

## Irrigation systems: care and maintenance

ne of the many reasons field owners embrace the idea of synthetic turf is the fact that it will save on water bills since it doesn't need irrigation.

This is true: the field will stay green despite

This is true; the field will stay green despite not having a regular drink. However, it's a rare synthetic field that doesn't need irrigation. And while synthetic turf does not need to be watered in the same way natural grass does, an irrigation system is essential. It helps to clean the field, settle the infill and reduce static electricity. It also helps reduce the much complained-about "heat island" effect common to synthetic fields in hot weather.

So while we can all agree that irrigation systems help fields function more efficiently, the question becomes this: what can be done to help irrigation systems themselves function more efficiently? The good news: it's not all that complicated, really. Like all other aspects of a sports facility, an irrigation system will work as well as it is designed to, as long as it is maintained well and checked often. Taking a step back from this point, it's essential to remember that the better designed the system, the less likely

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it is to have problems down the road. The investment of money on the front end to use the services of a quality professional such as a Certified Irrigation Designer (information is available at www.irrigation.org) can mean savings in the efficiency and integrity of a system.

Once any system is installed, however, regular maintenance is your friend. None of it is too difficult; as long as it is done on a regular schedule, it will become easier.

At least on a seasonal basis, remember to do the following:

- Test the irrigation and drainage systems to ensure there are no leaks, breaks or blockages. If problems are found, consult construction diagrams to locate and investigate them.
- If the irrigation system has been winterized (drained or blown out), it should be reopened carefully, allowing water to flow slowly into the system zone by zone. Next, at a minimum, check the day and time on the controller to ensure it is correct and then run the controller through one full cycle.
  - Check for the proper opening and closing of each valve.
- Check the spray pattern to make sure it is fully covering each zone.
- Check the operation of each sprinkler head. Do pop-ups function correctly? Do rotary heads rotate? Are heads at the correct height and are they adjusted correctly?





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- Is any sprinkler head allowing water to flow out (rather than spraying)?
- Is water being sprayed in the direction you intend? (In other words, the only place water should be falling is on the playing surface; it should not spray the dugout, spectator stands, areas outside the fence and so forth). Remember that water falling on other areas is (a) going to waste, and (b) may ultimately damage or waterlog those other areas if they don't have sufficient drainage systems. (And that's a story for another time).

Take the time to readjust, repair or replace any damaged elements in the irrigation system. If unsure of any of the workings, contact the designer or builder of the original system, who can provide information.

The efficiency of an irrigation system is irrevocably tied to the drainage system beneath the field. So once the irrigation system has been given its check-up, take the time to make sure it's working well with the drainage system. Irrigate the field heavily (or, if the weather is right, you can use a heavy rain as your yardstick. Either is fine; what you're looking for is a good soak to help you test the drains).

Once the field is saturated, carefully inspect the surface to ensure it drains as quickly as expected and there are no areas where

water collects or where the field does not drain. If you spot standing water, check how deep it is. Does this area drain more slowly, or not at all? Take pictures of the problem and contact your field builder, who can help you determine what is wrong. It may take a simple fix; it may be something more complex. One thing is for certain, however: whatever is wrong is not going to remedy itself, and will require some kind of assistance.

Keeping a field performing at its optimum level means putting in the extra time to make it work that way. No facility thrives on neglect and a field with excellent irrigation and drainage will remain playable, comfortable and hassle-free for years to come.

Mary Helen Sprecher is a free lance writer who wrote this article on behalf of the American Sports Builders Association. ASBA is a non-profit association helping designers, builders, owners, operators and users understand quality athletic facility construction. ASBA publishes Sports Fields: A Construction and Maintenance Manual, a comprehensive guide to the design, construction and maintenance of sports fields. The book is available for purchase either in hard copy or in electronic form. Information is available at www.sportsbuilders.org.



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