

# A Sweet and Sour Beginning

By Bob Vavrek, Regional Agronomist, USGA Green Section

The start of the 2004 season could not be sweeter for many superintendents across the North Central Region. The turf at many courses had ample time to harden off during November. Fortunately, snow cover was often present before the arrival of frigid weather. Temperatures have warmed up slowly and steadily all spring and a short duration of temperatures in the 80's jump started the growth of turf. Courses that experienced these conditions have observed little winter injury to the playing surfaces. Many superintendents have commented that this may be the best turf quality seen during April over the past 10 years.

On another positive note, the amount of play was up at many facilities during late March and early April. Golfers have been taking advantage of the dry spring weather in spite of the cool temperatures. Early season revenue provides many courses the opportunity to plan for various course improvements later this season.

In contrast, a number of courses in Minneapolis-St. Paul area and northern Michigan have reported moderate to severe injury to *Poa annua* on greens and fairways. The pattern of most damage was consistent with direct low temperature kill and crown hydration, although desiccation was observed in some sites. The loss of turf was generally limited to low lying areas that tend to collect water during a mid-winter thaw. Some courses experienced unusually cold temperatures during early winter. Turf without the protective insulation of snow cover was seriously damaged. The most extensive damage occurred on older courses where the greens and fairways are dominated by *Poa annua*.

It was no surprise to find that open areas of golf courses experienced injury when you review weather data for the month of January in the Twin Cities area. Extreme temperature swings occurred on the 17th (high 34, low 4) and the 21st (high 30, low -9) and throw in a 24 below zero temperature on the 30th for good measure. Areas on golf courses insulated by snow cover survived while the turf across many exposed sites did not.

In the absence of snow cover, greens covered with a material that provided a degree of insulation, such as excelsior mats, fared much better than greens covered by a popular, thin, waterproof cover. As mentioned in many previous articles, green covers are not a panacea for all forms of winterkill. Covers that appear to provide a considerable amount of protection from winter injury one year can provide little, if any, protection from another type of winterkill the following season. Furthermore, under some conditions a particular cover may exacerbate the winter injury, especially when warm mid-winter temperatures cause the turf to break dormancy early. Covers, however, have been very helpful for accelerating the recovery process this spring.

There is a lesson to be learned from the winterkill, that hopefully, you did not have to address this spring. Never assume that a new product that performs well one season, under one specific set of environmental conditions, will provide the same benefit year after year. In this case, a new type of cover material was generally accepted based on its performance over a few seasons at a few golf courses. No doubt it provided and will continue

to provide some benefit under certain conditions, as all covers do. The extensive dead turf under these covers at a number of courses, though, clearly indicates their inability insulate the turf from cold temperatures.

The same lesson applies when you consider the increasing number of miracle products being sold to courses across the Region. Change the biology of the soil with these microbes or this fertilizer and then make the water wetter with this device are just a few of the claims made people who generally spend much more money on glitzy advertising than research. A more conservative approach towards turf management is needed when the operating budgets are frozen or reduced. Insist on seeing the results of sound scientific research instead of a testimonial when it comes to using new products. As usual, if it sounds too good to be true...it probably is. 🌱

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