Field Tips: Winter Turf Injury in Coastal New England

by Larry Pakkala, CGCS
Woodway Country Club

The winters of 1993 and 1995 in the northeastern United States were severe to say the least. Turf managers at the finest golfing facilities struggled to repair damaged turf (mostly Poa annua on putting greens) to open their courses for the season. To compound the problems, we had unseasonably cold temperatures until the end of May, making seed germination next to impossible. Superintendents tried all kinds of tricks and trades to facilitate turf recovery before summer’s onslaught. It was almost comical.

The ice that had formed beneath the snow was a condition many of us had never faced. When the ice melted, the effects of crown hydration were not at first apparent. But seven days later—WHAMMO! Large areas of Poa annua had died from crown hydration on greens once covered by ice.

What We Learned

If at all possible, do not let surface ice form on greens. There is some thought that snow removal is not necessary; however, in my experience it is extremely beneficial. The key is not the snow cover itself but ice that forms underneath as a result of rain following snow. Ice forms because water from rain and melting snow cannot drain through the already frozen surface. Our practice is to remove by squeegee any surface water that puddles before it freezes—a labor intensive practice, perhaps, but better than having to repair damage resulting from crown hydration. The USGA Green Section strongly recommends installing subsurface drains to low areas of greens where water collects. Additionally, installing a short piece of pipe to the surface with a cover speeds water drainage during the winter. When the threat of freezing has passed, simply replace the surface pipe with soil and sod and install a metal plate 4 inches under the sod to allow easy location the following winter.

Larry Pakkala, CGCS, has been the property manager at Woodway Country Club in Darien, Connecticut, for 15 years. He received his degree from Pennsylvania State University. He has served as president of the New York Metropolitan GCSA and the Tri-State Turf Research Foundation (New York, New Jersey and Connecticut).