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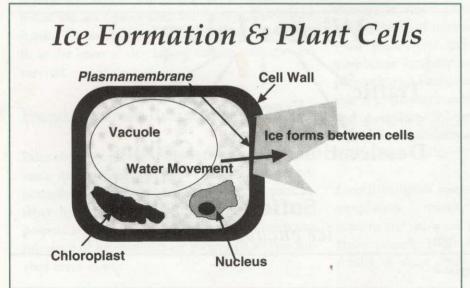
Physiology of Turfgrass Freezing Stress Injury

by Frank S. Rossi Cornell University

Through the years, golf course management has been impacted by the introduction of various technologies. Technological advances have enabled golf course superintendents to maintain higher quality turf and playing conditions than could be expected if technology was unavailable. Does it follow then that technology gives us control?

The answer is different depending on the context in which the question is asked. Surely, mechanical and chemical technology have provided useful tools for achieving superior putting surfaces. Still, when it comes to the various aspects of winter injury on northern golf turf, the last few winters have demonstrated the harsh reality of how precious little we control.

Recent devastating losses from winter injury have revitalized interest in this otherwise neglected area, as evidenced by the number of articles in popular trade magazines, conference topics and university research programs. Minimizing turf loss in winter requires improved comprehension of the



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