

Golf Course Maintenance

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The low humidity and cooler temperatures of fall are long awaited by golfers. However, golf maintenance needs to consider the upcoming winter and begin to prepare the turf in advance. The first step is to begin raising cutting heights on putting greens. Many golfers enjoy faster putting green speeds, and the fall-induced physiological changes to turf make them much easier to achieve during this time of year. It is easy to get caught up in the “race for speed,” but doing so can affect the winter survival of the turf.

Sunlight

Think of the turfgrass leaves like solar panels. If turf leaves are kept in the shade their ability to capture energy will obviously be compromised. Low cutting heights effectively reduce the size of the solar panels and also will adversely affect their ability to capture energy. Why is energy so important? Plants now are storing carbohydrates for the winter; therefore, keeping cutting heights too low, too late in the fall, sends the plants into the winter in a weakened state. Turf that enters the winter weaker has a lower chance of survival. If we experience a mild winter, it may not matter. If we experience a harsh winter, raising heights alone may not be enough.

- Raising putting green cutting heights by 0.1 mm a week, starting in November, will help. These slight increases will have a minimal impact on putting green speed.
- We planned on increasing sunlight penetration through tree work can have a huge impact on winter survival. Light penetration in the fall has a significant impact on the plant's ability to store carbohydrates and harden off properly. Greens that are shaded in the winter experience an increased potential for damage. Winter shade, even when the turf is not growing, often translates to more winter injury.

We've just finished our Members tournament and although it was great fun to play lightning fast greens. We now must raise the heights and increase fertility to promote healthy growth.

Winter Works

We've got a lot planned for this winter! Multiple areas of fairways

require drainage. Bunkers that have drainage problems will be rebuilt, tee enlargements and of course a lot of love for the greens to recover. Once the turf is sound our efforts will turn to landscaping. We are replacing high maintenance landscape areas that never look good with a lower maintenance more aesthetically pleasing landscape.

Greens will be needle tined all winter. What is “needle tine” aerification, and why do we engage in it so frequently on greens?

Needle tine aerification, also referred to at times as solid tine aerification, and/or venting, is aerification that entails the use of small (often 1/4” diameter) solid tines to poke small holes into the green. Small solid tines are less invasive than a “coring” tine because they don’t remove any material from the green. Poking a solid cylindrical hole into the greens surface does several things:

1. physically loosens up the soil- which aids absorption of water, fertilizer, and other products that we apply to the greens surface. We often use the term “compaction” when referring to soils, which means that the soil is impervious to materials moving through it. Needle-tining alleviates compacted soils, which has the aforementioned desirable results.
2. allows air to enter the soil, which is imperative for proper root and soil health- because soil without oxygen is less able to absorb nutrients and water and also doesn’t allow roots to grow deeply.
3. increasing oxygen content in the soil is also important because it means there is less room for toxic gasses in the soil. Due to plant and soil organism respiration, a buildup of undesirable gasses could also spell trouble for the root growing environment.
4. Soils with more air content are a better growing environment for roots. This drying of the soil also combats water born diseases and algae effectively, creating a healthier greens surface.