Who Says Three's a Crowd?

There's a Reason why the Top 3 Golf and Utility Manufacturers use Trojan Batteries in their Vehicles.

When you calculate how well we perform against the competition, consider that our battery technology is backed by over **200+ years** of engineering expertise, acknowledge our industry leading performance at **40,000+** tested ampere hours,* plus the fact that we have been in business since **1925**, it is easy to see why all paths lead to Trojan Battery.

ALSO AVAILABLE IN: Columbia Par Car | Cushman | Eagle | Garia | Melex | Star Car | Stealth | Tomberlin *Independent laboratory testing validates the sustained capacity and superior performance of Trojan Batteries. Check out our innovative

New Golf Batteries for better performance on and off the course.





FOR MORE INFOMATION: (800) 423 - 6569 or +1 (562) 236 - 3000

TROJANBATTERY.COM

OUTSIDE THE ROPES



Tim Moraghan, principal, ASPIRE Golf (tmoraghan@aspire-golf.com). Follow Tim's blog, Golf Course Confidential at http://www.aspire-golf.com/buzz.html or on Twitter @TimMoraghan

WATER WORLD

S mart minds have been saying for years that "water is the new oil," and that water use already a critical issue to the future of golf—is only going to grow in importance. In an attempt to address the issue, the USGA, with the support of the GCSAA, held a "Water Summit" last fall, billing it as a factfinding and exploratory meeting and a chance for key stakeholders to meet and exchange ideas.

These organizations are hardly the first to worry about water. Peter Mc-Donough, golf course superintendent at The Keswick Club in Charlottesville, Va., has been at the forefront of water management for years. Working closely with various stakeholders in his state, he led a successful effort to get Virginia to adopt break-through procedures and protocols. Working on behalf of his local superintendents association, McDonough and his committee were able to create best practices manual, communicate with constituents, and gain recognition from the Virginia legislature and influence Chesapeake Bay legislation.

That's a great start. But if the other local associations don't start showing the same sort of initiative, water legislation will be forced on the golf industry whether we like it or not.

Before we do anything else, those of us fighting for our piece of the water pie must realize that golf is only one faction relying on this valuable resource. And not only is golf not the most important game in town, most people are less interested in giving us more water than they are curious to know what golf can do to help preserve and extend the limited amount of water we have.

Who are we competing with? Any profession involved in growing turf is dependent on water (landscapers, other sports, nurseries, etc.).



Before we do anything else, those of us fighting for our piece of the water pie must realize that golf is only one faction relying on this valuable resource.

Now consider agriculture, livestock, utilities, vineyards, and other heavy water consumers, to say nothing of real estate, car washes, and all kinds of manufacturing. Everyone needs water.

All the more reason that Mc-Donough is a good example for the rest of us to follow. I recently asked him for some tips in setting up water management strategies and best management practices. His suggestions started with one caution: Water management is not an overnight process but takes years to implement.

• Know and understand how those not in our business perceive golf and its use of water. Communication is vital to educating these parties about the conservation efforts already in place and that overwatering turf is as harmful as no water at all. People need to know when green is good, and not good.

• The keys to success are marketing and selling these conservation messages in concert with other associations in your region (PGA, state, and regional golf associations).

• Setting up regular meetings with allied associations is critical to arriving at consensus and, eventually, mutually beneficial strategy.

• Use allied associations as conduits to their members, who will are key to building a base of advocates and supporters.

• Your efforts must have a single message that is put forth as part of a unified front in approaching other stakeholders. If you don't work

together, the government will make decisions for you.

• Align with others who have needs for water by identifying and joining agribusiness associations or councils (wine, farm bureau, produce and poultry) in your state and region. A representative of the superintendent's association needs to be present and participatory. Golf must be on the same page as others with similar needs and must be part of the bigger picture. Try going it alone and its likely state government will leave golf out of major decision making and make an example of it.

• Don't criticize other entities' needs for water. Be part of a team and act collectively so everyone gets a fair share of the allocation. Golf has to be a good citizen and consider the overall needs of other industries.

• Do your homework illustrating the value of golf to the local, state, and regional economies through tourism, revenues, and real estate.

Farms and other agricultural entities are governed by stringent state and federal regulations. Golf usually doesn't answer to the same sort of strict guidelines. However, it's in golf's best interest to report water, pesticide, fertilizer, and chemical use to the proper authorities. Learn what these agencies want to know from you and work, carefully, to help them make educated and fair decisions.

But don't get involved with regulatory agencies unless you are armed with the most accurate information. States can and will estimate numbers if your facts aren't correct, and they'll make decisions not in your favor.

Success begins locally and moves up the line, eventually reaching the state and even the federal level. If you don't know how politics works in your area, hire someone who does know. In Virginia, McDonough's group works closely with a consultant who knows the ropes, is a lobbyist and could coordinate efforts with other agencies.

"Before I started down this path I wasn't aware of the different needs of other entities that have a stake in the water game, from car washes to construction," McDonough said. "I also learned the art and protocol of governmental procedure, extent of the involvement of government regulators, who are very different from legislators. Know how legislators make policy, and regulators implement and monitor the results of the decisions."

McDonough stressed that because golf can't exist without water, the industry must make a commitment to the long haul. Be patient and know that progress, especially in politics, takes time. But stick with it. Your decisions and participation can have significant effect on golf now and into the future.

But golf won't have a future without your help. **GCI**



PGRs are the Silly Putty of turf management... they fit just about anywhere on the course.

Nothin

TIO

With so many factors out of their control – weather and amount of play, to name a couple – superintendents are looking at plant growth regulators to take charge of their turf. According to Laurence Mudge Manager of Bayer's Green Solutions Team, plant growth regulators – or PGRs, as they're commonly referred to – are simply an organic compound, natural or synthetic, which when present or applied in small amounts, alter plant growth and development.

"PGRs are tools that can help golf course superintendents manipulate plant growth to maximize desirable turf characteristics and playing conditions," Mudge says. "Some of the desired changes in turf growth and development would include: growth reduction, increased density, recuperative potential, fewer clippings, decreased mowing, deeper roots, increased



The Best is Back



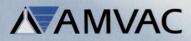


The Most Effective Snow Mold Control Available

The fungicide you've trusted is back controlling Snow Mold and other labeled winter diseases on golf courses. Pound for pound – ounce for ounce this proven performer offers an exceptional value for your golf course management program.

Contact your AMVAC/AEP distributor today or AMVAC at 1-888-GO AMVAC (1-888-462-6822) and visit www.amvac-chemical.com.

Turfcide 400 Turfcide 10G



Always read and follow all label directions and use precautions. Turfcide® is a registered trademark of

AMVAC Chemical Corporation. ©2012 AMVAC Chemical Corporation.

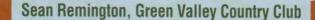
TURF MANAGEMENT

green speed, fewer seedheads and improved turf color."

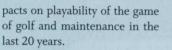
Mark Brotherton, SePRO Turf & Ornamental Product Manager, adds finer leaf texture, improved stress tolerance and *Poa annua* suppression, among other things, to reasons why plant growth regulators are popular.

"Consistent PGR applications made throughout the growing season help maintain a physiological balance in the plant, providing more predictable turfgrass growth and performance," Brotherton says.

Sean Remington, superintendent at Green Valley Country Club in Lafayette Hill, Pa., is a PGR proponent. "The biggest benefit overall is the manageability of the grass and improved playability for golfers," he says. "PGRs are one of the biggest im-



"PGRs are one of the biggest impacts on playability of the game of golf and maintenance in the last 20 years."



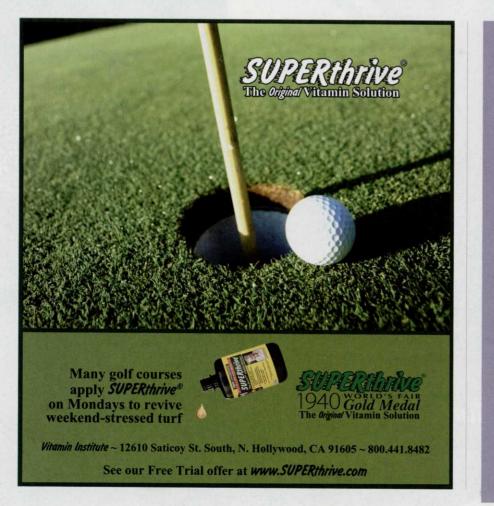
"In the 80s, if we had a stretch of 3-4 days of rain and couldn't get on the course to mow, we had to raise the height of cut and really work to get it back to where it was. Now, 3-4 days of rain doesn't scare you as much. You don't have as far to come back from," he addd. "It changed the whole game right there."

PGRs are used as part of an integrated disease management program to directly and indirect-

ly suppress turf diseases, Mudge says. For example, PGRs like Primo Maxx and Trimmit have been shown in university trials to control dollar spot.

"Other PGRs positively affect the turf plant, which results in improved plant health and greater tolerance to summer stress diseases like anthracnose," he says. "Annual bluegrass seedhead suppression with Proxy reduces the bumpiness on putting green surfaces, resulting in a truer ball roll, minimizes the presence of unsightly seedheads, and improves long-term plant health by reducing the energy plants use when producing seed. Primo Maxx can suppress vegetative growth, reducing the need for frequent mowing, along with making plants more compact, increasing plant density, and resulting in better playing surfaces.

"Both of these PGRs have been shown to reduce the impact of anthracnose on annual bluegrass and creeping bentgrass," Mudge adds. "Simply put, suppressing seedheads allows the plants to use more energy on vegetative



<image><image>

Reprints enable you to reuse your article and simply place it into the hands of your target audience. Having been featured in a well-respected publication adds the credibility of a third-party endorsement to your message.

Give yourself a competitive advantage with reprints.

800-456-0707 reprints@gie.net

SEE WHAT'S NEW FOR 2013





NEW FOR 2013!

GREEN LINE TEE SIGNS

- Stylish. Low maintenance. Weather-resistant tee signs.
- All signs include club logo, hole number, par, yardage with optional hole layout.
- Sign comes pre-drilled for easy installation. Please specify when ordering if you do not want the signs drilled.
- Green Line Mounting Post sold separately.
- Includes six color-matched mounting screws.



	CUSTOMIZED GREEN LINE CURVED SIGNS WITH LAYOUT 23 ½"H x 17 ½"W x ½"D (60 cm x 44 cm x 1 cm)	CUSTOMIZED GREEN LINE CURVED SIGNS WITHOUT LAYOUT 23 ½"H x 17 ½"W x ½"D (60 cm x 44 cm x 1 cm)	CUSTOMIZED GREEN LINE DELUXE SIGNS WITH LAYOUT 23 ½"H x 17 ½"W x ½"D (60 cm x 44 cm x 1 cm)	CUSTOMIZED GREEN LINE DELUXE SIGNS WITHOUT LAYOUT 23 ½"H x 17 ½"W x ½"D (60 cm x 44 cm x 1 cm)
Green/White	300700	300705	300600	300605
Black/White	300750	300755	300650	300655
	\$325.00	\$200.00	\$325.00	\$200.00

Green

Black

GREEN LINE POSTS

- The perfect mounting option for our Green Line Tee Signs.
- Features decorative beveled top.



RANGE BALL PUSHER

- Make short work of your practice area cleanup.
- Proven design features durable PVC frame and exclusive rollers which glide easily across all turf surfaces.
- 44 ½" (113 cm) wide head makes short work of collecting range balls.

44 ½" (113 cm) head – 33 ½" (85 cm) height

85300 Range Ball Pusher

\$37.00

DOUBLE DIVOT MIX BOTTLE RACK

300800GN

300800BK

\$93.00

- ► A must for any golf course.
- Portable design makes placement easy anywhere on your course.
- ▶ Holds 30-40 oz. (1.2 L) Seed and Soil bottles.
- Bottles not included.

72" (183 cm) long, 4"W x 4"D (10 cm x 10 cm)

35"H x 58"W x 18"D (89 cm x 147 cm x 46 cm)

	G
	\$675.00
Black	200145BK
Brown	200145BR
Green	200145GN



WRAPAROUND SAFETY GLASSES

- Well thought-out construction combines safety, comfort, and affordability.
- Vision is unobstructed by the one-piece wraparound lens.
- Tight fit allows maximum safety and unobstructed vision.
- Flexible temples and non-slip rubber head grips.
- Available in either clear or tinted lenses.

75000	Wraparound Safety Glasses – Clear	\$3.50
75050	Wraparound Safety Glasses – Tinted	\$3.50







PREMIUM GREEN LINE HAZARD/ YARDAGE STAKES

- Premium recycled plastic stakes feature a decorative beveled top and rich vibrant UV-resistant colors.
- 5 ½" (14 cm) stainless steel spike makes it easy for players to remove and replace.
- Purple stakes used to designate reclaimed/recycled water.
- Priced individually. Sold in multiples of twelve.

24" (61 cm) long, plus 51/2" (14 cm) stainless steel spike

		SQUARE with spike
U White	17024	-
Yellow	17124	-
Red	17224	-
Blue	17324	-
Purple	-	17424
	\$8.25	\$17.25

CUSTOMIZED GREEN LINE PRODUCTS

- Promote your brand by adding a full-color custom logo to Green Line products like benches, water stands, and divot mix boxes.
- Logos are engraved with colored resin or inlaid with full-color decal.
- No color limits.
- One price for custom logos \$75.

VERTICAL RANGE FLAGS

- Make your range stand out with these oversized vertical flags.
- Integrated tube design fits all regulation flagsticks, making installation a snap.
- Top nut can be adjusted so flag moves with the wind or stays in a fixed position.
- Includes flag, mounting rod, and hex flange locknut with nylon insert.

	VERTICAL RANGE FLAGS 40"H x 14"W (102 cm x 36 cm)	
Yellow/Black-50	60050	-
Yellow/Black-100	60100	_
Yellow/Black-150	60150	-
Yellow/Black-200	60200	-
Yellow/Black-250	60250	-
Red	-	60510
White	-	60520
Yellow	-	60530
Orange	-	60540
Medium Blue	-	60550
Green	-	60560
Black		60570
	\$33.00	\$30.00







SPECIAL EVENT CUPS

ST2000 SMART-FIT" CUP

CROWN ALUMINUM TEE MARKER

WHY IGNORE 25% OF YOUR GOLFING MARKET?

NEW CUSTOM EVENT FLAGS

THINK PINK!

think

Welcome the ladies to your course with a complete line of customized flags, flagsticks, tee markers, cups, special event cups, and more! Now available exclusively from Standard Golf.





Real people. Real service. Total customer satisfaction.

A HIGHER STANDARD OF SERVICE

Now you have two resources: your preferred Standard Golf Distributor and your SG Express order specialists.

- Talk to experienced, knowledgeable specialists ready to answer your product questions and personally manage your custom orders.
- Visit with art directors who personally walk you through your customized orders.
- Check out our intuitive e-commerce site that allows you to place and track orders online.

LET'S GET STARTED. CALL TODAY!

1. CALL SG EXPRESS (866-743-9773) or ...

2. ORDER ONLINE. Need help? Call and we will walk you through the process. growth, and vegetative growth reduction provides adequate turf quality without resorting to negative practices like ultra-low mowing heights or sub-optimal nitrogen fertility."

PGRs are applied as part of a superintendent's normal agronomic program, most often as part of a foliar spray program. The equal distribution and uptake by plants is critical in achieving uniform results, thus foliar sprays are generally recommended over granular applications, Mudge says.

The "best time" to apply is a moving target.

"It depends on the PGR used and the desired effect," Mudge says. "Seedhead suppression with Proxy should be performed prior to seedhead formation; for plants like annual bluegrass or creeping bentgrass, it would be in late winter through spring, as coolseason turf begins to grow very actively. Many superintendents use growing-degree-day models from Michigan State University and Virginia Tech University to assist with proper timing.

"For warm-season turf such as Bermudagrass, seedheads can be suppressed during spring transition from dormancy," he added. "Growth-reducing PGRs can be used throughout the year on actively growing plants, but superintendents should be careful not to over-regulate growth during periods of stress or when growth is reduced by excess heat or cold temperatures."

Cale Bigelow, Ph. D., associate professor, agronomy – turfgrass science at Purdue University, admits nobody really knows what is best when it comes to utilizing PGRs during periods of stress, and solid arguments can be made on both sides.

"My bias is that less mower injury is probably better for the turf during late-summer stress," he says. "In recovery mode you are lightly feeding soluble nutrients and these, in turn, hopefully are pushing growth."

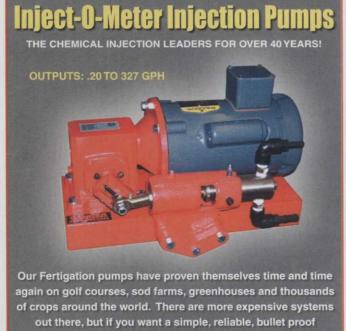
If turf is still under regulation, Bigelow says superintendents can alternate daily mowing and lightweight rolling for surface smoothness. Because of the potential of rapid regrowth as the PGR wears off, he generally recommends staying the course for a few more applications until summer temperatures moderate, thinking the benefits outweigh the potential risk.

Brotherton noted that applica-

tion frequency is driven by type of playing surface it is applied to.

"Putting green applications are made as often as weekly and spread out to as long as monthly," he says. "The most common frequency is every 1-2 weeks. Tee and fairway applications are made every 2-6 weeks, with 3-4 weeks being the most common. Turf maintained at a high mowing height would require lessfrequent applications."

As for speed of activity, Brotherton says foliarly absorbed PGRs begin regulating within 1-2 days, while root-absorbed products begin working within 2-4 days. The speed at which a PGR can be absorbed and translocated through the plant depends on several environmental factors as well as how physiologically active it is.



Fertigation System that works, call Inject-O-Meter today!

1-800-545-4440

Email: rthorn@inject-o-meter.com

Website: www.inject-o-meter.com



During a recent USGA Turf Advisory Service visit, a laser was used to show how Canada geese can be removed from the course.

The pocket-sized Bird Phazer Laser emits a powerful bright green light. When the beam hits the feathers of geese, it makes a bright splash of light. Their eyes are very sensitive to uv light, and the bright green laser light is very traumatic for them. A flock of more than 50 Canada geese immediately took flight from more than 200

yards away. \$199 Compare to the Avian Dissuader

geesedamage.com (800) 555-9634 JWB Marketing Columbia, SC

CHAMPION Turf Farms

Our focus is Bermudagrass Greens...

- Over 45 Years of Planting Bermudagrass Greens
- Installing Greens on Over 600 Courses in 19 States
- Breeders of CHAMPION Dwarf Bermudagrass Released in 1995
- Breeders of EMERALD Dwarf Bermudagrass Released in 2007
- Creators of the No-Till Renovation Process Used to Convert Over 400 Courses to CHAMPION
- Developing Numerous Innovations in Production and Planting Techniques

Nobody does it better...

- Guaranteed Purity
- Guaranteed Establishment
- Refrigerated Transportation Of Planting Stock
- Sprigs Treated With Fungicides Before Shipping
- The Fastest Grow-In Possible
- No Contamination During Installation
- No Weeds In Planting Stock
- No Soil In Planting Stock
- No Heavy Equipment On Your Greens
- We Are Always There In Person To Install Your Greens

Follow-up support after installation...

Because we are the breeders of the grasses we install, we will be there to ensure your success for the life of your greens. We make follow-up visits, take soil tests, and make agronomic recommendations for every set of greens we install.



Specializing In Bermudagrass Greens Since 1966

BERMUDAGRASS FOR GREENS

2012 GREENS INSTALLATIONS PERFORMED BY CHAMPION TURF FARMS

A.A. SI

Ansley Golf Club at Settindown Creek - Roswell, GA -No-Till conversion from Bentgrass to CHAMPION Atlantis Country Club - Atlantis, FL -No-Till conversion from Tifdwarf to CHAMPION Barefoot Resort - Love Course - North Myrtle Beach, SC -No-Till conversion from Bentgrass to CHAMPION Barnsley Gardens Resort - The General - Adairsville, GA -No-Till conversion from Bentgrass to CHAMPION Birchwood Country Club - Nashville, NC -No-Till conversion from Bentgrass to CHAMPION Bonita Fairways Golf Course - Bonita Springs, FL -No-Till conversion from Tifdwarf to CHAMPION Breckenridge Country Club – Breckenridge, TX -Course renovation, greens planted with EMERALD Brier Creek Country Club - Raleigh, NC -No-Till conversion from Bentgrass to CHAMPION Buckhorn Springs Golf and Country Club - Valrico, FL -No-Till conversion from Tifdwarf to CHAMPION Charleston Country Club - Charleston, MO -No-Till conversion from Bentgrass to CHAMPION Colonial Country Club North Course - Cordova, TN -Course renovation, greens planted with EMERALD Country Club of North Carolina - Pinehurst, NC -No-Till conversion from Bentgrass to CHAMPION Cypress Woods Golf & Country Club - Naples, FL -Course renovation, greens planted with CHAMPION Desert Pines Golf Course – Fort Stockton, TX -Greens renovation from Bentgrass to CHAMPION Emerald Greens Golf Resort & Country Club - Tampa, FL -No-Till conversion from Tifdwarf to CHAMPION Fields Ferry Golf Club - Calhoun, GA -No-Till conversion from Bentgrass to CHAMPION First Tee of Central Arkansas - Little Rock, AR -No-Till conversion from Bentgrass to CHAMPION Fort Bend Country Club - Richmond, TX -Greens renovation from Tifdwarf to CHAMPION Goldsboro Municipal Golf Course - Goldsboro, NC -No-Till conversion from Bentgrass to CHAMPION Grande Dunes Resort Club - Myrtle Beach, SC -No-Till conversion from Bentgrass to CHAMPION Greenville Country Club - Greenville, NC -No-Till conversion from Bentgrass to CHAMPION Griffin Bell Golf Course - Americus, GA -Greens renovation from Tifgreen to CHAMPION Griffin Golf Course - Griffin, GA -No-Till conversion from Tifgreen to CHAMPION High Point Country Club - Willow Creek - High Point, NC -No-Till conversion from Bentgrass to CHAMPION Hillandale Golf Club - Durham, NC -No-Till conversion from Bentgrass to CHAMPION Inverrary Country Club - West Course – Lauderhill, FL -Greens renovation from Tifdwarf to CHAMPION Lady Bird Johnson Golf Course - Fredericksburg, TX -Greens renovation from Tifdwarf to CHAMPION Lake Hickory Town Club Executive Course - Hickory, NC -No-Till conversion from Bentgrass to CHAMPION Lansbrook Golf Club – Palm Harbor, FL -No-Till conversion from Tifdwarf to CHAMPION Lely Resort - Classics Course - Naples, FL -Greens renovation using CHAMPION Lely Resort - Flamingo Course - Naples, FL -Greens renovation using CHAMPION

> 3606 Ave F Bay City, TX 77414 1-800-463-TURF (8873) info@championturffarms.com

Magellan Golf Course - Hot Springs Village, AR -No-Till conversion from Bentgrass to CHAMPION MBN - King's North Course - Myrtle Beach, SC -No-Till conversion from Bentgrass to CHAMPION Moss Creek Golf Club - Devil's Elbow South - HHI, SC -Course renovation, greens planted with CHAMPION Mystic Creek Golf Course - El Dorado, AR -Newly constructed course using CHAMPION greens North Shore Country Club - Sneads Ferry, NC -No-Till conversion from Bentgrass to CHAMPION Occoneechee Golf Club - Hillsborough, NC -No-Till conversion from Bentgrass to CHAMPION Orange County National Crooked Cat - Wintergarden, FL -No-Till conversion from Tifdwarf to CHAMPION Old Chatham Golf Club - Durham, NC -No-Till conversion from Bentgrass to CHAMPION Olde Liberty Golf Course - Youngsville, NC -No-Till conversion from Bentgrass to CHAMPION Page Belcher - Stone Creek - Tulsa, OK -No-Till conversion from Bentgrass to CHAMPION Palm Beach Country Club – Palm Beach, FL -No-Till conversion from Miniverde to CHAMPION Paul Walker Golf Course - Bowling Green, KY -No-Till conversion from Bentgrass to CHAMPION Pine Forest CC Green & Gold Courses – Houston, TX -No-Till conversion from Tifdwarf to CHAMPION **River Hills Country Club – Lake Wylie, SC** -Greens renovation using CHAMPION River Run Country Club - Davidson, NC -No-Till conversion from Bentgrass to CHAMPION **RTJ Trail Hampton Cove Short Course - Owens Crossroads, AL** -No-Till conversion from Bentgrass to CHAMPION Sedgefield Country Club - Greensboro, NC -No-Till conversion from Bentgrass to CHAMPION Sherbrooke Golf & Country Club - Lake Worth, FL -No-Till conversion from Tifdwarf to CHAMPION The Challenge at Oak Forest - Longview, TX -Greens renovation from Tifdwarf to CHAMPION The Club at Olde Cypress – Naples, FL -Course renovation, greens planted with CHAMPION The Club at The Strand – Naples, FL -Course renovation, greens planted with CHAMPION The Country Club of Coral Springs – Coral Springs, FL -No-Till conversion from Tifdwarf to CHAMPION The Course at Eagle Mountain - Batesville, AR -No-Till conversion from Bentgrass to CHAMPION The Golden Bear Club - Windermere, FL -No-Till conversion from Tifdwarf to CHAMPION Golf Club at Bradshaw Farm Red & White - Woodstock, GA -No-Till conversion from Bentgrass to CHAMPION The Peninsula Club - Cornelius, NC -No-Till conversion from Bentgrass to CHAMPION The Rustic Golf Course – Rockport, IN -No-Till conversion from Bentgrass to CHAMPION Ventura Country Club - Orlando, FL -No-Till conversion from Tifdwarf to CHAMPION Verdict Ridge Golf & Country Club – Denver, NC -No-Till conversion from Bentgrass to CHAMPION Wekiva Golf Club - Longwood, FL -No-Till conversion from Tifeagle to CHAMPION Wilshire Golf Club - Winston Salem, NC -No-Till conversion from Bentgrass to CHAMPION

For a Complete List of of Courses Please Visit: www.championturffarms.com

TURF MANAGEMENT

Frequency depends on the PGR used, Mudge says.

"Seedhead suppressors like Proxy and some others are typically applied 1-3 times in the winter-spring transition period during seedhead formation," he says. "Other growth-regulating PGRs can be applied monthly to weekly during the growing season. Typically, the more frequently these are applied, the lower the use rate to provide even, uniform plant growth regulation. Using high rates infrequently can result in more variable results.

We know the benefits, but what are the dangers?

"There is always the risk of over-regulation," Brotherton says. "Over-accelerating growth could cause the plant to literally grow itself to death, while overretarding growth could lead to



Poa seedhead suppression reduces bumpiness on greens.

turfgrass injury or decline."

Mudge stressed caution.

"PGRs affect plant growth, so superintendents should be careful when using them on weakened or stressed turf. PGRs work best on turf that is healthy and maintained with strong agronomic and IPM practices," he says. "I like to use the analogy that 'even the best medicine won't help a starving patient.' When used improperly, PGRs can weaken or damage turfgrass. "In addition, caution should be taken when using PGRs in conjunction with DMI (demethylation inhibitor) fungicides, which are very similar chemically, especially during high temperatures," he adds. "If you tank-mix the two, or even apply a DMI fungicide on PGR-treated turf, you run the risk of overregulating the turf, which can result in phytotoxicity. To reduce the risk of any issues, avoid applying to stressed turf or during high temperatures."

Jerry Corbett, technical service manager at Quali-Pro, warnsthat where you start in terms of turf health will have a lot to do with where you finish.

"The dangers would be jumping into a PGR program with a weak turfgrass base to begin with," Corbett says. "Promote the

You Don't Have to Be Green to be Clean...

Otterbine AERATING FOUNTAINS

OFFERING BOTH FUNCTION AND BEAUTY these surface spray aerators are engineered to provide results, and are supported by a 5-year warranty and *Pattern Guarantee.* Widely used throughout the world, Otterbine's Aerating Fountains improve and maintain water quality in ponds and lakes by controlling algae and eliminating odors while providing attractive fountain-like displays.



by Otterbine®

Aerating Fountains

Ent industry show Booth 4216

