## **USGA UPDATE**

## Ice and Snow Accumulations

By BOB VAVREK **USGA** Agronomist

Extreme temperature fluctuations and a lack of consistent snow cover across the upper Midwest have many superintendents worried about Poa annua survival on greens and fairways. The potential for winter desiccation injury to turf is high taking into consideration the droughty conditions during October and November last fall. To make matters worse, deep frost impedes water movement through the soil, making low lying areas of turf more susceptible to freeze/thaw injury following several midwinter rainfall events that have occurred in many areas of the Region.

Fortunately, turf had ample opportunity to harden off before winter. Samples removed from sites on greens that have a history of winterkill have, so far, greened up when taken inside and placed in a warm sunny site.

The late-February through early-April period, however, can be the time when turf on greens is exceptionally susceptible to crown hydration injury associated with freeze/thaw cycles. Recent storms have blanketed turf with a significant amount of snow. Make an extra effort to prevent snow accumulations in the immediate surrounds to greens from creating a dam that causes the water from melting snow and ice to accumulate across low lying areas of putting surfaces. As the weather slowly warms up, Poa annua will become increasingly susceptible to cold temperatures and crown hydration. Sometimes turf that managed to survive nearly the entire winter can be zapped by a cold snap in March.

Removing ice/snow from the surrounds along the primary surface drainage patterns off the green can be well worth the effort. Even a narrow channel can keep melting snow from transforming a green into an ice rink. Many superintendents remove snow from the front of the greens, but pay attention to secondary drainage patterns off the sides or back of the putting surface as well.

Should winter injury occur, feel free to contact the North Central office for information regarding the most effective and expedient ways to encourage rapid recovery. An onsite, TAS visit can be especially helpful to convince golfers to provide enough time for damaged turf to recover. Play, even light play, across damaged, overseeded turf can greatly prolong this process and possibly have an adverse effect on playing conditions throughout the season.

(Editor's Note: Bob Vavrek may be reached at rvavrek@usga.org or by calling 262-797-8743.)

## On The Road With The USGA By R.A. (Bob) BRAME, Director

The highlight of January travel was the Midwest Turf Expo in Indianapolis on January 6th thru the 8th. The winter weather made for good attendance and some interesting information was presented. The following points were made by various speakers. If you're interested in more information or in knowing who was the presenter, give my office a call.

Research on "Green Speed - Good, Bad and the Ugly," administered by Michigan State University has revealed that, on a given day from green to green, it requires a difference of at least eight inches in speed for golfers to notice. For touring pros a four inch difference is noticed.

Golfers seem to be content with a green speed of between

9 fi and 10 fi feet.

Involving the members at the course where the research was done, via survey input, seemed to help in achieving a reasonable balance between dependability/health and

Green speed was typically slower at 2:00 p.m. as com-

pared to 7:00 a.m.

Speeds did vary from day-to-day with the 9 fi to 10 fi window being the zone where most golfers were content.

If you've had problems with moles in the past check-out www.themoleman.com.

A great deal of research continues to be done with or concerning Heritage resistance. There are currently at least fifteen researchers working on this concern around the world. The take home message: Heritage is no longer a stand alone product. The suggestion was to alternate fungicides and tank mix Heritage with a material like chlorothalonil.

Low rate tank mixes of various fungicides (label permitting) may help address the amount restrictions with

2001 was the first year for Heritage resistance to gray leaf spot to show up in Indiana (Bloomington area).

In 2002, gray leaf spot disease was active from July thru

October in Indiana.

The tendency for gray leaf spot to start on the higher mowed rough and then move onto fairways, as has been common in the Mid-Atlantic states, doesn't seem to apply in Indiana or Kentucky.

The following is a good web site to check periodically through the season. www.btny.purdue.edu/turfcast.fcgi

We have just completed our annual mailing of Turf Advisory Service information to all golf courses in our database. If your course did not receive this information give our office a call. Course visitation is the foundation of Green Section activities; and as always, we look forward to a new season and working with your course.