

Winter Golf Not Worth the Cost

University of Nebraska–Lincoln Turfgrass Science Program | turf.unl.edu

Winters in the Northern Great Plains can be two-faced with days below zero and days in the mid-60s F. They can be snow covered or bone-dry. The temperature swings and dry conditions in 2014 and 2015 led to widespread winterkill on many of the region's golf courses. Winter play can further intensify damage. Does a relatively small increase in winter revenue outweigh the cost of winter injury?

What's best agronomically?

It's very simple; golf should stop before the turf stops growing during late fall. Turfgrass plants recover from traffic (cart, foot, ball marks, and divots) through active regrowth. Concentrated winter traffic on greens and tees stresses turf plants and makes them more susceptible to winterkill when cold temperature return.

Concentrated cart and foot traffic around tees and greens are often seen the following spring.

Traffic on wet soils or partially frozen soil also increases compaction. Winter freeze-thaw cycles help alleviate summer compaction. Winter traffic reduces natural compaction relief and negatively impacts turf performance during the summer.

While dry and unfrozen conditions may seem like a better occasion to allow winter play, these conditions are especially challenging because they dehydrate the turf. It reduces the plant cold-hardiness and can lead to death when cold weather returns. Many golf course superintendents fight winter desiccation with light applications of winter watering. Concentrated traffic accelerates turf dehydration, increases water requirements, and increases the risk of winterkill. It is analogous to playing golf on turf that is never watered during a summer drought.

Potential for winter revenue

From an agronomic prospective, winter play should be restricted or banned to maximize turfgrass health and survival. The counter argument is that winter play increases revenue during a slow time of the year. It can also bring new clientele to a facility when other courses are closed for the season.

Golf course managers need to carefully weigh the potential for winter revenue with winter turf injury. A small increase in winter revenue likely won't offset the cost of damage. This is especially true when winterkill is widespread the following spring.

Winterkill recovery expectations

Re-establishing turfgrass in spring is extremely difficult because the soil is cold and the weather isn't ideal for seedling growth and recovery. Traffic from spring golf also slows recovery. Under ideal conditions, expect winterkill to linger until mid-summer or longer.

Summary

The thought of increased revenue during winter can be very tempting. However, damage from winter play frequently dwarfs the small increase in revenue, especially at courses with a history of winterkill during spring.

Authors: Bill Kreuser, Assistant Professor, Department of Agronomy & Horticulture, University of Nebraska–Lincoln.



Figure 1. Winterkill on a green where foot traffic was concentrated leading to the tee box for the next hole.