Tips for Athletic Field Care

*Dr. Dave Minner**

Use higher than normal seeding rates. In most cases, facilities are needed for play before seeded grass has completed a full year's growth. Higher seeding rates allow for faster ground coverage and provide better competition with weeds, especially crabgrass. Higher than normal seeding rates that provide faster coverage are Kentucky bluegrass 3 to 4 lbs/1000 sq. ft., tall fescue 8 to 12 lbs/1000 sq. ft., and perennial ryegrass 10 to 15 lbs/1000 sq. ft.

Deeper seeded grass that is able to germinate survives traffic better. Drill seeding and seeding after hollow coring is preferred. Plants that develop crowns deeper in the soil are more protected than those that are on top of the soil and are easily damaged.

When renovating, keep existing turf if there is at least 30 to 50% grass cover. Mature grass plants, even a thin stand of grass, have better traffic-tolerance than a thick stand of seedling turf. Unless there is good reason, avoid nonselective killing of grass in high-traffic areas. Keep the grass you have and overseed with coring and slicing to fill-in bare spots.

Use a combination of nitrogen sources. Quick release in the fall, slow release in early summer, and organic nitrogen in the spring or summer.

Use equal N and K for traffic and drought tolerance.

Always ***have at least one showcase field***. Reallocate resources so that you have at least one field that lets you boss and the public know that you are capable of producing quality turf when given the proper resources and control of the field. Even if resources are limited, don't spread them out so that all your fields are average-to-poor or your reputation as a grounds manager may be perceived as average-to-poor. Document what it takes to have at least one good field, and use the information to justify an increase in resources to improve the rest of the fields that are in poor condition.

Build ***a repertoire of instant solutions*** that you can count on in time of need. For example, thick-cut sod, pre-germinated

Continued on page 18

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Continued from page 12

seed, water removal products, smoothing and rolling. Like any good ball team, you should practice these procedures before you try in game situations.

SOME COMMON MISTAKES

Non-irrigated areas

Using 100% ryegrass for fall repair of summer "burn out". Each year you will be doing the same thing over and over. Continue to use the ryegrass but add 30% Kentucky bluegrass, especially those from the low-maintenance and drought-tolerant categories.

It is a mistake to anticipate that tall fescue can be used as a substitute for an adequate irrigation system, especially on soccer fields where a smooth ball rolling surface is desired. Even with its excellent drought and traffic tolerance tall fescue's bunch habit can cause a clumpy and uneven playing surface when water is lacking and traffic is intense. Should clumping become a problem, interseeding with more and temporary watering with a portable rain gun will be needed to regain adequate turf density. If Kentucky bluegrass and perennial ryegrass have failed because of limited water then give tall fescue a try. The key point here is not to discourage you from using tall fescue, but instead to encourage you to provide at least temporary irrigation. Watering as little as five times during the summer may be sufficient to maintain an adequate stand of tall fescue.

Close mowing and heavy nitrogen applications of any non-irrigated turf, especially Kentucky bluegrass. This combination of mowing, watering, and fertility is the best way to predispose Kentucky bluegrass to summer patch and loss of turf during summer drought dormancy.

Irrigated areas

Over watering – too much, too often, too shallow. As a general rule, turf should be allowed to slightly wilt before irrigation. At this stage of the wilting, soils are well-aerated because air has replaced the water that was removed from the soil pore space by the roots. Roots need water to grow, but they need air-filled pore space. Excessively wet soils become anaerobic and have a distinct sulfur odor of rotten eggs. Root growth is poor in anaerobic conditions. Allow the turf to slightly wilt and then apply about an inch of water. Wait until the turf just begins to wilt before watering again. About 1.0 to 1.5 inches of water per week is sufficient for sand-based fields. Sand-based fields may require more frequent watering.

Mid-day watering of grass. This increases humidity and free moisture near the plant that results in increased disease.

No plan for watering the skin on baseball/softball fields. Don't forget to install separate heads and valves for watering just the infield dirt. Don't place the heads so that they water both the dirt and the grass. Watering the skin portion of an infield is just as important as watering the grass. A separate station is needed for watering the skin infield because it is managed differently than grass.

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