**2006: A Season of Extremes**

By Robert Vavrek, USGA Agronomist

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 turf managers.

Last 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 four 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 90s 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 six to eight weeks of heavy play when hot weather arrives 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. 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 six to eight weeks of heavy play when hot weather arrives earlier than usual.

The quality of turf come spring. 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 green up. Whether or not the turf fully

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