



**City of Sunnyvale  
Department of Public Works  
Parks Division  
INFORMATIONAL BULLETIN**



**FROST DELAYS AT GOLF COURSES  
Why Are They Necessary?**

Frost occurs when the soil surface is 32°F (0°C) or below, causing dew to freeze on turf. The ice crystals that form are lovely to look at, but they are also the most serious hazard to the health and appearance of turf during winter months.

Frost by itself doesn't necessarily cause damage to turf. However, when weight is applied to frosted turf in the form of foot or vehicular traffic, damage occurs. The frost transforms turf from a soft, springy surface to a fragile, brittle surface that cracks when pressure is placed upon it.

Golf cart traffic on frosty turf results in damage that appears 2-3 days later. Walking on frosty greens also produces foot shaped patterns of brown, dead turf. In both cases, turf is slow to recover, leaving unsightly brown areas for weeks or even months.

Frost is usually an early morning problem that is relieved once the sun comes up and air temperatures rise. Once frost crystals melt, turf is safe for foot and vehicular traffic.

There is really only one way to avoid frost damage and that is to avoid all traffic—golfers, carts and maintenance equipment—until it has melted.

Early morning irrigation can help speed the melting process, but unless air temperatures rise sufficiently and all of the leaf and stem tissues are unfrozen, the best policy is to delay golf and maintenance operations until all signs of frost are gone.

Information provided by: PACE Turf [www.paceturf.org](http://www.paceturf.org)

*For additional information on Sunnyvale Golf Operations, call (408) 730-7625.*

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