

NORTH CENTRAL REGIONAL UPDATE

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I was asked to look into my crystal ball and discuss potential problems that superintendents in the North Central Region might encounter during the upcoming season. At first, issues such as cholorthalonil use restrictions came to mind or the steady westward march of gypsy moths and Japanese beetles across Wisconsin into Minnesota. However, I decided to discuss a more general concern, one that most of us in the upper Midwest tend to take for granted -- water.

The abundance of fresh water lakes/rivers, readily available groundwater, and over 30 inches of precipitation each year across Michigan, Wisconsin and Minnesota are the reasons why we rarely consider water to be an issue on the golf course as long as a relatively dependable irrigation system exists. Too little water or too much water (mostly too much), however, can have a considerable impact on the health of the turf and the quality of the playing surfaces.

Water impacts the golf course even before it is born. The presence of wetland habitat can limit the amount of land available for development at a particular site.

Protecting wetlands and wetland mitigation can significantly increase the cost of building a course. Only time will tell what impact, if any, the new Bush administration will have on wetland development and other environmental issues.

Once construction begins, the washouts and erosion associated with heavy rainfall events can throw a monkey wrench into the timetable for opening a course. One the other hand, a lack of consistent rainfall during grow in will hinder the germination and development of turf across slopes, mounds, in roughs and other areas that lack supplemental irrigation. Rough turf quality can be set back a year or more during a droughty grow in.

Water continues to be an issue after turf establishment. An increasing number of courses are experiencing the problem of moss encroachment on greens. The ability of moss to compete in turf is enhanced by excessively close mowing

heights, low fertility, and overwatered playing surfaces. Sometimes an extended period of wet weather causes a surge of moss growth, but most often it was related to too much irrigation and/or poor surface/subsurface drainage through or across the green. I see a few more home remedies in my crystal ball, but don't expect any long-term success regarding moss control until the grass is a little higher and the greens are drier.

Heavy rainfall events during the 2000 season caused some of the most severe bunker washouts I have ever encountered. I see more superintendents experimenting with new erosion control materials, such as Bunker Woll, in severely sloped cavities.

Experience will dictate how and where to employ these materials to minimize bunker erosion, but I doubt any material will be a panacea for erosion problems in all architectural styles of bunkers.

On a final note, I encourage everyone to have their irrigation water tested at least once this year. A number of reputable independent labs are available to determine pH, soluble sales, bicarbonates, and other characteristics of water that can, under some circumstances, have a significant effect on turf quality, especially during extended periods of drought.

Superintendents in the more arid regions of the country and those at courses where effluent water is used for irrigation will never take water quality for granted. The water is tested frequently and the steady buildup of salts near the surface greens during dry weather is constantly monitored. Sand based greens are subjected to long irrigation cycles at appropriate intervals to flush the accumulation of salts from the upper soil profile -- a stress that can cause injury to *Poa annua* playing surfaces.

Salt accumulation is not a common problem at courses in the upper Midwest because the frequent thundershowers that occur throughout the summer provide a natural flushing action through a green. On the other hand, the unusual weather patterns over the past several years have provided the type of conditions where damage to greens from excessive salts did occur at several courses. Damage that could have been prevented by simply testing the irrigation water and monitoring the soil profile with an inexpensive conductivity meter during periods of hot dry weather. Feel free to call the North Central Regional office in Wisconsin (262/797-8743) for information anything you may encounter during the season.



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