

## Topdressing Your Lawn

**Q:** What are the benefits of top dressing my lawn?

**A:** Top dressing a lawn is the practice of placing a thin layer of material on an established lawn. The material can be soil, compost or sand. Top dressing originally was used to smooth the playing surface of a green used for sports. Other benefits were observed and top dressing has become another management tool for promoting healthy turf grass.



A lawn topdressed with compost.

### Benefits

Topdressing lawns has been shown to promote a quicker recovery from physical damage. Topdressing can also help to control thatch and reduce incidence of disease. Topdressing can help fill in gaps in the grass. A topdressing program can also be used to improve or alter the structure of the root zone.

### Soil Structure

Soil structure refers to the arrangement of soil particles and how they stick together. An ideal structure would be made up of crumbs that stick together to form larger clumps. This arrangement allows for small pockets of space called micro pores

that hold water for the grass and a fairly equal amount of larger spaces called macro pores. Macro pores are air spaces that allow oxygen to get to the roots of the grass. Both types of pore spaces are equally important to growing a healthy stand of grass. The two different pore spaces have an inverse relationship with each other. As one type of pore space is increased the other decreases in amount. If the soil is a heavy clay, it will be comprised of mostly micro pores and can hold water around the roots of the grass. This greater concentration of water-holding pore space limits the amount of oxygen available to the root system and can increase incidence of disease in turf. On the other hand sandy soils can be very droughty because they contain a disproportionate amount of air spaces. A greater balance of pore spaces can be achieved on native soils by top dressing the lawn.

### Good Practices

Topdressing applications should be light; no more than a ½-inch at a time. A thicker application can cause problems. It can stunt the growth of the grass and a thick application can shade the grass. Topdressing applications of soil should be closely mirror the native soil. Allowing the soil cores to be reincorporated after aeration is a great topdressing for home lawns.

If topdressing is being used to improve or change the growing medium of the lawn, then compost or other organic matter, topsoil, or sand can be used. Top dressing applications should be light and frequent applications should be used to make changes to the growing profile. For the average home lawn, compost is the best choice. Compost will improve the overall structure of the soil. It will help to achieve the balance of pore space needed for healthy growth. Compost or another source of

organic matter will also improve the fertility of the soil and can reduce the need for fertilizer.

If screened topsoil is chosen as a topdressing material, then it should contain a texture similar to the native soil. Texture of soil refers to the percentage of sand, silt or clay particles that comprise the soil. These particles are arranged by size. Clay particles are the smallest, then silt, and finally sand particles are the largest. Sand particles are further categorized into very fine sand, fine sand, medium, coarse, very coarse and gravel particles. Because the size of soil particles can vary greatly it is important to select a top dressing that is similar to the native soil. Sudden changes in soil texture can interrupt water flow and cause more problems to develop in the lawn. A simple soil feel test can be performed on your soil and the topsoil being considered to determine compatibility. Test instructions can be found at [http://www.ndhealth.gov/wq/sw/z1\\_nps/pdf\\_files/soil\\_texture\\_feel\\_test.pdf](http://www.ndhealth.gov/wq/sw/z1_nps/pdf_files/soil_texture_feel_test.pdf).

A very important rule of topdressing is to use a coarser material over a finer material. Never use a topsoil that is comprised of soil particles that are smaller in texture than the native soil. This has led to the popularity of top dressing with sand. Top dressing with sand is often done on golf courses and sports fields. Sand resists compaction more than the other soil particles and is chosen due to the high

amount of traffic these areas see. The sand is used as a topdressing after the grass has been core aerated. A sand of very similar texture must be used for each subsequent topdressing or layering can occur. Sand can be used to top dress lawns when the native soil is sand. If the native soil is not sand, than caution should be used when selecting sand as a top dressing material.

### **Note of Caution**

If topsoil or compost are to be used to change the growing medium of the grass, than be sure to get an analysis first. The pH of the compost and topsoil can vary greatly and some nutrients can be present at toxic levels. Also be aware that topsoil and river bottom sand will have weed seeds and can introduce a new problem into the lawn.

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