A SUMMER TO REMEMBER

By Ray Schmitz

Years from now, the summer of 1995 will be one that will be much discussed because of the terrible heat and humidity in the Midwest part of the United States. It will be mentioned along with the summer of 1955 which some of the "older superintendents" still talk about.

The problem of high summer temperatures was compounded by a wet, cool spring which didn't allow for the grass plants to develop a good dense root system and carbohydrate storage in the plant. As we all know, these factors are critical to the grass plant to defend itself from the normal stresses of summer, i.e., heat, humidity, disease, traffic, etc. We went from unfavorable springtime conditions right into the summer heat, and later the heat and humidity, and in some places in the Chicago area, untimely heavy rainfall.

At Flossmoor Country Club, starting around the 1st of August, the turf was under stress but held up pretty well. Fortunately, we missed the heavy rains that caused damage to courses on the North Side and downstate courses from Decater to Danville. I kept saying that if weather conditions don't change, we are going to start seeing turf decline mainly on the fairways. In the meantime, we were spraying on a preventative basis, but the spray intervals were becoming very short. When you read the label of a fungicide, and it says that you can expect 14 day control; it did not happen. All thoughts about IPM went out the window. We were in the midst of a battle!

On August 9, the 30th Glenwood Pro Am Tournament was held at our club and was very successful. We received many favorable comments from the 42 visiting golf professionals who played the course. In the meantime, the heat and humidity continued. On August 11, which was a Friday, at one o'clock in the afternoon, I could see that I had lost the battle and there was little anyone could do, especially on the fairways to keep the turf from "going out." Instead of blanket spraying for disease, we reverted to spot spraying of known trouble areas, mainly to save money on our already stressed operating budget.

On August 19, two members on my green committee expressed their concern about the course, and I decided I would write a letter to the membership explaining what happened to the course, why it happened, and what I was going to do about it. The next day, I had my letter sent to the members. In addition, I wrote a nine-point outline explaining an approach to repair the damage which would be started immediately.

We keep hearing about the value of communication, and this was a good example. Let the golfers know that you are aware of the situation, that you did your best to keep the damage at a minimal level and offer a solution with a timetable. At a time like this, it is important to stay positive and not lose your cool. After receiving the letter I issued, many of our members came up and thanked me for the update. From that point on, I was getting waves and smiles instead of stares and frowns from the members, not all, of course, but from the overwhelming majority.

The 3rd week in August, we continued to spray greens and tees, now on a curative basis. I discontinued to spray fairways because I felt that the sprays were ineffective, and I would rather spend money on an improved variety of seed at this point than spray fungicides that were not doing the job.

Near the end of August, the temperature finally started to cool down, and I started to seed the stress spots in the fairways in an attempt to get the course back to acceptable playing conditions as soon as possible. Our target date was September 23, when we were hosting the three-day Big Ten Girls Invitational Golf Tournament. The tournament was a big success, and the girls loved the course, and most played very well. The seeding that I had done earlier had filled in most of the dead spots that had occurred in the fairways.

A total of 350 pounds of bent grass seed was applied to the fairways, including a small amount applied to thin spots on greens and tees. Only 100 pounds of bluegrass was seeded, and this was slit into the intermediate cut of rough bordering the fairways, which was damaged by summer patch . The rest of the bluegrass in the rough came through the summer in pretty good shape, except for some crabgrass patches here and there. I felt that the key to my success in overseeding was that I applied the seed before Labor Day. All that was needed was a good rain which didn't come until October, so the new seeding had to be watered by means of the irrigation system. The new seeding was fertilized with a high phosphorous fertilizer, which I felt was important for the development of the new grass plants.

What have I learned from the turf grass damage I had last summer? First of all, at the first

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sign of prolonged stress to the turf grass, I will raise the height of cut of all grass that is mowed short, such as greens, tees, and fairways. Secondly, if high soil temperatures have caused very shallow rooting of the turf grass, then it is time to begin spoon feeding the turf. A little bit of fertilizer applied more often to the plant in the upper root zone, where it is available, makes sense. Reducing mowing frequency and avoiding mowing the clean-up lap on stressed greens helps to reduce damage on the edges of greens.

Also, monitor turf closely and do not over water, especially if the air temperature and the humidity is high. Syringing turf to cool it down on hot days can be effective as long as the leaves do not stay wet for a long period of time. Lastly, start a good preventative spray program and apply at the higher labeled rates. Reduce spray intervals, if necessary.

Why did some courses come through the summer better than others? After talking to many superintendents about their courses, I will attempt to make some conclusions. Courses with the least amount of Poa Annua and newer varieties of bent grasses seemed to fair much better. Drainage was another big factor. Poorly drained and low-lying wet areas seemed to have more damage. Air circulation was another big factor. Tight old courses with mature trees did not fair as well as the newer, more wide-open courses where the wind can help dry the grass leaves. Southern exposures that were at right angles to the sun during the hottest part of the day seemed more prone to damage. Turf favored with northern exposures had less stress because they had cooler soil temperatures. One thing we have to remember is that in this part of the country, we are trying to grow cool season grasses. It was almost impossible at times this summer when the temperatures, for a long period of time, were more favorable for growing warm season grasses.

One positive side effect of a stressful summer like we just experienced is that it points out some weaknesses, whether it be in our management practices, golf course employees, sprinkling system, or mowing techniques. Also, we must take a look at the reliability of some of the products that we have used this past year. This is a good time to analyze our operation and prepare for another summer like we just had, even though it is only suppose to happen every 100 years. ■