Formula for success: (1) safety; (2) playability. Keep your priorities straight, and the field will follow.

by STEVE & SUZ TRUSTY

Safety and playability should top your list of field priorities. Assess past problems, and develop data on water movement on and from the field surface.

Football only starts in the fall from the fans' perspective. For the sports turf manager, football field preparation and maintenance is a year-round job. Demands are increasing for both game and practice field time. Football facilities usually must share space with soccer, baseball, bands, concerts, and other events. Proper field preparation entails bringing turf to optimum levels so it can stand up to the stress and maintain season-long playability.

Steve Wightman, stadium turf manager for San Diego's Jack Murphy Stadium, says, "The biggest difference between sports turf management and other areas of turf care is that our prime concentration is always on athlete safety and field playability. The optimum agronomic conditions for the turf and aesthetic appeal of the field take second place."

Sports turf managers must know their own field conditions, have a good understanding of agronomic principles, keep up with the latest advances in turf-related technology, observe other fields and exchange information with other turf professionals, and keep detailed records of their own field maintenance procedures, including timing, weather-related influences and results.

On top of that, maintenance procedures must be "worked into" the small windows of opportunity allowed by heavy field-use schedules.

Tom Lujan, stadium turf manager of Denver's Mile High Stadium, stresses that planning and communication are the keys to success. Coordinating the grounds care staff with field user groups allows essential procedures to be scheduled around activities.

And all this must happen within the constraints of available time, money, equipment and personnel.

Eight tips

1) Know your fields. Some sports turf managers have had the privilege of helping design and develop state-of-the-art game and practice fields. Others have inherited decades-old established facilities. Whatever the situation, maintenance procedures must be based on your field conditions. The more you know about your fields, the more comprehensive your program can be.

2) Do some digging, literally. Take soil test samples from multiple sections of your game and practice fields and have these samples analyzed by a competent lab. Assess not only pH and nutrient levels, but also the soil profile breakdown.

3) Study construction, reconstruction and/or renovation plans, if they are available. Do some probing to verify for yourself whether subsurface materials, drainage and irrigation systems correspond with existing records. Develop an up-to-date plot plan of each field, noting dimensions, elevation changes, soil type and the depth of various layers, including any changes in soil profile within portions of the field, the sub-surface drainage and the ir-
to determine how effectively turf development of the roots. Note abilities govern when and how these variations are related to maintenance programs will whether changes in the current soil nutrients are being used. turf samples for tissue analysis condition and the length and snow accumulation patterns weather regions, track “normal” temperature and humidity variations between segments of the field and how these variations are related to the conditions already tracked. If your budget will allow it, send turf samples for tissue analysis to determine how effectively soil nutrients are being used.

7) Identify problems from past seasons and determine whether changes in the current maintenance programs will help alleviate those problems. Because football is played “in the turf,” often concentrating action in specific areas, compaction is a continual problem. Pre-football core aeration traditionally begins as early in the spring as other field use allows. Budgets, temperatures, grass types and irrigation capabilities govern when and how frequently core aeration can be used. Some stress can be alleviated with additional aeration only on the game field, or only between the hash marks of the football fields.

Topdressing is most effective when used in conjunction with core aeration. When necessary, field soil profiles can be modified gradually by removing cores and topdressing with the desired media.

8) Assess the grass types and varieties in use and analyze their performance under field use conditions. Check out alternatives, compare performance at test sites and at other sports fields with conditions and programs similar to your own. New grasses generally are tested on a practice field, or portion of a practice field for at least a season before a complete change is made. These “experiments” usually start in the early spring.

Heavily damaged and thinning fields also will be overseeded, sprigged or sodded as early as possible, frequently following the first aeration of the spring or summer. Cool-season fields also may be overseeded with perennial ryegrass or a ryegrass/bluegrass combination just prior to the beginning of the football season, and weekly throughout the season. Players then “cleat in” the seed so it’s in place for germination as conditions warrant.

Fertilization programs are adjusted according to specific turf needs, but generally, nitrogen levels will be kept sufficient to support sustained, steady growth while avoiding any flush of rapid, lush growth. Potassium levels will be increased to improve plant hardiness, both for the rigors of play and the approaching colder weather. Phosphorus levels may increase in conjunction with overseeding.

Turf color may be “perked up” a touch on the game field with an application of a liquid nutrient “package” or chelated iron a few days before the season opener.

Mowing heights that have been moved up gradually during summer’s more limited field use are gradually moved back down to game levels prior to the start of the season. Mowing frequency which also may have been reduced during the summer returns to play schedules. Mowing must fit into the multiple pre-game practices and the irrigation and field painting schedules.

Irrigation timing and amounts are critical to seed germination and turf rooting. For seedlings, frequent, light irrigation is needed. On established turf, less frequent, longer irrigation periods encourage deep rooting. On fields with thick, well-rooted turf, compaction can be reduced somewhat by keeping moisture levels toward the dry side during practices and play. But fields can’t be so dry during use that the turf is stressed.

**Cut the stress**

Safety and playability should be tops on everyone’s list. Work with field users and plan field use to move some practices to the outer sections of the game field, to a practice field, or even to the outfield section of the baseball field.

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