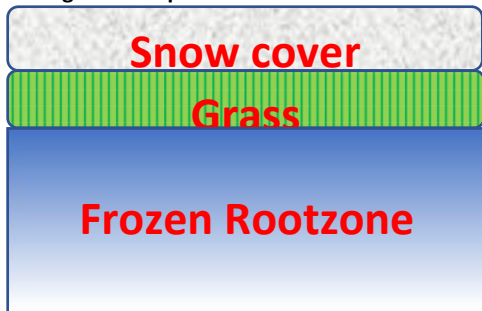


Dealing with a rapid thaw...



Dealing with a rapid thaw is perhaps one of the trickiest management situations in sports turf.

At some point during a thaw after a prolonged period of hard frost and / or snow cover, there will be a perception that the snow / ice / frost has 'gone' and the surfaces are 'acceptable' to play on.

The worst-case scenario is one where the rapid thaw is accompanied by rainfall. This often happens when a dominant, cold temperature, high pressure system is replaced by a mild, south westerly-based, low pressure. The latter is usually associated with rain.

Regardless of whether you have snow cover lying over frozen ground, the dynamic is the same.

Fig 1. - The rain will fall onto the frozen grass and rootzone and dependent on the type of rootzone (sand, loam, clay, mixture thereof), it will soon transition into a state where the surface layer of the rootzone begins to thaw over the top of a deeper, frozen layer.

Fig2. - The upper layer will become mobile as it thaws and at this stage it is at its most susceptible to damage from foot traffic. Play at this stage will have a deleterious effect. Under concentrated wear, the unstable, upper zone will shear the grass at the root and turn the surface layer to a mix of grass and soil. Affected areas will be damaged and not recover until the spring. It is also worth mentioning that when the upper layer is fluid, it is very easy to slip and fall onto frozen ground causing harm. It is a clear health & safety hazard and especially on sloped surfaces.

Fig 3. - The other issue is that the rainfall will not be able to drain through the profile because it is frozen and so will accumulate on the surface causing flooding. The heavier the rain, the more significant the flooding.

Once the thaw has reached a depth where the surface is stable under traffic, then damage will be limited. This will often be indicated by water being able to drain through the profile. It must also be remembered that areas of shade may take longer complete this process as the frost will have penetrated deeper.

Patience is a virtue during this process.

