

Turfgrass Maintenance Topdressing

**Tom Samples, Professor and John Sorochan, Associate Professor
Plant Sciences**

What Is It?

Topdressing is the uniform application of a thin layer of soil or organic material over the turf surface.



Why Topdress?

Turfs are topdressed to control thatch, level and smooth the turf surface, protect turfgrasses against extreme low temperatures and amend the turfgrass root zone.

1) By mixing soil with thatch, beneficial soil microorganisms, or decomposers, have direct access to nutrient-rich organic matter. This speeds the decomposition of thatch. The mixed layer of soil and thatch formed as a result of topdressing often accelerates water movement from the turf surface into the soil below.

2) Although topdressing does not usually level major indentations in turfs, it is the preferred method of maintaining smooth, firm golf greens and athletic field surfaces disrupted by play.

3) Topdressing bermudagrass turf before the first autumn freeze may help buffer plants from direct low-temperature kill during winter dormancy.



4) The physical properties of the turfgrass root zone can be improved by topdressing if an appropriate topdressing material is used and the turf

is topdressed several times each year for many years. If the goal is to improve the texture of the soil by topdressing, turf should be prepared for topdressing by aerifying with a conventional core aerifier, a deep-tine aerifier using hollow or solid tines, or a deep-drill aerifier.

What Is the Best Topdressing Material?

Selecting the right topdressing material is critically important. The best topdressing material to level and firm the turf surface is often one that matches the soil on site. The use of a topdressing material with a texture drastically different than that of the underlying soil often results in soil layering.

The movement of water into and within layered soils is usually severely restricted. Topdressing materials with several components (e.g., compost, peat moss, sand and soil) must be thoroughly mixed and dry before they are broadcast over turf. A soil shredder, auger, vibrating screen and large volume, tumbler-type mixer are often used to commercially prepare topdressing materials. Topdressing mature compost or a sludge-compost mixture after core-aerifying turf may improve the biological activity of soil.



How Much? Generally, from 1/8 to 1/4 inch of material is broadcast as turf is topdressed. Fertile, rapidly growing and thatch-prone turfs may require more frequent and heavier topdressing. Nearly one-half cubic yard of topdressing material is required to create a 1/8-inch layer over a turf area 10 feet wide by 100 feet long. One cubic yard of dry sand may weigh as much as 3,000 pounds.



Approximate Depth of Topdressing Material	Approximate Volume of Topdressing Material (Cubic Yards Per 1,000 Square Feet)
1/8	0.4
1/4	0.8
3/8	1.2
1/2	1.5
3/4	2.3

When? Turfgrasses are most often topdressed when they are actively growing. Leaves and stems damaged as topdressing materials are applied and mixed with thatch may require several days or weeks to recover. Recently, topdressers have been engineered with spinners to uniformly 'dust' golf

greens with topdressing material while causing very little soil compaction or turfgrass injury. Rather than using a drag-mat or broom to mix the topdressing material with thatch, greens are simply watered immediately after topdressing.

Visit the UT Extension Web site at <http://www.utextension.utk.edu/>

W161N-3/08

Copyright 2008 The University of Tennessee. All rights reserved. This document may be reproduced and distributed for nonprofit educational purposes providing that credit is given to University of Tennessee Extension.

Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development. University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.