

USGA

It's Been A Tough Year

By: Pat Gross, Agronomist, Western Region

Years like this are bound to happen. After a few relatively wet winters and mild summers, the cycle always seems to swing around and we get a hot humid summer that really tests the environmental limits of the turf. The summer of 1996 was just such a season for superintendents throughout the southwest-ern United States. Many courses experienced turf loss on greens and fairways. It was unfortunate to see the angry gaze of course officials and worried look on many superintendent's faces, many of whom believed they were the only ones with dead grass. While many superintendents predicted and anticipated the problems, the cures were not always completely effective. As a reference, the following trends were observed throughout the Southwest this past summer. If you experienced these problems, take heart and know that you were not alone.

Turf Diseases

Beginning in late July, many courses experienced severe problems with anthracnose and summer patch. Higher than normal temperatures with prolonged heat and humidity starting earlier in the year were just too much for most putting greens. While many of the turf pathology books describe anthracnose as a weak secondary pathogen, I strongly disagree with this assessment in the southwest - it is a devastating disease on *Poa annua*/creeping bentgrass greens. Both anthracnose and summer patch are stress related diseases that appear to be more severe as soil salinity increases during the summer.

Courses with the most success followed a religious aerification and leaching program starting in late spring, and carefully monitored irrigation applications — some to the point of exclusively handwatering the greens and turning off the automatic irrigation system. This also seemed to be an unusually heavy year for Southern Blight on greens and fairways. This could be the result of some superintendents shying away from the use of *Bayleton* in the spring.

Salinity and Water Management

Salinity accumulation continues to be a major problem in western soils, especially on greens. Layered greens presented the biggest challenge. It was very difficult for some superintendents to find an acceptable balance between controlling salinity through leaching and trying to avoid anaerobic black layer. The best approach seemed to be aerifying the greens with 3/8" hollow tines prior to leaching, and then allowing the greens to gradually dry while hand watering dry spots as necessary.

Another interesting thing happened while reviewing water tests for a particular golf course that uses effluent water. The effluent is used from January through October and then the supply changes to Colorado River water. The salinity graph showed moderate levels from January to October, and then salt levels jumped off the chart in October. Many of us assume that effluent water is higher in salinity and that our problems would be solved by using potable water. This is not always the case. Some potable sources are as high or higher in salinity. The moral of the story is

to investigate the source of your water and monitor water quality throughout the year. Many courses have been experiencing salinity problems in early winter, possibly as a result of using Colorado River water.

Black Turfgrass Ataenius Beetle

The Black Turfgrass Ataenius Beetle continues to cause problems on greens, especially in the Palm Springs area. While the new insecticide *Merit* showed good control earlier in the year, multiple life cycles of this pest caused serious damage later in the year. The small grubs can be difficult to locate and identify, and the damage is often mistaken for localized dry spots. More and more courses are reporting damage from BTA, and superintendents should start their monitoring programs earlier in the spring to identify adult flights and anticipate egg laying.

Looking at a bad year in a good light.

Sometimes, difficult years are a good learning experience that allow superintendents and course officials to evaluate their programs and make necessary changes. Problems that result in devastating turf loss can often lead to course officials finally taking the necessary steps to solve the problem (e.g. replace the irrigation system, remove some trees, rebuild the greens, etc.) Most of the problems did not occur over night. Many greens are predisposed to turf damage from excessive shade, solid layering, or lack of drainage. While many golfers don't understand the problem until they see the damage, this was a good year to demonstrate what can happen in a tough year. ♦



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