

# Dealing With Dreaded Disease

BASF'S KYLE MILLER SHEDS LIGHT ON HOW TO DIAGNOSE AND COMBAT TURF DISEASE OUTBREAKS

In 1982, Ronald Reagan was president, "Tootsie" was America's top movie, Rick Springfield dominated the music charts, and Kyle Miller began studying agronomy and turf disease. No doubt that Miller, the senior technical specialist for BASF Corp., has learned a few things in his field since that time.

Previously an agronomist for the department of transportation in Virginia and a turfgrass research biologist at Monsanto, Miller has a master's degree in agronomy from Auburn University.

At BASF, Miller is involved in developing market opportunities for new and existing products through university and end-user trials. He spent some time recently with *Golf-dom* Editor in Chief Larry Aylward to answer some questions on diagnosing pest outbreaks on turf.



Kyle Miller

**What new turf diseases are wreaking havoc on golf courses across the country? What are you seeing?**

In the last five years or so we have seen several new diseases that superintendents now have to be on the lookout for. One is *Pythium* root dysfunction, otherwise known as *Pythium volutum*. This disease attacks bentgrass during the spring and summer months.

A second new disease is rapid blight, which is seen primarily on *Poa* and ryegrass. Finally, there is Waitea patch, which is also called brown ring patch. Waitea patch is the newest disease and is found on bent-

grass both in the East and the West.

Superintendents should be assured that turf pathologists across the country are working hard to characterize new diseases, and manufacturers are working closely with them to discover effective chemical controls to fight them.

**How can golf course superintendents best combat these turf diseases from occurring? What cultural practices can they implement?**

By characterizing and understanding these diseases better, turf pathologists now can inform superintendents on what environmental and cultural conditions cause these diseases.

*Pythium volutum* is a stress-induced disease related to fertility, water and mowing practices. The disease is observed when bentgrass roots are actively growing, thus occurring primarily in the spring and fall.

Rapid blight was initially linked to golf courses that use high salinity water, but it has become more widespread and is now present in more than 11 states. Superintendents should check water quality to determine salt levels.

Waitea patch or brown ring patch seems to affect primarily annual bluegrass, but can also be seen in bentgrass. This disease is a *Rhizoctonia* species (like brown patch) but is not always controlled by standard brown patch fungicides. Although similar in some ways to yellow patch, it occurs in warmer weather. This disease is not well understood.

**I understand that some diseases, including dollar spot and anthracnose, are lasting longer? Why is this happening?**

When I talk with superintendents

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## Quotable

**"Golf is an important trigger for the long-term development of Dubai's tourism and residential markets. Yet we must ensure that all golf course development is environmentally sustainable. We do not just want to follow international best practice — we want to set it."**

— Sultan Ahmed bin Sulayem, chairman of Dubai World, the residential golf development with four 18-hole, environmentally friendly golf courses, in Dubai. The courses are named Fire, Earth, Water and Wind.

**"I don't care what those folks at Augusta say, Pinehurst is the golf capital of America."**

— North Carolina Congressman Howard Coble addressing the Green Industry folks who attended Legislative Day on the Hill.

**"It's kind of nice to come over here and get some rest. But [parenthood] has been great. I wouldn't trade it for anything."**

— New father Tiger Woods on heading to Carnoustie, Scotland, for the British Open — and some peace and quiet. (*Sydney Morning Herald*)

# Business Tip of the Month

## Off The Fringe

### To Lease or Buy Depends on a Few Factors

Whether to lease or buy turf equipment and golf cars involves some of the biggest decisions a superintendent makes. Unfortunately, there is no easy answer. "It depends on a lot of different factors," said Club Car Marketing Director Michael Read, echoing the thoughts of Toro Finance Marketing Manager Paul Danielson. Two of the most important factors are a club's cash situation and the importance it places on having newer equipment.

Leasing has been on the rise for the last decade. "Leasing started with the golf development boom of the mid-1990s," noted David Hamilton, vice president of sales for Club Car's Golf Americas group. Developers and owners put millions of dollars into designing and building courses and clubhouses during that boom period. Delaying large up-front purchases through lease arrangements was an attractive option for those new facilities.

Leasing instead of buying can be appealing from an accounting standpoint. A lease is generally treated like a rental expense rather than a balance-sheet item. That may help an operation live within loan covenants and potentially enhance some financial-performance ratios, such as return on equity. Leased equipment is also usually turned over every three to five years and can be serviced and stored by the distributor.

Leasing is just an option; many clubs still purchase their equipment. If a club owns its equipment, it will likely continue doing so and can roll its equity into a new purchase. If decision makers like to pay cash or make monthly payments to finance the purchase of their own cars, then buying golf cars and maintenance equipment may be more attractive. "That's the personal preference side of the issue, and there's nothing wrong with doing what feels comfortable, especially if it's a strategy that fits your business model or has worked well over time," Hamilton said.

Internal Revenue Service depreciation guidelines changed in 2003 and now allow owners to take a depreciation deduction up to \$100,000 of the purchase price in the first year of ownership. Prior to the change, depreciation deductions were scheduled over a longer period. An accountant can help decide whether this favors purchasing.

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about their golf courses, they tell me that years ago, dollar spot was a spring and fall disease, and now they see it throughout the growing season.

With anthracnose, it used to be just a summer problem, and now we see it occurring much earlier or much later in the year during cooler weather.

I believe the reason these diseases are lasting longer is related to the improved playing conditions that superintendents are providing. With the improved playing conditions come more intensely managed turf that is being mowed shorter, allowed to dry out a little longer and not fertilized as much.

These are all stresses that lower the turfgrasses defenses and make it more susceptible to disease.

#### Generally what are the best tools that superintendents should have in their tool boxes to help them identify turf diseases?

Superintendents can stay current on the latest turf issues by attending educational events and seminars, whether it's at the Golf Industry Show or at their local state conference or meeting. Another important tool for superintendents is to keep in touch with other local superintendents to discuss what they are seeing on their own courses.

The Internet is a great tool and can provide excellent information on diseases. The Internet allows our turf pathologists to get information out to superintendents very quickly.

Lastly, a superintendent shouldn't be hesitant to send a turf sample to a local diagnostic lab to have them provide a formal diagnosis. You don't want to get caught in a situation where you are treating for the wrong disease. Such a situation could result in extensive damage on the turf, and unfortunately, it can put a superintendent's job in jeopardy.

*Editor's note: To listen to a short podcast of a similar interview with Miller, visit [www.golfdom.com/onlineexclusive](http://www.golfdom.com/onlineexclusive).*