

Problem: Thatch Control



Plants Most Likely To Be Affected: Kentucky Bluegrass, Bermudagrass, Zoysiagrass and Creeping Bentgrass

Description: When thatch is less than one-half inch thick, it is not much of a concern; on the contrary, it may provide some protection to the crown (growing point) of the turfgrass. However, when thatch exceeds one-half inch in thickness, the lawn may start to deteriorate. A thick thatch layer results in roots staying in the thatch rather than penetrating the soil. Because thatch tends to dry quickly, the lawn becomes drought sensitive. Also, thatch encourages certain insects and diseases.

Recommendations: Thatch is best kept in check by power-raking and/or core-aerating. Because these operations thin the lawn, they should be performed when the lawn is in the best position to recover. For warm-season grasses that time is June through July. For cool-season lawns, fall is the best time (i.e. September) though these operations can also be scheduled for the spring if done early (March).

Zoysiagrass and bermudagrass are more prone to thatch accumulation than buffalograss. If thatch is more than $\frac{3}{4}$ -inch thick, the lawn should be power-raked or removed with a sod cutter. Set the power-rake blades just deep enough to pull out the thatch. The lawn can be severely damaged by power-raking too deeply.

If thatch is between one-half and $\frac{3}{4}$ -inch thick, core-aeration is a better choice. By removing cores of soil, core-aeration relieves compaction, hastens thatch decomposition, and improves water, nutrient, and oxygen movement into the soil profile. The soil-moisture level is important to do a good job of core-aerating. It should be neither too wet nor too dry—the soil should crumble fairly easily when worked between your fingers. Go over the lawn enough times so that the aeration holes are about 2 inches apart.

Excessive thatch accumulation can be prevented by not over-fertilizing with nitrogen. Frequent, light watering also encourages thatch. Water only when needed and attempt to wet the entire root zone of the turf with each irrigation. Finally, where thatch is excessive, control should be viewed as a long-term, integrated process (i.e., to include proper mowing, watering, and fertilizing) rather than a one-shot cure. One power-raking or core-aeration will seldom solve the problem.

References:

1. [Thatch Control in the Home Lawn](#), Iowa State University, Horticulture Guide
2. [How to Control Thatch in Your Lawn](#), University of Minnesota Extension

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