## **Aerating & De-Thatching**

Aerating your lawn is a great way to reduce thatch, loosen up compacted soils and make it easier for water and nutrients to reach the roots of your turf.

Even with the best care available, lawns can thin out and lose color due to excessive thatch buildup, too much foot traffic or pet traffic through specific areas that create hard or compacted soils, or periods of high temperature, high humidity, or drought. Aerifying and overseeding is recognized by turf experts such as golf course superintendents as the best treatment to control thatch, helps reduce those compacted areas, fills in bare spots and revitalize growth.

## Aeration

An aeration treatment removes small cores of soil and thatch to allow air, moisture and nutrients to penetrate down to the root zone. The cores brought to the surface contain microorganisms, which help the breakdown of the woody thatch tissue layer just below the lawn's crown. As the thatch layer is broken down, it is converted into organic matter that will then combine with existing soil particles.

Also, as the cores begin to breakdown over a period of several weeks, the holes gradually fill in with a mixture of organic matter and soil, and the filled hole allows roots of existing grass plants to spread out and grow deeper, creating a healthier, thicker lawn.

## Ideal time for Aeration

Because the aeration process is stressful on lawns, it should only be done during periods just before active growth is expected. For cool season grasses, those typically found in New England this would be in early spring or early fall, the 2 times of the year when cool season grasses really grow.

## **De-Thatching**

Over time, lawns accumulate thatch. Thatch is a layer of slowly <u>decomposing grass</u>, dead roots, and other yard debris that's picked up by your mower and tossed back onto the grass. Thatch can accumulate even if you sweep or use a mulching mower, however the build up may not be as quick. The accumulation of thatch over time prevents water and other nutrients from getting through to the roots of your lawn. Accumulation of thatch, like the compacted soil, also gives insects a great place to hide.

A light layer of thatch, one-fourth to one-half inches deep, is actually beneficial to your lawn. It protects the soil from changing temperatures and adds to the resilience of the lawn, which means when you step on it, it springs back instead of compacting the soil

When your thatch becomes too think it acts as a thatch roof would. It repels water and any other nutrient you try to give your lawn. Thick thatch can prevent water from ever reaching the soil, which results in the grass roots growing in the thatch, instead of the soil. Since the water in the thatch evaporates much quicker than that in the soil, your lawn will become susceptible to drying out quicker than if the roots were planted firmly in the soil.

Since thatch can keep the ground temperatures from changing a lot, <u>insects and diseases</u> thrive in thatch-covered lawns. Think about it. It's warm and moist and cannot be penetrated easily by substances used to control the insects or disease. What better place to live if you're a grub? Another problem with thatch filled lawns is that the mower will not be able to mow evenly. This will cause other problems such as scalping.

To prevent your thatch from getting too thick, de-thatching is usually performed every other year.. It's best to de-thatch your lawn just before it begins growing the most vigorous for the season. For New England, this would be in the spring.