Managing soccer fields

BY KEVIN I. MEREDITH

With the huge increase in popularity of soccer in the United States, there is a corresponding increase in the demand for quality fields. This trend is reflected at all levels of play: youth, club, municipal, high school, college, and professional. Each level has a different expectation of field conditions but all have the same need, safe playing surfaces.

Building and maintaining quality fields requires a considerable investment of both time and money. There isn’t much sense in building a $250,000 field if you are only willing to spend $10,000 a year to maintain it. It takes creative thinking, continuing education, networking, and an understanding of the local political process to acquire the funds you need to produce and maintain quality fields. How these funds are used and the results produced reflect your management abilities.

One of the goals of management is to produce the best results possible with the resources available. In order to ensure that this goal is accomplished it is essential that a maintenance plan is developed. This plan is the basis for determining what procedures are used and when they are implemented. It does not have to be a book; it can be just a general outline used for guidance. It is also a great tool at budget time, a dual-purpose document used to schedule work and gauge costs.

When developing a maintenance plan for soccer fields there are specific areas that require extra attention. They are the goalmouths, center field spot, penalty spots, corner kick areas, referee runs, and the bench areas. There are two types of damage that occur at each of these areas: compaction and abrasion. The amount of damage done to each area is relative to three things: initial health of the turf, weather conditions, and player impact.

Where the action is

By far the area that needs the most attention on any soccer field are the goalmouths, which are subjected to both abrasion and compaction. The goalie is very much like a caged animal, pacing back and forth in the same area pawing the turf and compacting the soil. It is the repetitive nature of the activity that causes the damage. As the soil becomes more compacted the turf’s ability to resist abrasion is decreased and is more susceptible to damage. With this in mind any maintenance activity that relieves compaction will greatly increase this area’s ability to resist abrasion. The frequency and intensity of compaction relief is relative to the amount of play this area receives.

There are several strategies that can be employed to reduce compaction and extend the effective life of goalmouth turf. One is to not allow any practice or greatly limit the amount of practice allowed in the playing field goal areas. This can be...
accomplished by moving the goals forward on the fields or to the sidelines for practice. Another is to have a separate set of goals that can be setup at various areas of the field for practice. This will work if you have the support of the coaches and athletic directors. It is important that the end users understand the necessity for reducing damage to the goal areas. It is your job to educate them and enlist their cooperation in helping produce better playing conditions. They will respond in a positive manner when they feel that they are part of a management plan that includes them.

The next thing that can be done is continuous compaction relief. This can be accomplished with simple hand tools or mechanical aeration equipment. The hand tools used can be a spike plate, a manual core tool, or a power drill with a masonry bit. Each of these will work in the limited area of the goalmouth and do not require a huge investment in either labor or equipment. If mechanical equipment is available it can also be used as needed.

It is a good idea to top seed the area after compaction relief. Broadcast the seed by hand and apply light topdressing that is lightly raked in. This procedure allows a constant renewal of plants in the damaged area (be sure to use the same type of grass seed that the fields are grown on). This will insure a uniform color and texture along with not introducing a species that has different growing characteristics and may create problems in the future.

The most drastic procedure for repairing the damaged turf is resodding. If you have the support of the turf manager or the National Soccer Hall of Fame, you might be some color difference but not like new sod on an old field. The ideal situation is to have a small sod patch on site that is maintained like the fields. When sod is needed it is harvested and used. If grown on plastic with a bed of sand it can be cut and peeled very easily, no sod cutter required. There must be some drainage through the plastic or the water will stay and rot the turf. This method beats running to the sod farm a couple of times a year for fresh sod. There might be some color difference but not like new sod on an old field.

The thickness of the sod makes a difference on how well it stays and how soon it can be played on. Thicker sod (at least 2 inches) stays in place better and can be played on sooner. The most critical part of using sod for repair is keeping it watered after it is installed. If you don’t have water available your success with sod may be limited.

The procedures used in the repair of the goal areas can be used in all other damaged areas. It takes very little effort to effort to maintain the areas susceptible to damage rather that having to do major repairs. A maintenance plan takes into account the procedures needed to prevent damage and the required time it takes to implement them. It also takes into account all other maintenance operations associated with the production of quality turf. These include water, soil conditions, pesticide use, mowing practices, and a clear understanding of who is in charge of implementing the plan.

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