## USGA FORE THE GOLFER



## **Frost Delays**

January 2014

\ \ \ / hat is the justification for frost delays?

Frost is essentially frozen dew. Ice crystals visible on the outside of the plant can also form on the inside of grass blades. The grass plant, normally resilient to footsteps or cart traffic, becomes brittle and fragile when ice crystals form. Under the pressure of traffic, ice



crystals puncture living plant tissues and rupture plant cells. Damage will not appear right away, but it will show up in footsteps and tire tracks the following days as the plant is unable to repair itself and begins to die. Frost damage can occur on any turfgrass mowed at any height but it is amplified when the plant is mowed low, as on a putting green. In a best-case scenario, damage will be limited to leaf blades only, which will eventually disappear once active turf growth resumes. However, if the plant crown, or growing point of the plant, is compromised, damage will be more severe and recovery could take months.

Keep in mind, a foursome typically takes several hundred footsteps on each green, so even allowing just a few groups to play when frost is present can be very damaging to the greens, and the rest of the golf course for that matter. It is not completely understood when frost will cause damage, so the decision to keep traffic off the golf course must be made conservatively to protect the condition of the course. For this reason, golf facilities are wise to close the course to play or delay starting times until frost has completely melted.

## **Useful Resources:**

Frost Delays Video (English) Frost Delays Video (Spanish)

