
BY THE GOLFDOM STAFF

It was the first day of the Golf Industry Show, and the Las Vegas Convention Center was packed. To get from booth A to booth B took the skill of a NASCAR driver. (And if booth B was the Direct Solutions booth, well, you could pretend to be a NASCAR driver in their life-size simulator.)

Though overall attendance was slightly down — 14,707 attendees compared to 14,772 attendees last year in Orlando — qualified buyer attendance was up 2.6 percent.

“Going from a traditionally strong draw in Orlando to a western location the next year generally results in a drop off in attendance, but that was not the case this year,” GCSAA CEO Rhett Evans said. “I think that speaks to the value of the event and the belief the industry is gaining some strength. I sensed a much better mood from both attendees and exhibitors.”

Indeed, of the many meetings Golfdom held, (see Golfdom’s GIS Quick Stats, page 25) only one vendor told us that the 2012 show was slower than the 2011 show. One vendor even said the traffic in their booth increased from Wednesday to Thursday, even though the crowd was visibly smaller on the second day of the show.

Without further ado, here is Golfdom’s rundown of some of the highlights of the 2012 GIS. Look for our product roundup story on the GIS in next month’s issue.
Frank Rossi, Ph.D., associate professor in the department of horticulture at Cornell University, wants superintendents to think about the amount of fertilizers and pesticides they use more carefully and suggests ways to cut back on potassium, nitrogen and phosphorus.

Rossi, who’s been researching potassium use for 13 years, questions whether superintendents are applying too much of it. “I’m not convinced you’re getting the desired response from the amount of potassium you’re applying,” he says. “You can afford to reduce or eliminate potassium for a period of time. It’s a low-risk savings. Yes, potassium is vital to the plant. It’s so much so the plant manipulates its chemistry to make sure it has enough. Reducing fertilizer input can enhance the nutrients that are already there. Plants don’t have to work to collect potassium because the soil does all the work.”

Rossi’s research has been done solely on cool-season grass, but he says no research indicates warm-season turf needs more than one-half to 1 pound of potassium.

Rossi, who’s not a proponent of foliar fertilization, says soil has an innate ability to supply nitrogen to older, established turf via organic matter that’s been built up over time. He predicts that during the next five to 10 years superintendents will be testing soil for nitrogen more often. Soil testing can help superintendents ratchet down how many nutrients they’re applying. “Farmers have been doing this for 20 years,” he says. “They have to be efficient. Putting less nitrogen into the environment is probably a good thing.”

Additionally, Rossi says weaving in bioproducts such as Civitas and Rhapsody into a pesticide program can
reduce the amount of pesticides that need to be applied. There are three ways to reduce pesticide use:

- don’t spray;
- lower the rates; and
- extend the intervals of products.

Bioproducts can allow superintendents to get the same control with fungicides at a lower rate. Large chemical companies are adding plant defense activators into their pesticides because bioproducts are so popular, Rossi says.

Rossi also has been testing the reduction of preemergent herbicide applications in fairways at Bethpage State Park in New York. In cases where two years of preemergent herbicides were skipped in the fairways, crabgrass infestation didn’t resurge.

“If you can trim a few thousand here or there from your chemical budget, you can put that money toward, say, labor,” he says.

Every year the GCSAA bookstore showcases select authors and their books at the GIS. It is a memorable experience just standing in front of the signing table listening to tales of enlightenment. The book signing is a time-honored right of passage for every author. Hearing the author talk about the content and processes behind the book is very motivating.

This year I found out what it is like to sit behind the signing table. My first book, The “Environmental Stewardship Toolkit,” published by John Wiley and Sons, made its debut. The first copies literally shipped directly from the bindery to the bookstore tabletop!

The fact is, you put two years of writing and editing into a book and it becomes 320 pages fresh off the presses. Your thoughts race as you wonder if the book will be well received.

I bought a quick-drying blue pen made from recycled water bottles for the occasion and faced one of the most defining moments of my life. The book signing was successful. I will never forget the experience, nor everyone who stopped by, bought a book or offered encouragement.

After 30 years of research and two years of writing, I had the honor of signing my own turf book.

BY ANTHONY L. WILLIAMS, CGCS, CGM, ENVIRONMENTAL EDITOR

“If you can trim a few thousand here or there from your chemical budget, you can put that money toward, say, labor,” he says.

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Non-turf areas stay clean for months with one shot of ‘stay-put’ ProDeuce®.

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Seed with Speed

Turfco unveils new 40-inch seeder designed for golf course greens and spot seeding on the links.

The Turfco TriWave 40-inch Overseeder features a dynamic design duo — 1 1/2-inch seed spacing and two independent floating heads. The design combination enhances germination by empowering the TriWave to closely follow contours of all types of course terrain for consistent seed depth.

“The TriWave’s patent-pending floating heads ensure superintendents don’t miss low spots or destroy high spots or unmarked sprinkler heads,” said Turfco President George Kinkead.

The seeder’s WaveBlade technology — counter rotating blades twirling at 900 revolutions per minute — creates clean, optimal slit widths for improved seed-to-soil contact and keeps turf disruption to a minimum. The TriWave’s delivery system places seed directly into the slit, reducing waste and further boosting germination.

Nearly 20 golf courses tested our 40-inch TriWave Overseeder with resounding success," says Scott Kinkead, Turfco’s executive vice president. "Frankly, it was like pulling teeth to get some of the supers to part ways with the new machine — but that’s a good thing."

Turfgrass Talk Show
Spotlights Wetting Agents

Wetting agents have earned their place in the golf market, according to the GCSAA’s Turfgrass Talk Show at the GIS.

Hosted by Thomas Nikolai, Ph.D., a turfgrass academic specialist with Michigan State University, the Turfgrass Talk Show on wetting agents embodied “infotainment.”

Although guests of the Turfgrass Talk Show varied in their use and support of wetting agents, all agreed it’s more a question of when, where, how and how often to use the solutions.

Guests of GCSAA’s Turfgrass Talk Show on wetting agents included:

➤ Rodney Tocco Jr., a research assistant and doctoral student at Michigan State University;
➤ Douglas Karcher, an associate professor in the Department of Horticulture at the University of Arkansas;
➤ Matthew Taylor, CGCS, director of golf for the Royal Poinciana Golf Club; and
➤ Michael Morris, CGCS, a golf course superintendent with the Crystal Downs Country Club.

“I haven’t bought into the need for a full-blown wetting agent program yet, but we do use wetting agents on our greens during certain times of the year,” said Taylor, who oversees 36 holes in Naples, Fla.

Taylor said wetting agents help golf course superintendents combat localized dry spots and deal with drought conditions and related water-use restrictions.

Morris agreed, noting he is somewhat skeptical of some of the water- and money-savings claims made by some wetting agent manufacturers.

“On greens, wetting agents serve as a bridge between waxy sand coatings and water — improving water droplet penetration,” Karcher notes.

Tocco and Karcher agreed that several applications of a wetting agent can help control localized dry spots and enhance soil moisture levels.

“Wetting agents clearly are one of the many tools we have to enhance turf quality,” Nickolai concluded.
A Blast from ‘67
My Favorite GIS Moment
BY SETH JONES, EDITOR IN CHIEF

It was a Golf Industry Show filled with highlights, but the best moment for me came when Michael Bavier, CGCS-retired, stopped by the Golfdom booth.

“I brought you a Christmas present,” the former GCSAA president (1981) said to me. He then reached into his briefcase and handed me a copy of the May 1967 issue of Golfdom.

The copy had been sitting in his bookshelf gathering dust for the past few decades. He decided he needed to do something with the magazine before it accidentally got recycled, and knew we’d appreciate it at the Golfdom office in Cleveland. Indeed, the rare old magazine was a hit with all of us in the Golfdom booth.

Expect to see Bavier’s name more this year, as the co-author of “Practical Golf Maintenance” (with Gordon Witteveen) told me he and his wife are working on an update to the classic turf book, due out sometime this year.

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Golfdom GIS Quick Stats

| Number of editors covering the show | 5 |
| Number of meetings made | 58 |
| Number of meetings missed | 2* |
| Number of blog posts | 31 |
| Number of Tweets | 97 |
| Amount lost at the casinos don’t ask! | *our bad! |
Every golf course superintendent battles his particular problem weed that impairs playability. For most, it’s *Poa annua*.

*Poa annua* survives as a weed due to its high genetic variability, rapid germination, short life cycle, and tolerance of compacted soil. *Poa annua* quickly dies in warm weather, leaving areas bare until permanent turf has had time to fill in. Bentgrass provides conditions that are ideal for *Poa annua* growth, including high moisture, nitrogen, high-traffic levels and routine fungicide use.

A New Turfgrass Chemistry

XONERATE™ (Amicarbazone), an entirely new turfgrass chemistry, is a post-emergent herbicide for the control of *Poa annua* on golf course fairways, roughs and tees. XONERATE is available in an easy-to-use water-dispersible granule formulation.

Studies have shown XONERATE to be 90 percent effective, more than any other product on the market for the control of *Poa annua*.

The XONERATE Difference

XONERATE offers selective removal of *Poa annua* in many cool- and warm-season turfgrasses, including creeping bentgrass and Bermuda grass. The mode of action in XONERATE eliminates *Poa annua* with little to no disruption to the growth of bentgrass.

With XONERATE, golf course superintendents will be able to re-seed creeping bentgrass at seven or more days after the last application in roughs, fairways and tees. The first application can be scheduled in the spring as early as six months after seeding creeping bentgrass in the fall months of the previous year.

“XONERATE does what it says it does. It will eliminate your *Poa annua,*” says Cory Troyer, golf course superintendent at Otter Creek Golf Course in Columbus, Indiana. “If you plan it out properly-use XONERATE in a program—I think it will be a fantastic way to re-establish bentgrass in a high *Poa annua* population.”

How XONERATE Works:

- XONERATE is absorbed by plant leaves and roots for quick, residual, post-emergent activity.

- Inhibits photosynthesis in sensitive plants by interfering with normal electron transport resulting in subsequent cell membrane and chlorophyll loss.

- *Poa annua* control occurs over a three- to four-week time period

- *Poa annua* initially becomes chlorotic (loss of green color), followed by necrosis (browning of plant tissue)

- Temporary yellowing of the turf may occur after application. This effect is temporary and the turf will recover in 14-21 days.

Meeting Your Goal of Improved Golfer Playability

Improving playability and aesthetics is every golf course superintendent’s goal. The elimination of *Poa annua* from existing turf will increase the consistency of the playing surface and decrease color variation.

*Poa annua* grows in a different direction and at different growth rates than bentgrass so the greens tend to be bumpy, says Shawn Emerson, director of agronomy at Desert Mountain Golf Course in Carefree, Arizona. “They [members] want to play in the best conditions possible so we have to come up with a system and a strategy that meets their expectation and works in the environment to kill this *Poa annua*.”

XONERATE offers a new way of approaching the age-old problem of *Poa annua* to help golf course superintendents meet their goals.

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1. Grounds Maintenance, Controlling *Poa annua* in bent grass greens by Bert McCarty, Clemson University, December 22, 2011

2. Rates and application will vary by turf type and geography.
Introducing a product that doesn’t just manage or suppress Poa, it actually eliminates it. XONERATE™ herbicide from Arysta LifeScience is a major breakthrough in turf management; giving you control of Poa annua that’s 90% effective — more than any current product on the market. For the whole story, talk to an Arysta LifeScience representative or visit www.eliminatepoa.com.

Dollar Spot Control in Cool Season Grass Fairways

Rick Latin, Ph.D., is a professor of turfgrass pathology at Purdue University and has conducted research on controlling many common turfgrass diseases including dollar spot. Our conversation centered on dollar spot control in cool season grass fairways. Rick can be reached at rlatin@purdue.edu.

Q What is your take on early season (March or April) fungicide applications to control dollar spot?
Spraying on a specific date like March 15th or 30th or April 15th is artificial. A specific date fits well for human activities but it does not reflect what is occurring with the dollar spot pathogen. Dollar spot infection occurs in response to moderate air temperatures and consecutive hours of moisture on the leaves. Two years of research at Purdue has shown fungicides applied on specific dates in March and April did not reduce dollar spot severity later in the season.

This year may be the exception where early season fungicide applications for dollar spot control may make sense because of unusually mild weather in the Midwest. However, temperature is only part of the equation — ample moisture must accompany the elevated temperature for infection to occur.

Q What guidelines do you suggest to predict when the first fungicide for dollar spot control should be applied?
We are a few years away from having accurate predictive models. The best a superintendent can do is to use his / her compiled experience to anticipate initial outbreaks. From a scouting perspective, it is important to understand the history of dollar spot on the course because initial outbreaks tend to occur in certain areas with favorable microclimates. Being able to recognize the very first signs and symptoms is critical.

Q What cultural practices are recommended to reduce dollar spot severity on cool season grass fairways?
Remove dew in the morning to reduce the period of leaf wetness; avoid early evening irrigation on fairways to reduce the period of leaf wetness; and provide sufficient nitrogen to encourage a healthy, actively growing turf stand.

Q What are the guiding principles for developing a fungicide program to control dollar spot on fairways?
1. Understand the history of dollar spot outbreaks on your course and know which areas are most prone to dollar spot.
2. Know which fungicides are most effective for controlling dollar spot and if the pathogen populations on your course have issues with fungicide resistance.
3. Include chlorothalonil in the fungicide program. It has multi-site activity and therefore will not contribute to the rise of resistant populations.
4. Closely monitor weather conditions and be aware of the conditions that favor dollar spot infection.

Q Fall is a long way off, but when do you recommend stopping fungicide applications for dollar spot control in the fall?
First, never let a dollar spot outbreak get out of hand. Dollar spot damage on fairways in the fall can be seen long into the spring. A late August/early September fungicide application to control dollar spot followed by mid-September fertilization provides satisfactory control most years. The fertilization in mid-September gets the grass growing and the turf can cope with a low level of dollar spot infection.

If the turf has a history of dollar spot infection in the fall keep treating until the first frost. My experience is that the threat of dollar spot infection usually declines dramatically following the first hard frost.

Q Is there anything else you would like to add?
Dollar spot is usually clustered in certain fairways, certain portions of specific fairways or in certain microclimates. To economize on time and fungicide expense, consider spot treating only the areas that have a history of dollar spot infection.

If you want to determine if an early season fungicide application for dollar spot control is effective, put down a sheet of plywood, mark the corners with a small dot of spray paint and spray over the top of the plywood. This way you can determine the value of the application for yourself.

Clark Throssell, Ph.D., Golfdom’s research editor, loves to talk turf. He can be reached at cthrossell@questex.com.
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