

# Off The Fringe

## Outer Limits

EXPERIMENTAL FACILITY LOOKS  
ITS BEST DESPITE CONCERTED  
ATTEMPTS TO DESTROY ITS TURF

By David Frabotta, Senior Editor

**I**magine your green chairman routinely infects your A-1 putting greens with cutworms and asks you to fertilize the crabgrass. And your general manager also wants the dollar spot to flourish on the L-93 while you devise the best way to grow various weeds in the TiffEagle bermudagrass fairways.

It's no joke. That's the life of Gary Ryan, turf superintendent for the Bayer Environmental Science Research and Training Center in Clayton, N.C. He's in charge of keeping 40 different golf-length cultivars healthy at the company's experimental facility while scientists try to kill them during product testing under the most stressful conditions possible.

"It was hard to get used to at first, but it's been interesting to find new ways to control pests," Ryan says. "Agronomically, I'm still the same thing I went to school for, but I'm doing it in different ways."

Those "cultural" methods don't typ-

ically include preventive pesticides or fungicides because they could interfere with experimental trials in progress. So Ryan keeps a close watch on plant stress, and he aerates more often than he did as superintendent of nearby Neuse Golf Club.

"I've been in the business for 15 years, and I think I've reseeded more in the past three than I did in the previous 12 combined," he says. "But I've learned more in the past three than I could have in other environments, too."

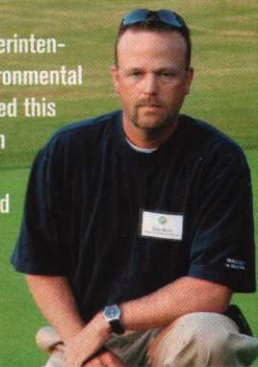
Ryan's domain includes 40 acres of golf-height grasses, which include 40 varieties of warm- and cool-season turf on four golf holes and plots scattered around the facility's 281 acres, which also includes eight acres of vegetative/or-namental management studies. And there's always something new. The facility just planted two acres of seashore paspalum to see how it fares in North Carolina's transitional climate (zone 7).

As many as a dozen experimental trials are being conducted at any one time, requiring Ryan to consult a spreadsheet before he can treat a pest or stamp out a fungus.

"They kill it, and I bring it back. That's it in a nutshell, but I'm still doing what I love."

That cycle might sound pretty familiar to other superintendents, too, says

Gary Ryan, turf superintendent for Bayer Environmental Science, rehabilitated this A-1 bentgrass green that was about 60-percent damaged due to an experimental trial.



certified golf course superintendent (CGCS) Bruce Williams, director of golf and grounds management for Los Angeles Country Club.

"We stress turf to create better conditions for the golfer, so I'm not so sure what he is doing isn't like what every superintendent is doing around the country," he says.

Williams was a speaker at Green Start Academy, a Bayer/John Deere confab that brought 50 assistant superintendents to the Research and Training Facility for continuing education and networking.

Other speakers included Stanley Zontek, director of the USGA Green Section in the Mid-Atlantic region; Grady Miller, Ph.D., professor at North Carolina State University; Bob Farren, CGCS, grounds and golf course manager at Pinehurst Resort, as well as product lecturers from Bayer and John Deere/Turf One Source.

"There has been some good basic information here," says Green Start board member Ken Mangum, CGCS, director of golf courses and grounds at Atlanta Athletic Club. "We all depend on research like this because we are busy doing our jobs every day, and the better-educated our assistant superintendents are, the better off the industry will be. ... They are going to be controlling budgets of their own not too long from now."

In the meantime, Ryan will continue his uphill battle to make the grounds suitable for guest tours and training, and he says he'll keep a special eye on the paspalum experiment. If it works well, he says he might even use it for his lawn. ■



Richard Rees, Ph.D., demonstrates the NTech GreenSeeker, which translates light reflection into a vegetative index to determine turf health.

### BAYER MEASURES PLANT HEALTH

A turf doctor might be able to gauge the exact health of your greens on-site thanks to a development by Bayer Environmental Science. The company recently dedicated a lab at its Research and Training Center that will work to quantify plant health using equipment that measures photosynthesis and root biomass, among other criteria.

Measuring phosphorescence, for example, allows turf managers to measure plant health prior to adverse visual symptoms, says Richard Rees, manager of projects and technical information for Bayer Environmental Science. He is spearheading the development of diagnostic tools that can be mounted to existing equipment for practical turf evaluations.

The company's plant health initiative was launched in cooperation with North Carolina State University. ■