laid any time soil can be prepared.
3. Better establishment on high use areas.
4. More dependable results on banks and slopes where erosion is a problem.
Disadvantages include:
5. Higher cost.
6. A limited number of grass cultivars available as sod.
7. Limited availability of sod with grasses adapted to shady locations, heavy traffic or utility areas.

## Site Preparation

Proper site preparation is important in the establishment of a lawn. Prepare the site for sodding as you would for seeding. For detailed information on site preparation, refer to Extension Bulletin E-1401, "Site Preparation for Lawn Establishment." The suggestions which follow provide an overview of the preferred practices.
Weedy perennial grasses, such as quackgrass, tall fescue, and bentgrass, should be killed before an area is sodded. Tilling alone will not eliminate these undesirable species. Use a suitable herbicide to eradicate these weedy grasses.

For a high quality lawn, exten-


Improper watering of sod results in poor establishment.
sive and deep rooting is important. For this, porous, welldrained topsoil with good waterholding capacity is desirable. How much is enough? The more, the better - from a minimum of 3-4 inches to a preferred 6 inches. If an adequate depth of topsoil is not already spread on the site, additional topsoil can be purchased. Avoid using topsoil contaminated with troublesome weedy grasses such as quackgrass. Do not use fine textured, dark muck as a topsoil because, being an organic soil, it breaks down too quickly. Good topsoil need not be black in color.

Do not simply apply a thin layer (less than 3 inches) of topsoil without tilling into the soil below. A shallow layer becomes a barrier to rooting and drainage, making it difficult to maintain a healthy lawn.

If adequate topsoil is not available, there are alternatives for improving sandy soils or clay subsoils. Sandy soils have a low water holding capacity that can be improved by working 2-3 inches of loamy topsoil or fibrous peat into the soil to a 6 inch depth. Fine textured clay sub-soils present a more common and difficult problem. These soils compact easily and are not favorable for root development. To improve these soils, apply 2-3 inches of sandy topsoil or 2 inches each of coarse sand and fibrous peat and mix into the existing soil to a 6 inch depth.
If topsoil or amendments (sand, peat) are not used, the existing subsoil should definitely be loosened to a 4 to 6 inch depth. Grading and traffic on the site often leaves the soil highly compacted and undesirable for sodding. Tilling the soil will reduce
this compaction and improve root growth. Before tilling the soil, be sure it is dry enough to work without forming clods. The site can be tilled in much the same way as when preparing a garden. Break up large clods and remove sticks, stones and other debris.

Fertilizer and lime should be applied according to a soil test available from your county Cooperative Extension Service office. If soil tests are not available, apply 10 to 15 pounds of $5-20-20$ or 6-24-24 per 1000 square feet. Do not use lime unless indicated by a soil test. Incorporate this fertilizer into the upper 3-4 inches of soil. Complete the preparation process by smoothing the surface. Pay special attention to firming the soil over pipes and tile lines. Water thoroughly and allow time for settling, with the finished grade about $1^{11 / 2}$ to 2 inches below: walks and drives.

## Sod Selection

Sod should be free from weeds and weedy grasses (bentgrass, quackgrass, tall fescue) and should contain species and cultivars recommended for the location to be sodded. Most sod grown today has been selected for higher quality lawns in sunny locations. Usually blends of improved bluegrasses are grown and respond well to watering and fertilization. Blends of several cultivars also provide improved disease resistance when compared to a single cultivar. A few growers provide sod adapted to shady or utility areas. If your needs for sod are unique, be sure to inquire about adapted sod. For more information refer to Turf Mimeo No. 1, "Recommended Turfgrass Species and Cultivars for Michigan." This can be obtained from your county Cooperative Extension office.

## Sod Installation

The grass plants in sod produce heat that cannot be dissipated


Sod can be staked to prevent slippage off of a slope,, In this case the sod was stretched during installation and gaps were formed once the sod dried.
when the sod is rolled or stacked for too long. This heat may kill the sod. To prevent this damage, the sod should be laid within 24 hours of its harvest during warm weather, and always within 48 hours.

Sod can be laid nearly any time of the year if the soil is dry enough to allow soil preparation. Problems may exist with early winter sodding because the sod may dry out and die if the roots are not established before the ground freezes. Sodding should not be done during dry periods if watering is not possible.

Avoid laying sod on powdery, dry soil. A soil that is moist to a depth of 6 inches, but not saturated, allows the new roots to establish rapidly. The ends of the sod pieces should be staggered to prevent lines across the turf caused by slow establishment at the edges. Make sure that the edges of the sod are in good contact with each other but not overlapping. Avoid stretching the sod or gaps will develop between the pieces when the sod drys. Once the sod is laid, roll to insure good contact with the soil. Roots will dry out rapidly if air pockets are left between the sod and the soil. If sod is laid on a slope, it may be
necessary to peg the sod strips with wooden stakes to prevent slippage.

Thoroughly water the sod immediately after rolling. As a general rule, uniform watering will be necessary every day to keep the sod moist until the roots have grown into the soil. It is best to water the sod during mid-day to obtain rapid establishment. Be sure to apply enough water to wet the soil under the sod. Rooting normally requires two to three weeks. Once the sod is established, watering can be reduced gradually to once a week or less, depending on when the grass begins to wilt.

Mowing should begin when required by the growth of the grass. The recommended mowing height for bluegrass sod is $11 / 2$ to $21 / 2$ inches. Avoid removing more than $1 / 3$ of the leaf surface at any one mowing.

After the sod is rooted, follow a fertilization program suggested for established lawns. Generally four fertilizer applications per year are suggested for higher quality lawns. Once the sod is established, good management practices will be necessary to maintain a high quality turf.


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