



## Dealing With Extremes

How to protect turf from the havoc of various weather conditions and the use of fields for other events.

by Dan Douglas, Reading Phillies

Ask a sports turf manager about extremes and his or her first thought is about the weather. They conjure up memories of spring floods while thousands of kids are chomping at the bit to use the fields after a long winter; or the surprise snowfall just before the championship football game in early November. Certainly the drought a few years back cannot be forgotten. Practically anywhere you go the locals say, "If you don't like the weather, wait a minute."

Weather forecasters like to use the word "normal"—normal high temperature, normal low temperature, normal rainfall, and the like. When is the last time you had a day where the weather was normal? Normal is really the average of extremes. As an example, in 1999 those of us in the mid-Atlantic region suffered through a drought. Then, in early fall, the remnants of hurricane Floyd dropped close to a foot of rain on us. As the climatologists closed the books on 1999 they concluded we had "normal" rainfall for the year.

When dealing with these weather extremes, our biggest asset is our experience. I realize that my 15 years experience as a sports turf manager pales in comparison with many of my peers. I was talking with a golf course superintendent the other day. The conversation naturally turned to the weather. He has been in charge at the same country club for over 40 years. He wasn't comparing weather conditions from year to year, but rather from decade to decade. I humbly accept that I am still a mere pup in this industry. With that said, I will share some of the lowlights of my sports turf career.

### The Need for Proper Drainage

I began working for the Reading



Dan Douglas is accustomed to dealing with the unpredictable weather patterns of Reading, PA, such as this October ice storm.

Phillies in 1991. I inherited a field that was constructed in 1950 and had been abused for over 40 years. Field construction concepts were a tad different 50 years ago than they are today. Take right field for instance. The warning track sloped from the fence toward the outfield. Every time it rained the water washed onto the playing surface from behind the outfield wall. One day in late July, unbeknownst to me, a contractor sprayed an herbicide behind the outfield wall. A heavy thunderstorm blew in shortly thereafter and within a few days we had about 3000 square feet of dead turf in right field. You can't get any more extreme than death. Ryegrass and green paint allowed me to limp into fall when, needless to say, major regrading occurred and a certain chemical applicator was fired.

Adequate drainage is a major component to the success of every athletic field. The best time to address the

drainage of the playing surface is during construction. A complex drainage system is nice, but a field constructed with an appropriate slope and proper grading will be able to withstand the worst deluge.

Snow tends to create havoc at times. During the baseball season I treat snow as white rain. The infield is tarped and I helplessly watch the radar. My approach to snow is "Mother Nature put the snow there, so she can take it away." If the temperatures don't rebound enough to melt the snow, then we don't want to be playing baseball in those conditions anyway.

### The Need for Efficient Irrigation

My first year in Reading featured a very dry summer. With plans to install an inground irrigation system that fall, I did what I could to keep the grass growing with garden hoses. It became a frequently repeated, night-





An occasional April snow is treated as white rain, and the field cover is used to keep the infield dry until nicer weather conditions return.

long vigil. I would set up a sprinkler in the outfield, give that spot a good, deep soaking, then move the sprinkler to a new location. I would never get enough water on the field, but it did keep the turf alive, and by the end of the night I at least felt like I'd tried to take control of the situation.

The 1999 season was a whole different story. Following a very dry fall and spring came a hot summer. The Governor declared a drought emergency in late July and nobody knew what that meant to them. Eventually an archaic set of regulations began to appear which essentially stated that athletic fields could not be watered at all. Practices for fall sports were getting underway during the height of the drought and many school boards had discussions about field safety and even considered postponing the start of the fall sports season. Fortunately, the hurricane struck, and we went back to dealing with drainage issues.

The drought was a public relations juggernaut for the organization and myself. Technically, we could not apply any water to the playing surface. Realistically, we had to and did. I was on the evening news explaining the relationship between water and player safety and how we had cut our usage by over 50%. The public was understanding (especially the head of our local water authority) until I told a reporter off camera that we use 15,000 gallons of water during an irrigation cycle and she went on the air and said we use 150,000 gallons per cycle. I had some phone calls the next day.

Most of us in the turf industry were caught off guard when the drought



GPU Stadium is also used for other events such as concerts. Here, Dan and his crew make preparations to protect the infield from concert-goer abuse.

emergency was declared. We thought our usage would be restricted but not eliminated. Check with your state to find out what regulations you will have to follow if a drought emergency is declared in your area. The Pennsylvania Department of Environmental Protection decided to update the regulations after the drought and the latest version is a lot more athletic field friendly.

### The Need for Control

Like it or not, none of us can do anything about the weather except complain about it. There are other sources of extremes though. Many of our stresses occur because our fields are used in ways they are not designed for. Concerts are an excellent source of ulcers for me. I learned long ago that I need to be the one calling the shots during the concert set-up and tear-down. We used to allow the equipment trucks on the field, but, after one backed through a barrier and parked in a newly sodded area, they are now kept in the parking lot and we fork-lift the equipment to the stage. A roadie once called me an "anal-retentive gardener." Yes I am. My field, my rules.

Over the years a lot of situations occurred, or were about to occur, that I had not had previous experience with. My peers came to my rescue. When a situation presents itself that you are not comfortable with, grab

the STMA membership roster and call someone who has handled the problem in the past. Our industry prides itself on sharing information with one another. The best advice I received in college from a professor was that I don't need to know everything, but I do need to know where to go to get information (I wish he had told me that before my last semester).

An observation I have made is that the fields that were in good shape before some extreme event hit, were the fields that handled the stress the best. Take all the necessary steps your budget allows to insure that your fields are in the best possible condition. Have a plan in place for dealing with whatever Mother Nature or management can throw at you. Phone your peers and gather information in preparation for an event you haven't had the experience to handle yet.

The best part about "extremes" is that they make "normal" feel special.

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