

Winter Injury by Snow Mold Prevented by Fungicide

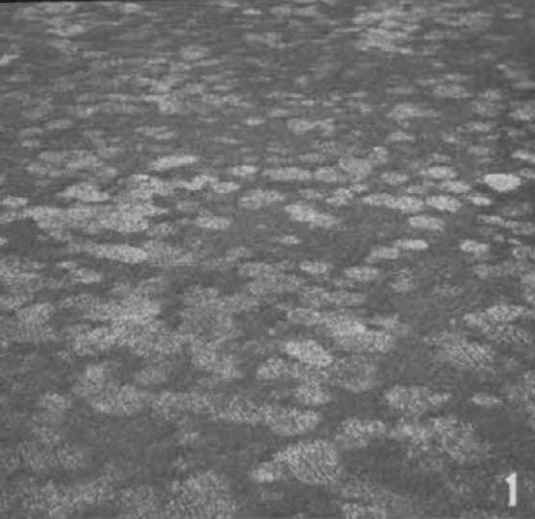
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There are three principal types of winter injury on bent grass putting greens, snow mold, wind burn, and water damage. Injury usually comes in the spring when the snow melts, but may happen during mid or late winter thaws.

Snow mold is caused by a fungus which flourishes at low temperatures. Snow furnishes the moisture required by all fungi for growth. In that respect the name is a misnomer. Heavy rains in winter or early spring bring snow mold when conditions otherwise are favorable for growth of the causal organism. Wind burn and water damage will be described and illustrated next month.

Grasses differ in their susceptibility to snow mold. Seaside is very susceptible, but Colonial, Washington, and some of the other vegetative strains are more resistant. Many Canadian clubs use New Zealand bent or brown top, which is a Colonial type, for that reason.

Anything which keeps the green excessively wet, such as poor surface drainage, protective coverings of straw, manure, etc., and excessive amounts of peat or other types of humus in the surface soil accentuate snow mold by keeping the turf wet. Likewise, late fall fertilization with soluble nitrogen, or excessive amounts of nitrogen in the fall aggravate snow mold. The deadline for fall fertilization should fall between September First and Fifteenth. The effects of nitrogen should be spent before winter starts so the turf hardens-off in late fall. Snow mold is sure to be bad, and hard to control when the grass is green, leaf blades are lush, and turf is in active growth when covered with the permanent winter blanket of snow. There is evidence to support the contention that excessive soil acidity promotes snow mold. The effect is probably indirect. Strong acidity makes the grass less vigorous. Weak-



1. A heavy infestation of snow mold on Seaside Bent green. Spots typical and moderate in size. 2. Severe example of snow mold on mixed bent green in Winnipeg. The large spots have been spiked to help recovery by breaking surface scum. 3. Calomel-corrosive mixture applied in late fall at 4 ounces per 1,000 square feet prevented disease on this Seaside bent green in Ottawa, Canada. Picture taken to show line where treatment stopped. 4. The four PK (phosphate-potash) plots got no nitrogen. Calomel-corrosive mixture (Calo-Clor) applied at 1, 2, 4 ounces per 1,000 square feet. No snow mold on treated plots, or