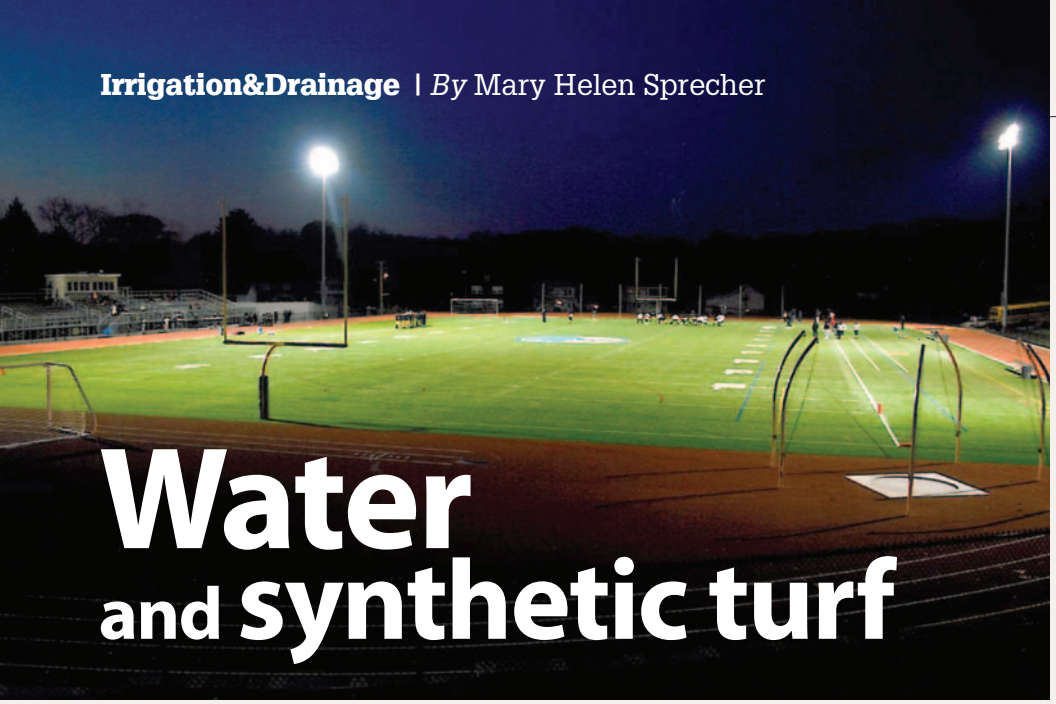

Water and synthetic turf

JUST ADD WATER.

Sounds easy, doesn't it? In fact, it almost sounds like a no-brainer. In reality, caring for a sports field is far from simple. In this case, one doesn't 'just' add water. Irrigation requirements for natural grass are completely different from those for synthetic turf. They serve a different purpose, use a different schedule, and vary widely, depending on a variety of factors. We'll discuss the requirements for natural fields another time, and for now, turn our discussion to synthetic turf fields.

Synthetic turf fields that are kept up with regular irrigation (typically referred to as a cooling system) show multiple benefits, including:

- Settling the infill (and keeping it there)
- Controlling static electricity
- Increasing the consistency of ball roll and bounce
- Reducing the temperature on the field

We also know athletes like fields watered prior to play, since particularly in the warm months, it makes for a cooler, firmer surface.

Make no mistake, though: A cooling system is not required in a synthetic field, just as mowing is not. However, it can, and does, increase the playability of the surface. How often to water, and how much, will depend on various factors, including the weather, the amount and type of use the field gets, and the type of drainage system—as well as how well the drainage system works.

Typically, most synthetic turf infill fields are designed to drain vertically through the system to get water off the field. Drainage, however, is a sticking point for many owners. Because drainage systems can be a significant expense, and because, from a spectator perspective, they are invisible, they are an area where cutbacks often occur in the budgeting process. And let's face it: it's easier to cut back in an area where you can't see, and to try to redistribute funding to a higher-visibility flashier option, such as a press box or electronic scoreboard, logos or graphics for the field, or other enhancements to the field's aesthetic value.

Owners need to keep in mind, however, that a well-designed drainage system is vital to the longevity and performance of the field. Conversely, a field that does not drain well will not be playable, and will not be a valuable asset, no matter how good it looks when it is dry.

Note: Most turf fields being built today have integrated irrigation and drainage systems. In older installations, where irrigation has not been built in, field builders often suggest that facilities be retrofitted with water cannons. It is suggested that six cannons in all be placed at midfield and at the 30-yard line on each side.

ON-FIELD DRAINAGE

There are different choices of drainage systems, with multiple options on the market. All have their advantages and disadvantages, as well as cost differentials to be considered. The choice of which system to use is ultimately that of the owner, who should make the decision in consultation with industry professionals. All sites are different, and while there is no 'right' answer across the board, there is always a right answer for a particular situation. An owner should talk with industry professionals, as well as with colleagues in the area who have comparable climate and facilities, as well as similar amounts of activity. There is no such thing as too much information, in this case.

The purpose of a good irrigation system is to water the field. Perhaps that sounds self-explanatory, but consider this: water should be going only on the field. The system should not overspray and hit the encircling track, benches, spectator stands or other areas. And ideally, the field should be constructed so that the only water the in-field drainage system needs to handle is that which falls onto the field from the sky, or onto the field from the irrigation system. The field should not be getting wet from runoff from the bleachers or from surrounding hillsides or other areas. Proper sloping of such facilities to direct water, correct placement of perimeter drains (and regular care of these drains, such as keeping them free of sediment and debris) can, and should keep problems to a minimum.

Assuming these types of issues (with the exception of maintenance) have been addressed in the design phase of the project, the drainage system beneath the surface of the field should be adequate to move a normal amount of rain or water from irrigation off the surface and keep it playable.

The owner or manager, however, should be proactive in making sure the system is functioning correctly. Builders often recommend watching the field during a rain to see if water collects in any spots, whether there is any subsurface bubbling to indicate a lack of drainage, or whether water seems to be percolating through. Problems should be noted in detail and reported to the contractor who installed the field, or to a field specialist who has worked with similar facilities. Some problems may be easily addressed by a professional, while some take more extensive work. Often, it is impossible for the owner or manager of the field to make that call.

Which leads to the final point, say the pros: if a problem is suspected, make the call for service immediately. An irrigation and/or drainage problem is not likely to fix itself, and if anything, is made worse (and possibly more extensive and expensive) by waiting.

Note: The American Sports Builders Association (ASBA) is a non-profit association helping designers, builders, owners, operators and users understand quality sports facility construction. The ASBA sponsors informative meetings and publishes newsletters, books and technical construction guidelines for athletic facilities including sports fields. It also offers voluntary certification programs in sports facility construction and maintenance, including sports fields. Available at no charge is a listing of all publications offered by the Association, as well as the ASBA's Membership Directory. Info: 866-501-ASBA (2722) or www.sportsbuilders.org. ■