2006 A Season of Extremes

USGA

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It should come as no surprise that many superintendents across the Region found the 2006 season to be unusually challenging. Extended periods of hot weather and the ever increasing expectations from golfers for ideal playing conditions will test the fortitude of even the most knowledgeable and experienced turf managers.

The year could not have started any worse for courses located across the northernmost reaches of the Region. Heavy rainfall during late November of 2005 rapidly froze into a several inch thick layer of ice that smothered turf across low lying areas of golf courses. Several feet of snow covered the ice within a few days and snow provided enough insulation to maintain solid ice cover until mid to late March. Courses in localized areas of northern Minnesota and northern Wisconsin experienced as much as 140 days of continuous ice cover.

Needless to say, you can kiss *Poa annua* goodbye after 4 months of ice. Under these extreme conditions, even bentgrass was injured or killed where ice cover persisted the longest. Many courses were faced with the unenviable prospect of initiating an extensive recovery program during initial months of a relatively short growing season.

Just when significant progress was made regarding recovery, a month long stretch of heat and high humidity occurred from early July until early August. The combination of heavy play and temperatures well into the upper 90's caused a relapse of turf injury where seedling bentgrass and *Poa annua* had barely a month of growth and development under their belts. Drought stress, heat stress, and high temperature diseases, such as brown patch and Pythium blight, dashed any hopes of golfers experiencing consistent playing conditions during August and September.

The rest of the Region was generally spared winter injury, but not the stress associated with extended periods of hot, humid weather. Root systems of playing surfaces dominated by *Poa annua* die back in response to increasing soil temperatures. Nobody looks forward to the prospect of managing weak, shallow rooted turf for 6 to 8 weeks of heavy play when the hot weather arrives much earlier than usual.

Early hot weather will jump start insect pest populations. As a result, pests such as sod webworms, cutworms, and ants were particularly troublesome last season. On the other hand, earthworms tend to seek cooler temperatures and more consistent moisture deep in the soil during hot weather. Most courses experienced limited earthworm activity from July through August

until soil temperatures cooled down during September.

Many courses exceeded their annual budget for fungicide treatments before September. Unanticipated treatments needed to be made to control hot weather diseases such as Pythium blight, brown patch, and basal rot anthracnose. Dollar spot thinned out a great deal of turf across untreated green banks, tee banks and roughs during the hot weather. In fact, the persistent dollar spot activity was a surprise to all of us who expect the disease to subside once temperatures reach the 90's. Perhaps the disease complexes are adapting to global warming faster than us.

Fairy ring activity was a concern all summer. In fact, many courses across the country found fairy rings to be the most prevalent disease problem this season affecting both cool and warm season turf. Some treatments that suppressed the rings fairly well in the past did not provide an acceptable level of control last summer. Depending on the course, some classes of fungicides worked better than others. This should come as no surprise considering the variety of fungal species that cause fairy rings.

Warm fall weather extended the golfing season well into December for some areas of the Region. Winter play prompted the usual concerns regarding whether or not to re-apply snow mold fungicides. A few rounds of play won't have much, if any, impact on the effectiveness of systemic snow mold fungicide treatments. However, if a particular course relies heavily on contact fungicides for snow mold protection, then moderate play accompanied by a mowing operation or two during exceptionally mild December weather can be a concern. This was the scenario for several courses in Michigan during December and early January where spring flowers began to break dormancy adjacent to the sunny sides of buildings.

We can only speculate what the impact of warm December weather will have on the quality of turf come spring. Concentrated golf cart traffic across dormant turf will not be pretty. The area around heavily used hole locations will probably be thin and slow to green up. Whether or not the turf fully hardened off before the cold weather finally arrived will likely affect the potential for winter injury. Fortunately, most of the Region experienced significant snow cover just prior to the coldest weather of the winter so far. In fact, we can only be certain of one thing for the 2007 season...that it will bring new challenges.