

# The Chase Is Over

Moles succumb to new worm-mimicking bait — meaning mole hills like these could be a thing of the past



"Moles are basically blind and hunt on smell and feel. Talpirid mimics both characteristics of earthworms. The tunneling should stop about the second day after you put out the bait."

Talpirid is the result of several years of research by Bell Labs. The company assigned six researchers to the project in 2001, according to Director of Corporate Sales John Schwerin, whose company at that time had more than 30 years of experience in the professional pest control market, dealing primarily with rats and mice. "But moles have always been a problem," Schwerin says.

BY PETER BLAIS

**I**f assistant superintendent Carl Spackler had been chasing moles in "Caddyshack," he would've liked the new bait product from Bell Laboratories. It's much more subtle in its control of the creepy critters than the high-powered ammunition Spackler would've used to battle them.

In fact, earthworm-shaped Talpirid Mole Bait, which Bell Labs recently introduced, may be the long-sought solution to ridding golf courses of the pesky tunneling insectivore.

"I can't say enough good things about the product," says Shadow Lake Golf Course Certified Superintendent Robert Donofrio, who reported previously trying every control measure from smoke bombs to sonic chasers to assorted

baits and repellents in his annual battles against the diminutive burrowing mammals that infested his Red Bank, N.J., executive nine-hole layout. "Right now, I don't have a single mole on the course."

"It really does work," adds James Longhi, owner of Longhi's Golf, an 18-hole, Southwick-Mass. facility.

### Problem

Moles! The pesky critters tear up golf courses. How to stop them?

### Solution

A company new to the industry has introduced a new product that could stop them once and for all.

The first difficulty was trapping the elusive creatures, which can tunnel up to 100 feet a day in search of food, and then keeping them alive.

"We did not understand initially that moles have a voracious appetite," Schwerin said. "They can consume as much as 100 percent of their body weight of food in a single day. We realized that we had been starving the moles, which was one of the reasons they were dying in captivity. Once we discovered the extent of their appetite, we were able to keep them alive."

The research team collected thousands of moles and studied their internal physiology, behavior and feeding patterns. Analysis of their stomach content showed almost 90 percent to consist of earthworms — not roots, vegetable matter or grains as many believed.

"They have a very unique way of consuming an earthworm," Schwerin explains. "They get the orientation of the worm, identify the head by the ring around it, immobilize it by gnawing the head, then stretch the worm to get all the excrement out as they push their paws down and stretch it."

Since worms were the moles' primary foodstuff, Bell replicated a worm right down to the ring, with the same pliability and stretch-ability characteristics as an actual earthworm. The anti-coagulants Bell had traditionally used so successfully on rats and mice were largely ineffective in

*Continued on page 94*



*Continued from page 92*

killing moles. Researchers eventually determined that bromethalin — an energy-metabolism antagonist that counters a mole's high-energy demands — killed moles within 24 hours.

"We started working with consultants and pest control companies to use the product in the field where there was mole activity," Schwerin says. "We were getting 100 percent success rates when the product was used according to our protocol, which consists of three visits. First, go out and identify a run to see if it is active by poking a hole in the run. If it is active, a mole will repair it within 24 hours to control its environment. Second, once we identify an active

run, we make bait placements inside the tunnel and mark them with lawn paint or flags. Finally, in two to three days, we return to the site to confirm that there is no new mole activity and stomp down the runs."

**It's important to wear gloves when applying the bait.**



Bell received Environmental Protection Agency approval in 2004 for Talpirid, which is named after a coupling of the classification term "Talpidae" for the mammalian family to which moles belong and that it will "rid" the pests from a site.

"What got us into the golf and lawncare businesses was that moles are active in both residential lawns and golf courses. They can tear up a tee box or finely manicured green," Schwerin says of the Madison, Wis.-based company's entrance into this new market. "Superintendents catch a lot of heat for not getting rid of moles."

Longhi said moles were tunneling extremely close to his greens and tees last fall and this spring. He used Talpirid according to directions and the moles were gone in 48 hours.

Donofrio laughs now at his past attempts to use smoke bombs, which always impressed the neighbors, or stabbing the ground with a pitchfork in an attempt to spear a burrowing mole.

Somewhere, Carl Spackler is smiling. ■

*Peter Blais is a freelance writer from Monmouth, Maine, and a frequent contributor to Golfdom.*

*Is your turf silicon rich?*

**EXCELLERATOR**

**EXCELL** Minerals

**To learn more about this unique turf nutrient additive, please visit our website at [www.ExcellMinerals.com](http://www.ExcellMinerals.com), or call us toll-free at 866-401-5700 for a limited time FREE sample.**



# Co-operative Action

By tank mixing a variety of broad-spectrum fungicides with different modes of actions, a superintendent can control several turf diseases simultaneously **BY BARBARA MCCABE**

**W**hen the television cameras zoom in on Nemacolin Woodlands Resort's Mystic Rock golf course this month at the 84 Lumber Classic, superintendent Brian Anderson will be beaming with pride.

The energetic, young superintendent oversees maintenance of the two 18-hole golf courses at the scenic 2,800-acre resort and spa in Pennsylvania's rugged Laurel Highlands, about 70 miles south of Pittsburgh in Farmington, Pa. He's confident that the turf management practices he employs at Mystic Rock will keep his bentgrass tees, fairways and greens looking as healthy and robust as the players vying for the \$4.4 million purse in this PGA Tour event.

"I manage turf very simply," the 29-year-old Ohio State University graduate says. "My thoughts on it are that it's just grass that wants to grow."

With the 84 Lumber Classic returning to Mystic Rock for the third year in a row, Anderson's simplistic approach to turf management seems to be working.

"The players loved every minute of it," he says of last year's tournament. "They didn't complain once about anything on the golf course."

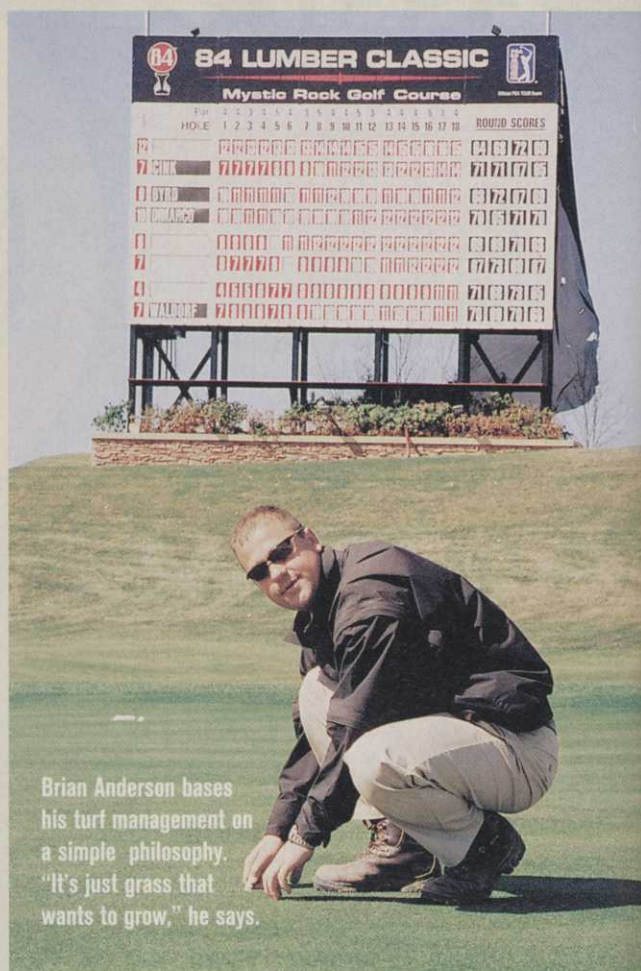
### Challenge

The PGA Tour is coming to town. Obviously, a superintendent wants his course to look like a million bucks. That means fighting off turf disease.

### Solution

By tank mixing a variety of broad-spectrum fungicides, a superintendent can control a number of diseases at the same time.

Situated at one of the highest points in the Laurel Highlands, the Pete Dye-designed course is about 2,200 feet at its highest point on the 16th hole. The high elevation helps minimize disease problems, reducing the amount of chemicals Anderson uses on the par-7,511-yard layout. But in spite of the altitude at Mystic Rock, Anderson must contend with dollar spot, which thrives in



Brian Anderson bases his turf management on a simple philosophy. "It's just grass that wants to grow," he says.

any type of weather. "Dollar spot doesn't look good on television, and it doesn't make for a good playing surface," says Anderson, who plans his entire disease prevention program around the tournament. "It's a high-stress period for us. We're manicuring our turf more than we normally would. We are more susceptible to disease by stressing out the plant."

Nonetheless, if Anderson sees disease developing on the course in the midst of the tournament, he doesn't panic.

"We don't overspray to compensate for it," he says. "We try to stick with our regular fungicide spray program."

Anderson prefers to use low rates of fungicides with long residual control and supplement the program with cultural practices that combat the disease.

*Continued on page 98*



*Continued from page 96*

"You can cut down on your fungicide use by doing simple things like topdressing, aerifying and eliminating thatch," he says. "Eliminating thatch is a big thing for us. Dollar spot loves to grow on it. Another thing is fertilization. The No. 1 way to combat dollar spot for us in this area is to fertilize. We like to keep our nitrogen levels up."

Anderson believes a synergistic effect is created by tank mixing a variety of broad-spectrum fungicides with different modes of actions, which enables him to control a number of different diseases at the same time. By mixing systemic fungicides such as Bayleton and 26GT fungicides from Bayer Environmental Science with a contact product like Daconil from Syngenta Professional Products, Anderson says he achieves the desired control of dollar spot and a host of other diseases.

"It's not just the altitude that prevents us from getting a lot of other diseases up here," Anderson explains. "We tank mix many different things and we use broad-spectrum fungicides. So, while our target may be dollar spot, we get control of a whole lot of other diseases — like anthracnose and summer patch — as well."

For example, spraying a tank mix of Bayleton and Daconil fungicides at the low label rate of 0.5 ounces per 1,000



**Brian Anderson prefers to use low rates of fungicides with long residual control.**

square feet each on the fairways of Mystic Rock and the Links, Nemaquin Woodlands' other golf course, Anderson says the courses get 25 days to 30 days of control of dollar spot.

"Daconil knocks down whatever disease is out there and Bayleton picks it up from there and continues to control it for up to 30 days, depending on the time of year," he says.

Again, it's the simple things that Anderson believes work best in combating turf diseases. His simple approach worked well in attracting the PGA event to Nemaquin and it seems to be working well in keeping it coming back. ■

*Barbara McCabe is a Philadelphia-based freelance writer for Philadelphia-based Tierney Communications.*

PHOTOS COURTESY: BAYER ENVIRONMENTAL SCIENCE

**golf  
construction**  
news.com

"The Source for New Golf Project Information"

**golfconstructionnews.com** (GCN) is an online report containing the most current and in-depth information on golf projects in the U.S. GCN keeps tabs on thousands of projects a year to provide the most up-to-date, comprehensive details as they become available. Reports can be ordered for up to eight regions of the U.S. to fit any-sized business.

#### Features include:

- Access to project updates 24/7 via secure, password-protected access
- Project tracking from conception to completion, with its status regularly updated
- Full details for New & Proposed Projects, Remodels to Existing Courses & Recent Openings
- State-of-the-art click-through contact access with developers, course designers and construction companies (if selected), and related parties
- Sortable project database — including by state, development phase, type and opening date

Subscribe online now! It's as easy as visiting [www.golfconstructionnews.com](http://www.golfconstructionnews.com). Review regularly updated sample projects on the home page and see the power of GCN for yourself.

For additional information, call toll-free 866-640-7170.