Safeguarding Against Damage by Winter Wind and Moisture

Snow mold is the commonest and most widespread cause of winter damage on greens, but in some years severe injury results from windburn or excessive wetness. Turf recovers in the spring more slowly from windburn or excessive wetness than from snow mold.

Windburn and desiccation injury are the same thing. One designation refers to the cause and the other to the effect. Windburn is most common in areas of low precipitation, but is not uncommon elsewhere during dry spells in winter, or in an unusually dry and windy spring, such as 1948. Injury occurs on exposed windswept areas and is worst on slopes facing toward the direction of the prevailing wind. Grasses like velvet bent, Washington, and other strains that produce a tight, closely knit turf, resist windburn best. Open textured grasses fare worst.

Some of the winterkill of Bermuda grass in the dry and windy regions of the Southwest is from windburn, rather than from low temperature as is commonly supposed.

The plant tissues of windburned turf is dried out excessively by the high winds and dry weather. Turf recovery in the spring is necessarily slow because the only growth is from the odd bud on a surviving node or joint of a grass stem.

The common method of preventing windburn is to use tree saplings or branches to collect and hold snow on the green. The saplings are scattered around the edge or over the green in late fall.

Several courses in Oklahoma and West Texas have used water to prevent windburn on Bermuda fairways. One course in southeastern Colorado did the same thing on exposed windswept greens. They drenched the turf thoroughly with water several times during winter. This method is said to be highly successful in those regions.

Reseeding damaged spots in spring is not successful unless the dead grass is removed, or the area is spike-disced enough times so the seed makes contact with the soil.

Injury from excessive water occurs during an unusually wet winter or early spring. Bad damage is likely when the soil stays saturated for several weeks or more. Low spots of standing water, and narrow surface drainage ways are the places where grass kills badly. Grasses which make tight turf are injured most.

On many courses in Canada, drainage trenches are placed in the greens in late fall to speed surface run-off of water from melting snow and from continuous rains. The sod is lifted and placed alongside the green. It is replaced in spring, none the worse for the lifting. Enough soil is removed from high spots along the trench so water flows away from the pocket freely. The soil is put back before the sod is replaced in the spring.

Areas where grass is killed are repaired in spring by resoding from a turf nursery. The other method of seeding is necessary sometimes, but is slower. All dead grass must be raked out before seeding.

Upper left: Windburn injury on high exposed knob on a bent grass putting green. Middle left: Tree saplings scattered on green to collect snow for winter to prevent windburn. Lower left: Saplings on green effectively hold snow for winter protection. Note exposed turf on uncovered approach in foreground. Upper right: Damaged bent grass from excessive wetness on low spot in green. Middle right: Drainage trench on putting green to prevent water from standing on green in winter. Lower right: Close-up of winter drainage trench on green showing sod and pile of soil alongside green.