Frost, Firewood, Spike-Free Footprints and Winter Putting Conditions

by Mike Huck USGA Agronomist

While most northern courses have closed down, southern courses are growing in their winter overseeding. Everyone soon will be hearing those famous winter comments: "What do you mean we can't tee off until 9:30 am?"; "Can't you just turn the sprinklers on and melt the frost?"; and "But the thermometer at the bank down the street said 36 degrees--that's not freezing!" Yes, it's the frost season again.

It is sad but true that many golfers do not understand the importance of allowing greens to thaw before play begins and, even worse, do not appreciate the long-term consequences caused by placing concentrated traffic on turf that is not actively growing. Since turfgrass leaves are composed primarily of water, the entire plant (internally and externally) can rapidly freeze when temperatures drop. Comparing a grass plant's leaf to a paper straw filled with water provides a simple and graphic illustration of this point. While an unfrozen straw would flex under pressure, a frozen straw would snap in two, damaging the tissue.

The frost is a great time to encourage cutting some firewood to warm your greens. When the sun is positioned low on the horizon, long shadows cast by trees shading eastern and southern exposures have significant impact on how early greens thaw and become playable. Golfers and club officials are probably more likely to approve tree removal in order to avoid delaying starting times than for any other reason imaginable. Reducing early morning shade not only melts frost and gets players on the course earlier, but also helps maintain warmer soil temperatures improving winter and spring growth.

Additionally, scientific evidence shows that early morning sunlight on greens is extremely important to grow healthy turf and deep roots. Compared with greens growing in cleared areas, those in shaded surroundings are much slower to respond in spring and often enter summer in a weakened state.

It does not matter whether you are in Denver, Phoenix or Los Angeles, traffic damage during the winter months when growth and recovery are limited can be devastating. The thinning and compaction caused by concentrated spike traffic during cold weather can require many weeks to heal when conditions again become favorable for growth. Consequently, a great number of courses that I visit in the Denver and Salt Lake City areas have banned metal spikes, at least through the cold season. This is done because of the obvious improvement in turf quality spike alternatives offer, and once players witness firsthand the improvement in putting quality through the winter, the program is often continued year round. The results have been so dramatic at neighboring Denver courses that municipal facilities, like those operated by the City of Aurora, have gone spikefree, too! In fact, the spike-free movement is so strong in Colorado that the Colorado Golf Association requires contestants to wear spike alternatives in their events throughout the year.

So, if your golfers are interested in getting on the course earlier in the morning and improving winter and spring playing conditions, I have two suggestions: cut some firewood to warm the greens and make your footprints spike-free.

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