An Icy Situation

By Jim Skorulski, agronomist, Northeast Region

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I write this update with growing trepidation as the winter months unfold. We should have sensed this winter was going to be different when early snow storms impacted fall fungicide programs and other winter preparation work farther north. Golf courses throughout the region have since been slammed with snow, widely fluctuating temperatures, heavy rains, ice storms, wind, and even unseasonably warm temperatures farther south. Several inches of rain saturated much of the region in the last week alone.

Fast moving weather systems and coastal storms have created weather extremes around the region. Wet snow, slush and rain following last week's storm created a particularly dangerous situation for annual bluegrass.

The reports from the field thus far have generally been positive, but the phone calls and inquiries increase as more recent rain has washed away the snow and left behind ice pockets or saturated surfaces. The impact of a thaw or rain event on the turfgrass depends on interactions between temperature, rainfall, and snow depth. Winter protection covers also can influence the impact of warm temperatures and rain. The weather conditions immediately following the period of thaw are most important with regards to turfgrass survival. A rapid temperature drop into the teens or single digits usually spells trouble. Those

fortunate enough to be located where the snow and ice layers completely melt are probably ok as long as the surfaces are able to dry prior to very cold temperatures. Golf courses where the snow pack is deeper and better able to absorb the rain and buffer the warmer temperatures usually survive a thawing period as well. Those located somewhere in between, where there is an incomplete snow or ice melt, have the most to worry about and turf survival at those locations often depends on the severity of temperatures immediately following the melting process. Fortunately, the temperatures immediately following the thaw and rain events fell to just below freezing in more exposed areas and we can only hope they were not lethal. It would be a good idea at this point to pull a plug or two from a susceptible green if you have any worries.

There is plenty of winter left so questions and difficult management decisions will likely arise. Hopefully, the weather patterns will become more consistent with near normal temperatures and some timely snowfall. Keep a few basic winter survival skills in mind as we move to the last half of winter.

- The first and perhaps most important is to try to maintain open paths for drainage on greens. This is especially important prior to warmer weather or rain events.
- Ice sheets that have been in place for over thirty to forty days on heavy soil greens or above covered greens now warrant frequent monitoring, to make sure the turf canopy is not becoming anoxic.
- Removing snow and ice and exposing turf in mid-winter can be risky and should only be done if a problem is anticipated and the immediate weather forecast is favorable to accelerate melting.
- The objective should continue to be to maintain consistent canopy temperatures close to the freezing mark, and to keep the surfaces from becoming saturated. How you succeed in this effort will have a big impact on turf performance in the spring.
- The warmer weather and open conditions are always inviting to golfers to look those conditions as a bonus to the normal golfing season. Unfortunately, allowing traffic on partially thawed or wet greens in winter is a recipe for problems both above and below the surface. Often those problems will not be immediately noticeable but can come back to haunt

the golf course later in the summer season. We realize the temptation to play the regular greens is great, so if you are going to do so, leave the decision as to when the greens are to be open to the professional you have entrusted to make decisions that are best for the long term maintenance and conditioning of the golf course!

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