Winterkill is a general term that encompasses all stresses that may damage turfgrasses during the winter period. It is important to properly diagnose the specific cause of winter injury in order to implement the appropriate practices that will minimize a potential reoccurrence in future winters. Seven types of winter stress are summarized in the accompanying table. Low temperature kill and winter desiccation are the most common winter stress problems. The low temperature pathogens that cause snow mold diseases are additional major winterkill problems and will not be discussed in this particular article.

Low Temperature Kill. Both cool- and warm-season turfgrass species are subject to severe injury caused by low temperature kill. The extent of injury relates to the size of ice crystal formation within the plant tissues, which results in mechanical damage to the living portions of cells.