





Niagara College Greenhouse & Nursery Success Sheet No. 129

Thatch

Thatch Basics

Thatch is a layer of dead and decaying tissue located between the green vegetation and the soil surface; it's derived from stems, roots, rhizomes and leaves. Overuse of fertilizer and shallow watering are major contributors to thatch buildup.

A thatch layer of less than half an inch can be beneficial to a lawn by improving its wear tolerance and insulating the root zone from soil-temperature changes. A layer in excess of half an inch can lead to a reduction in water and fertilizer infiltration, therefore resulting in an unhealthy lawn.

Thatch Prevention

The most important step to prevent thatch buildup is to aerify your lawn at least once a season. Water and fertilizer are able to reach further into the root zone, therefore encouraging deeper root growth and resulting in a stronger lawn.

Despite the popular belief, leaving grass clippings on your lawn does not contribute to thatch buildup. With frequent mowing and changing your lawnmower's height from low in the spring and fall to high in the summer, thatch accumulation will be reduced. These practices will also reduce the stress caused by drought and heat.

Applying fertilizers at rates that don't exceed the needs of the turf is essential. Excess nitrogen results in higher rates of

organic-matter production, which exceed the rate of breakdown. Also, watering deeply and infrequently when your lawn shows slight signs of water stress will help prevent thatch buildup.

Thatch Removal

Thatch can be removed by hand raking or by using tools such as a power rake. A power rake mechanically removes the thatch using steel blades or tines that slice through the turf and lift the organic matter to the surface.

Hand raking is extremely labor intensive and practical only for small lawns. A power rake can often be rented from your local home-improvement centre, or power raking can be performed by many lawn-care professionals.

The best time to dethatch a lawn is during a time of active growth, such as the spring or fall, when at least 30 days of favorable growing conditions can be anticipated for the recovery and healing process.

After dethatching, fertilizer should be applied. This will help your lawn recover more quickly from the abuse it was just put through. If you are dethatching your lawn in the spring, it is also a great time to apply a pre-emergent herbicide to prevent any weeds from germinating, therefore making your lawn thicker and healthier.

Chad Loewen, Class of 2008

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Niagara-on-the-Lake Campus, 135 Taylor Road, Niagara-on-the-Lake, ON L0S 1J0 phone: (905) 641-2252, ext. 4082; fax: (905) 988-4307 e-mail: mnewell@niagaracollege.ca Website: http://greenhousenursery.niagaracollege.ca