Winter Preparation Checklist For Putting Greens

By David Oatis, regional director, Northeast Region | November 3, 2017

Trees in full fall color signal that winter is approaching. Preparing playing surfaces for winter before it is too late can reduce the risk of winter injury and improve springtime playing conditions.

As the days get shorter and daylight saving time ends, an extra hour of sleep is welcomed. Here are a few things to ponder as you reset your clocks:

Solar power is increasingly popular, but golf courses have relied on it forever. Turfgrass leaf blades – i.e., turf solar panels – collect sunlight and convert it to chemical energy that fuels growth. If anyone questions the need to perform tree work that increases putting green sunlight exposure, just ask them where they'd place solar panels: in the sun or in the shade?

Temperatures have been mild but the cold weather is just around the corner. Take the following steps now to help putting green turf prepare for winter:

- ✓ **Raise mowing heights:**
  - Large solar panels generate more energy than small solar panels. Increasing leaf surface area by raising mowing heights helps putting green turf generate and store energy for overwintering.

- Raising mowing heights reduces turf stress. Turf that enters winter in a weakened state is more likely to experience winter injury than healthy turf.

✓ **Evaluate winter sunlight penetration:**

- Turf needs sunlight during fall to harden off properly so that it is better able to survive harsh winter weather.
- Sunlight is important even when turf isn't growing. Winter sunlight helps melt snow and ice. It can also reduce the frequency of freeze and thaw cycles that can cause winter injury.
- Morning shade receives a lot of consideration during the growing months, but afternoon shade during winter can result in rapid refreezing and winter injury.

✓ **Consider drainage:**

- Turf needs dry conditions to harden off properly.
- If putting greens have collar dams, consider options for addressing them.
- If putting greens have surface depressions, consider these options to reduce the risk of winter injury:
  - Remove strips of sod, creating channels that facilitate positive surface drainage of excess water from putting surfaces. Remember that infiltration rates are reduced when soils are frozen.
  - Installing heating cables in drainage channels will help keep water flowing by melting any ice that forms.
  - If putting greens have subsurface drainage, cutting holes from the surface to the top of drain lines in areas where water tends to collect will facilitate drainage throughout winter.
- Deep aeration can improve drainage. Better drainage can help turf harden off and reduces its susceptibility to winter injury.

✓ **Plan your fertility:**

- Avoid excessive nitrogen applications. Lush growth increases the vulnerability of turf to winter injury. Applying nitrogen to putting greens that are covered with tarps is especially risky.
- Make sure potassium levels are adequate. Insufficient potassium levels can increase the potential for winter injury on *Poa annua* putting greens. Keep in mind, however, that turf can only use so much potassium and excessive levels won't help. Furthermore, extremely heavy late-fall potassium applications have been shown to increase snow mold incidence on creeping bentgrass putting green turf.

Ultimately, turf that goes into winter weak won't come out of winter any stronger. Now, don't forget to set your clock back on Saturday night.

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