

Sports Turf and the Environment

Going Green

By Dave Doherty

Golf courses, because of their vast acreage, are under increased scrutiny from water and chemical conservation agencies, and this scrutiny is more than justified, because of the pristine conditions demanded by the golf enthusiasts.

The majority of golf courses constructed since the advent of the USGA specifications [1953] requiring sand based golf greens with drain tiles, have been built with sand as the base with some type of organic material added to provide water retention, [CEC] for nutrient retention, and a food supply for microbes.

The sand provides stability, but the porous material allows water to pass through and into the drain system, which is installed in gravel trenches under each green.

Our lab, *the International Sports Turf Research Center*, specializes in physical property testing with the ability to test pH levels, but leaves the chemical analysis of soils and water in the hands of labs specializing in that area.

Although we do not personally test for the chemical percentages contained in the water that runs off or through golf greens we do get involved with projects where the discharge water is tested. It has been reported that in some cases the discharge/runoff water is cleaner than that of the water entering the greens, especially in the cases where effluent water is being used for irrigation.

How is this possible you ask? Well, sand has been used as a water filter system throughout the world for centuries.

The sports turf industry has probably done as much or more than any industry to police itself over the years and takes great pains in keeping track of its chemical usage.

I have a rather large yard at my home in the Midwest and am told that my yard is one of the best in the neighborhood. I do spend many hours of my free time taking care of it because it's something that I thoroughly enjoy.

No chemicals other than fertilizer in the spring and fall have ever been applied to my turf. I am able to achieve these results as a result of having very **healthy turf** that requires a minimum of water and no usage of weed, insect, or disease control chemicals. You see healthy turf, by itself, will reduce the need for many harmful chemicals. Healthy turf is like healthy people who feed themselves healthy food that help fight off disease.

Golf greens that have balanced physical properties in-line with the original USGA specifications produce healthy turf, which requires fewer chemicals that could be harmful to the environment. Golf course superintendents are professionals and care very much for the environment that they are entrusted with.

Studies have shown that the contamination in our lakes, streams and wetlands is more the result of homeowner and commercial property run off than any other source.

Farmers are and have been coming under more intense scrutiny over chemical usage and run off than probably any other industry in North America. This scrutiny has resulted in one of the largest chemical companies in the world recently changing its formulation of one of its best-selling products.

Going green is everyone's responsibility, the farmer, the homeowner, the business owner, the landscaper, the golf course superintendent... all of us.

The golf course industry is doing its part, I assure you and I'm proud that my company is doing its best to do our part. I hope that you and your company or private club are doing the same.

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