

Thatch

What is thatch - accumulation of living and dead grass, leaves, stems and organic debris between the soil surface and green vegetation in a turf.

Thatch develops when dead organic matter (grass stems, dead roots, and debris but not clippings) builds up faster than it decomposes. It accumulates on top of the soil at the base of the blades.

The causes of thatch are numerous:

- **poorly aerated soil**
- **excess nitrogen**
- **too-high or too infrequent mowing**

On a well maintained lawn, thatch is rarely a problem. A thin layer (1/2 inch or less) is normal and does no harm. In fact, it protects the crown and reduces soil compaction. A layer thicker than 1/2 inch prevents water from reaching the roots.



If your lawn feels spongy when you walk on it, it has excessive thatch!

Problems Associated with Thatch

- turfgrass roots tend to grow in the thatch layer making plants more susceptible to stress
- interferes with water, air and nutrient movement
- soil beneath thatch becomes easily compacted because of poor root development
- increases insect and disease potential

Thatch Control

- **Scarification (dethatching)** – machine cuts into and pulls up a little bit of thatch, debris is then raked up. Because severe dethatching can weaken turf, it's better to deal with the problem before such action is necessary. The best time to do it is just before grass begins its most vigorous growth.
- **Aeration** - this is the penetration of the soil profile, resulting in soil air being replaced by air from the atmosphere. This helps to improve drainage encourages deeper rooting of grasses. Intensively maintained lawns should be aerated once a year; those with moderate maintenance, every two years. Lawns with heavily compacted soil or severe thatch problems may need twice-yearly aeration.
- **Raking** – performed in early spring, before the first mowing, to remove any debris left from the winter. Use the thatching rakes.