Nothing but "The Best"?

Early this summer I was at one of our University turfgrass field days. At these events visitors come to our research and demonstration areas to visit with University faculty and staff and view our latest research trials and listen to our education sessions. I figured by the time nearly 400 people heard my four 20-minute talks and asked questions that I would have a long list of material for this Q&A column.

So group after group came by, I made my points, and we discussed various athletic field turf issues. Among the attendees were both athletic field managers and coaches. After each group left, I jotted down a few notes related to their questions before the next group arrived. On the drive home, I started reading through their questions and made what I considered to be an interesting discovery. Most of their questions started with "What is the best . . . ?"

The following are examples of actual questions:
- What is the best grass to have on an athletic field?
- What is the best mowing height for Tifway Bermudagrass?
- What is the best fertilizer to use on a field?
- What is the best product to control [fill in the blank]?

It seems to be human nature to want nothing but the best: no one wants to waste time using the seconded rated product. Of course it is not in the tradition of a researcher to cut to the chase and proclaim there is only one best of anything. Each question provided me an opportunity to explain why there is often not a best or ideal, at least not without a thorough evaluation of the situation.

Take for instance the first question related to grass selection. This question is often asked immediately after I mention field use capacity and recovery. People are always looking for a new grass that can take the extreme wear and compaction received by most high school and municipal multi-use fields. This is one of the reasons artificial turf is making a comeback. But I do not believe there is currently a best grass. We have a number of great grasses available that can handle a reasonable amount of wear and tear when they are managed properly. Of course some grasses are better in some situations than others, but those situations can change during the year or season. So, it is virtually impossible to crown one grass as "best."

When the Tifway question was being asked, I was standing on a Bermudagrass area mowed at about one-half inch. A couple of attendees asked if I endorsed that low of a mowing height. I do not believe that a mowing height should be selected arbitrarily. Mowing height should be determined while considering a number of other factors, including the sport played on the field, performance expectations, level of maintenance, mower type, and grass.

I do not believe there is a best height for a grass. I often see Tifway Bermudagrass on athletic fields mowed at heights between 1/2-inch and 2 inches. A field will perform very differently on each end of this range. A field manager has to find a height that is manageable and also acceptable for the players and coaches. That height may need to be adjusted during the year to meet specific turf or performance requirements. Typically as the mowing height goes down, the level of attention from the turf manager must go up.

"What is the best fertilizer" is a relative question. The determinant of best fertilizer is often influenced by fertilizer price, plant needs, and turf managers' ability to manage applications. For non-nitrogen inputs, a quick soil test can determine need based on what is currently available in the soil. The question on nitrogen carriers is often dictated on desired response time (greening) and amount of money available to spend.

A grass plant is not as choosy about what it takes up as we humans are with what we eat. Your grass is a little like Mikey from the old cereal commercials—it eats anything. Generally, the products that result in nitrogen released over a period of time, and do not require as frequent application compared to the quickly available sources, cost a little more. I often tell turf managers that with all other things being equal, the best nitrogen fertilizer to use is the cheapest per pound of nitrogen as long as they are willing to ration the delivery.

Without even addressing the last question, I am sure you can predict where this is heading. In many cases, there may not be a "best."

On this back page each month Dr. Minner and I try to provide you with answers to your questions. More often than not, our answers provide more than one option. In the process of answering your questions we often challenge readers to evaluate their own situations and apply the information as best they can to solve their problems at that moment. When dealing a biological system such as growing turfgrass, there are not always specific formulas to follow that will provide 100 percent consistent results. In the end, we may have to follow advice once provided by Franklin Roosevelt: "We do our best that we know how at the moment, and if it doesn’t turn out, we modify it."