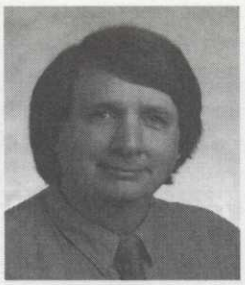
Avoiding the trap

by Christopher Sann



It is funny how events, which at the time they occur seem insignificant, can later become quite important. Several incidents during recent weeks have brought this truism home to me with considerable impact.

In early August, for the second time in two years, I spent three days at the Superintendents Diagnostic Short Course at Cornell University in Ithaca, New York. My primary reason for going was to initiate a very promising new employee, Brett, into the world of turfgrass management the right way -- dealing with and getting to know turfgrass management from a top-notch program. As it turned out, even after 20 years in the industry, I got as much from the course as my new employee did.

Although a little overwhelmed by all the new information, Brett was exposed to one of the top programs in the industry and, if nothing else, he came away from the conference with a healthy respect for the need to be scientifically accurate as a turfgrass manager.

My continuing education involved field diagnosis. After several incorrect diagnoses on my part, I concluded that even the most experienced turf grass management professional requires regular exposure to various turf diseases in order to maintain a current knowledgebase for making those same judgments in the field.

A friendly battle with Nelson

Dr. Eric Nelson, a participant at the conference, and I have had a friendly running battle for the past four years. Nelson contends that it is impossible to make an accurate diagnosis of turfgrass problems from visual symptoms while standing six feet away. Smug with the belief that real-world field experience is better than book experience, I have contended that an experienced, observant turfgrass diagnostician should be able to use gross visual symptoms to make an accurate diagnosis the majority of the time.

Nelson's point of view has been honed over many years by microscopic diagnosis of pathogens on multiple turfgrass species under all kinds of environmental circumstances. My point of view was based on over 20 years of field experience, primarily with high-maintenance, tall-cut turf situations.

Nelson was right

The events of the past two weeks have driven home the idea that trying to make visual diagnoses in the field without a follow-up close examination of a sample with a strong hand lens or microscope is a trap. These last two weeks have proven to me that I have been wrong and Nelson has been right.

During that period, I have had to explain to a disappointed long-time lawn care client why my annual July applications of grub control last year did not prevent major grub damage to his lawn starting in May of this year. I had to figure out why 25% of another client's lawn died from Bipolaris leaf spot, even though it was being treated for just such an infestation. I also suffered the embarrassment of having to admit to a third client that, though I had previously assured him that I understood what was going on, I had been unable to solve the riddle of why his front lawn would only hold good color for two weeks after a fertilization.

A common mistake

In all three instances I made the mistake of assuming that I could correctly diagnose the problems from visual symptoms alone, without a proper confirming examination. In all three instances, after considerable damage to my over-inflated ego, I went back and did a complete examination of the problems. I now know the real causes.

In the first instance, a close examination of the anal slits and anal hair patterns of some sample grubs produced the conclusion that we were not dealing with second or third Japanese beetle grubs instars -- those that the July insecticide application was intended to control -- but we were dealing with a second year/third instar infestation of Oriental beetle grubs that had been actively feeding since mid-May.

In the second problem, lawn had been treated for Summer leaf spot (*Bipolaris*) in early July, but had developed substantial damage which had an appearance of a blight that often develops when this pathogen gets into the crowns of the host plants. A close examination, however, revealed that the damage was caused by frit fly maggots tunneling down through the plant shoots. This misdiagnosed infestation may have existed for four or five years.

In the third problem, the lawn historically looks good in the spring and fall, but fails to hold color from fertilizer applications during warm weather even though the soil chemistry is in excellent shape and the turf is being treated

for chronic Necrotic ring spot and Pythium infestations. Last year, in an effort to understand what was happening, I had made the correct visual diagnosis of a Bipolaris infection, but then failed to make the more important diagnosis of a heavy Anthracnose infestation, which turned the turf stand yellow. When I did a more thorough job of examining the current grab samples, the characteristic Anthracnose spores were obvious. As is often the case, the fungicide that I had used to control the Bipolaris was not effective against the Anthracnose infection.

These mistakes can cost dearly

Luckily, I will not lose these homeowners as future clients, but it will cost me about $500 to repair the damage caused by my over-inflated ego.

If these problems had occurred at a golf course with damage to several greens, the cost to repair could have run into the thousands of dollars and perhaps left me seeking alternative employment.

Why did I miss these three problems

In looking back at these three problems for a common thread, I came to the conclusion that my failures were principally in two areas. The first was a failure to closely examine what was happening because of the amount of time it would have taken. I fell into an easy trap by accepting the most obvious possible solution. The second failure occurred because I was afraid that my previous diagnosis was inaccurate, or that if it was indeed accurate that I had failed to make a corrective action in time to control the problem. In other words, I was trusting my instincts when I should have been examining the problems scientifically.

If you find that you are failing your clients or more importantly that you are failing yourself, then it is time step back and find out why you are failing. Perhaps you too are relying more on instinct and less on scientific examination. That is a problem faced by many turf grass managers who believe they have already "seen it all." In other words, turf grass management remains a science and not an art so we must abide by the rules of science when forming conclusions or diagnosis.

In the near future, as common pesticides become even more regulated as to the circumstances allowing proper usage, this kind of seat-of-the-pants diagnosis with sloppy procedure may get you more than an unhappy customer, an angry greens committee chairman, or a feeling of embarrassment and disappointment. You might even find yourself answering to a state or federal regulatory agency. ■

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