

GETTING BACK TO BASICS

By Jim Hermann, CSFM

By this time of year New Jersey sports field managers are patiently awaiting conditions which allow them to start infield preparation for the spring baseball and softball season. They are checking their arsenal of specialty products to be sure inventories are at their peak.

The sports field manager needs to know what product dries up the puddles, what product firms up the base paths and maybe what products can get him or her through the fifth inning of an otherwise rained out game. These products are all effective tools at the disposal of the sports field manager and a thorough understanding of these materials is essential. In addition to these tools, the most useful and effective tool available to the sports field manager is the site specific experience and basic understanding he has for his fields.

Experience dictates which fields to watch for the perpetual problems of the game and the problems brought about by rain and other environmental conditions. One field may hold water at 3rd base due to a lip buildup. Another field may require attention because water inevitably funnels down the base paths and washes them out every time it rains.

Only the experienced sports field manager can predict with certainty the day to day challenges of each infield. Only the experienced manager can react to these predictable problems and maintain the infields in a safe and playable condition with some degree of effectiveness.

A primary challenge to every sports field manager is to use the experience and understanding gained over time to manage his infields in a "proactive" rather than "reactive" manner.

Many fields have perpetual problems. These problems can be caused by poor design, poor construction or years of improper maintenance. By identifying these problems and correcting them the sports field manager can minimize the day to day maintenance requirements of an otherwise difficult infield.

In some situations it may not be a case of poor design; it might just be that another design would be more efficient. An example of this would be a baseball infield with the baselines running down the middle of a 6.0-ft base paths. When designed in this fashion, only 3.0-ft of skinned area lies between the baseline and the turf perimeter. Aggressive play inevitably causes a buildup of material on the outside of 1st and 3rd base in the turf. With this buildup of material in the turf comes a depression in front of the base. This situation has the potential to cause water to pond in these areas. The "reactive" manager can get out on the field early and utilize the most effective products and procedures to transform an otherwise unplayable infield into an acceptable condition.

The "proactive" sports field manager on the other hand has dealt with the problem before the season began by making some basic adjustments. He may have realigned the baselines to favor the inside of the base path by positioning them closer to the inside turf perimeter or he may have constructed a radius around the 1st and 3rd bases which allows a groomer to pass to the outside of the base paths. In any event, the objective is to allow more distance between the bases and the turf perimeter. At a minimum he removed the lip to allow positive surface drainage to help manage potential water problems.

Many of those involved in the planning stages of a new field desire their own little Yankee Stadium. They want no more a than a 0.5% slope extending from behind the pitchers mound in all directions. They may desire a mix that is 60% sand and 40% silt and clay because someone said it works for them. They may even go to the expense of a complete gravel blanket under the infield to help evacuate surface water that ponds within the infield when positive surface drainage is not maintained.

For some, this might be the perfect infield. For others it can evolve into a maintenance nightmare. It is the opinion of many, myself included that a 0.5% slope is not sufficient to evacuate water from a moderately maintained infield skin. It requires more intense maintenance than a 0.75 or 1% slope. A 0.5% slope is not sufficient to effectively evacuate surface water from a turf infield constructed on a heavy textured soil. Turf Infields constructed with less than 1% slope rely heavily on internal drainage characteristics consistent with a lighter textured soil, a bypass drainage system of an effective design or both to efficiently evacuate surface water.

Unless the infield skin is watered on a regular basis, the 60-40 mix will more than likely turn to hardness similar to that of concrete. If the mix happens to contain more than 10 or 15% silt this infield mix could have the potential to become mucky when overly wet and extremely dusty when dry.

Although typically not a negative influence, the gravel blanket under the infield skin will be extremely inefficient in the evacuation of surface water, even though it is an effective means of managing a high water table beneath the infield. The proactive sports field manager will educate himself, start with an effective design and take the action necessary to manage and maintain the playing field in a safe and playable condition.

It has been my experience that a very difficult challenge to the sports field manager is to adapt design or reconstruction criteria to site specific conditions. An infield with a slope that radiates outward from a center point in the vicinity of the pitcher's area could be more expensive and more problematic than an alternative design, depending on site specific conditions.

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