

However, because of the difficulty in recovering from salinity damage once turf begins to deteriorate, it will always be best to approach the problem before damage is visible. That's why the application of an amino acid-based product is recommended in a fertilization program as a supplement for turf maintenance and as well as a precautionary measure in case of any incoming stress circumstance. GCI

The authors are members of the research and development team at Bioiberica, a Barcelona, Spain-based research company specializing in biochemical molecules and active ingredients for various industries.

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Superintendents can use rotors specifically designed for use with nonpotable water. Photo: Rain Bird

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## Making the most of water shortages

**W**ater availability is a growing threat to all golf courses throughout the country. It seems that every time people pick up a newspaper or turn on the TV news, they read or hear about water bans, shortages or unavailability that challenges the way superintendents maintain golf courses.

Although evapotranspiration-based controllers commonly are cited as one of the best water savings tools, they're not the only solution for water and cost savings.

Despite the availability of reclaimed water, the suitability can be called into question because of the potential for extra chemical inputs such as heavy metals. As such, the turf professional might be required to spend more time managing the irrigation process itself as well as the soil and the turf.

Reclaimed water, or the use of lightly treated recycled water, is an option. This method takes rain water and water used in households or commercial facilities and recycles it for reuse in turfgrass irrigation. It reduces discharge of wastewater into streams and oceans and is less costly and uses less energy than potable water.

These variables can be overcome by using soil inputs that not only help offset salts and other substances stemming from reclaimed water, but might also assist in the growth and vitality of turf.

The use of effluent water and other low-quality water will continue to grow as fewer courses are allowed to use potable sources. This article focuses on how superintendents can use amino acid products to make the best of a difficult situation and still produce quality course conditions.

#### BUSINESS APPLICATION

There's a need to grow healthier turf with poor-quality water, yet creating better playing conditions with lower-cost and fewer inputs. Amino acid products appear to help buffer the negative impacts of the damaging components of this type of water.

#### FIELD ASSESSMENT

The application of amino acids might be particularly helpful under stress situations by aiding in energy conservation, reducing water loss and helping the turf to maintain vitality. Contact John Walsh, editor (jwalsh@gje.net) with your experiences.

#### FUTURE OPPORTUNITY

Effluent water and less-than-desirable water will be the primary irrigation source for many courses in the future.

Amino acid-based products can be excellent tools to help turf withstand the stress caused by reclaimed water use. This technology is one option for dealing with the issue. GCI



BY JOHN WALSH

# Decisions, decisions

Relationships, service drive superintendent's choice to lease mower fleet

Cutting units are the core of every golf course maintenance operation. And because they're so integral, there are several important factors to consider before making the decision to purchase or lease them. Eric Shomaker, director of golf course operations at the private, 18-hole Mountaintop Golf Club in Cashiers, N.C., explains his philosophy about leasing mowers.

Opened in July of 2006, Mountaintop is only open part of the year – May 1 through about mid-November. The course features cool-season turfgrass wall-to-wall because it's high on the southern tip of the Appalachian Mountains. The lowest elevation of the course is 3,750 feet above sea level.

Yet Shomaker says there are golf courses with Bermudagrass fairways just 30 to 40 minutes away.

When it comes to mowers, Shomaker says the company he works for has national account relationships with Toro and John Deere. He says 80 percent of his mower fleet is John Deere and 20 percent is Toro. The fleet consists of:

- 10 John Deere 18-inch walking greens mowers (180B series);
- One Toro Greensmaster Flex 21 greensmower. "I use it from time to time, but I'm not sold on the piece," he says;
- 12 John Deere 26-inch walking mowers for tees and approaches (260 series). He says there's 2.5 to 3 acres to mow in those areas;
- Three John Deere fairway mowers with

five cutting heads (3235 series);

- One John Deere rotary unit with five cutting heads for the rough;
- Two Toro Sidewinders with three cutting units and a rotary deck for small areas in the rough; and
- One big Toro rotary mower with five cutting units for the rough (4500 series).

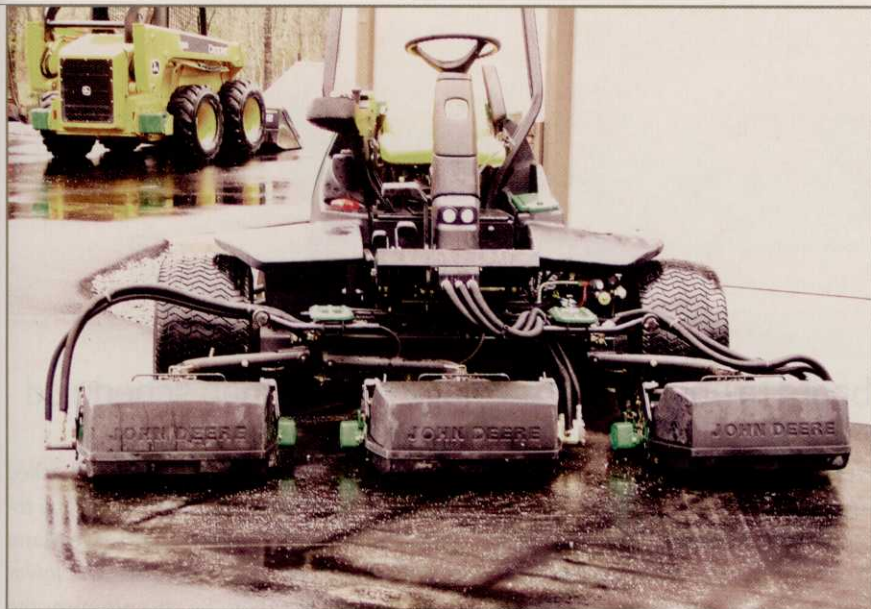
"I wasn't convinced of the John Deere [rotary] units enough to convert, so I went with Toro 4500," he says. "As far as the Sidewinders, John Deere didn't have anything to compete. But I've been pleased with the John Deere rough mower. It's as good as Toro."

Before making any purchasing decisions, Shomaker, who has a maintenance budget of more than \$1.5 million, opened the playing field for John Deere and Toro. Making the decision was up to Shomaker, and then he presented his decision to the owner. He says being a new course didn't influence what brand he purchased.

"However, I had a great deal of support from John Deere on the grow-in of the course," he says. "I didn't want to buy a lot of new grow-in equipment. I just needed a few pieces here and there – a greensmower,



All mowers in Eric Shomaker's fleet are part of a four-year lease. Photo: Mountaintop Club



Because Mountaintop's staff doesn't put many hours on the mowers, Eric Shomaker receives good residual rates on them. Photo: Mountaintop Golf Club

a fairway mower and utility vehicles. I purchased tractors and things I knew were going to last.”

During the grow-in, Shomaker, who has a staff of 16 full-time workers and 19 seasonal workers, was able to obtain used John Deere equipment that came off lease from other facilities. But, he says, they still had to be quality pieces of equipment that produced a quality cut.

“Toro did some of this on a smaller scale,” he says.

At the time of the grow-in, Jacobsen was going through a transition in which the local distributor was going out of business, so there was an uneasiness about the service aspect of purchasing mowers from the company, Shomaker says.

“The lack of representation from Jake was so poor, people couldn't get parts for four or five months,” he says. “No commitment could be made to Jacobsen at that time. However, Jacobsen is getting things worked out.”

#### LEASE NOT PURCHASE

All mowers in Shomaker's fleet are on a four-year lease. He says he prefers leasing more than purchasing because he can turn equipment in every four years.

“New equipment is always coming out,” he says. “Looking four years out, I want something better.”

Another reason why Shomaker, who's been at Mountaintop since April of 2004, prefers leasing mowers instead of buying them is because there's not as much out-of-pocket cash the owners need to put forth up front. Shomaker says anything with a life of more than seven years, such as sod cutters, tractors, blowers, skid steers, is purchased, and equipment such as mowers and utility vehicles is leased. The total cost to lease all the mowers is between \$160,000 and \$180,000 a year.

“We don't put a whole lot of hours on the equipment, so I get good residual rates,” Shomaker says about turning in the equipment after the lease ends.

Maintenance is another aspect that factors into purchasing and operating a mower fleet. The cost to maintain and repair all Shomaker's equipment, including the utility vehicles, is \$23,000 a year.

Service is also an important factor when leasing or purchasing mowers.

“Service is way up there for me,” Shomaker says. “Service has never been a problem.”

Interestingly, Shomaker has come across a situation in which he liked a certain brand of mower better than another brand, but the service wasn't as good as the other brand.

All the mowers Shomaker uses are gas powered. The rough and fairway mowers

are diesel. Even though manufacturers are working to improve electric fairway and greensmowers, Shomaker is skeptical of electric fairway mowers because Mountaintop's site is hilly and he worries about the longevity of the batteries.

“I'm not going to experiment with a purchased one, but if someone would give me one to use over time to evaluate, I would do that,” he says. “Electric is just as good as gas as far as cutting quality. The electric reels themselves reduce the chance for hydraulic leaks, but the mowers are gas driven. I worry about power. Besides, the noise reduction on gas and diesel has improved.”

Shomaker's purchasing decision-making process also includes input from the crew members who operate the mowers, keeping an open mind and considering relationships.

“I'm not locked in to one manufacturer,” he says. After this lease is up, it's an open playing field; yet I've established relationships with people, and it's hard to walk away from those relationships after a four-year lease. Maybe there will be a few pieces that change, but I will be loyal to people I have relationships with.”

In the end, Shomaker realizes it's not his equipment, it's the members.

“I need to manage the budget to meet the members' needs,” he says. **GCI**

The cost to maintain and repair all Shomaker's equipment, including utility vehicles, is \$23,000 a year.

The total cost to lease all the mowers is between \$160,000 and \$180,000 a year.

Shomaker has 30 mowers in his fleet, which include John Deere and Toro brands.

BY JOHN WALSH

# Mind as well

Superintendent convinces club board to buy mower package sooner than scheduled

Sometimes golf course superintendents get what they want sooner than they expect. Jeff Mann did.

Mann, golf course superintendent at the 18-hole Ulen Country Club in Lebanon, Ind., has been at Ulen for about seven months. Previously, he was an assistant golf course superintendent at Harbour Trees Golf Club in Noblesville, Ind.

The superintendent at Ulen before Mann signed a mower package in 2002, and the club verbally committed to a new mower package in 2007. However, Mann says he and the staff were having problems with the mowers, which would be costly to fix. For example,

there were some computer modules on the fairway units that needed repaired. Also, the blade reels on the fairway units needed to be replaced. Mann converted his fairways in September from ryegrass to creeping bentgrass and needed to increase the number of blades per reel on the fairway units.

"I took the board through it and said if we buy (in September 2006), it would be cheaper because the prices will go up in 2007," he says. "And, because I was going to be getting new fairway units and verticutters with the new package, it made sense to get the new package (in September) rather than buy new reels (in September) and new mowers this year."

The purchasing decision-making process

went something like this: The board asked Mann what he wanted, and Mann put together a wish list. Then the board gave Mann a dollar figure for the mowers that was lower than Mann's number. To compromise, the board asked Mann which mowers were not critical.

"We eventually came to an agreement," Mann says.

The board granted Mann permission to purchase two fewer pieces of equipment than he wanted.

Mann says the operators and his assistant also provided input before making the decision to purchase the mowers. Because the operators get to demo the equipment, they provide important feedback. And because Mann's assistant has been around for a while, Mann says he's seen a lot of equipment in his day, so he values his opinion.

Mann's mower fleet consists of:

- Four walking greensmowers (Toro);
- Three walking tee mowers (Toro);
- Two fairway units (Toro);
- Four triplex greensmowers (Toro);
- One trim mower (John Deere);
- One Sidewinder, a three deck rotary mower (Toro);
- Two ZTR rotary mowers (Toro); and
- One Lasteq, a seven-deck pull-behind mower.



Because the fairways at Ulen Country Club were converted from ryegrass to bentgrass, Jeff Mann needed to increase the number of blades per reel on fairway units. Photo: Jeff Mann



Jeff Mann prefers to lease more of the cutting units he and his staff use rather than purchase them; but the board at the Ulen Country Club preferred to purchase mowing equipment all at once. Photo: Jeff Mann

The older units in the fleet are the two ZTRs, the three triplex mowers, the trim mower and the Lastec.

Purchasing cutting units is Mann's and the club's philosophy, yet Mann says he would prefer to lease more mowers.

"The board said it wanted to get new equipment all at once," he says. "But I don't like to run fairway units more than five years because you start seeing problems, especially on hydrostatic mowers. The board didn't discuss leasing with me. But it will be interesting to see what ownership sells because some of the mowers are getting to the end of the line. If you lease, it takes the selling aspect out of it."

Mann says the board knows it will be getting hit with the cost for new fairways units in five years.

"The members understand the importance of maintaining a newer fleet," he says.

The longevity of walking greensmowers is different than fairway units. Mann replaces the reels after three or four years, but the greensmowers as a whole will last seven to eight years.

Mann, whose maintenance budget is

\$582,000, says he would prefer to lease fairway mowers and trim mowers instead of purchasing them. However, he says it's possible the club will lease more equipment in the future based on his reasoning.

"If I get into a leasing program, we know we're rolling into new equipment," he says.

#### RELATIONSHIPS

Aside from the decision to purchase mowers instead of lease them, Mann says he decided



to buy from Toro because he had a lot more experience with Toro than with Jacobsen and John Deere.

"Jacobsen hasn't been able to establish a good relationship in this area," he says. "We've had a hard time getting parts."

Before Mann arrived at Ulen, which has 300 members, he says the club was using John Deere equipment.

"The other companies didn't impress me as much as Toro," he says. "Toro's service is excellent. It came down to price. Toro gave me the best deal, and the financial stability of the club enabled me to get the package I got. However, I went into the decision-making process with an open mind. Next time I need to purchase or lease equipment, I'll look at any company in this area. Customer service, the ability to get parts, and what I'm going to get after the sale are more important than price." **GCI**

Jeff Mann says greensmowers as a whole will last seven or eight years, however, he replaces the reels after three or four years. Photo: Jeff Mann



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### Mallet 2F insecticide

- Features long-lasting, residual control of pests including white grubs, billbugs, weevils and cutworms
- Liquid concentrate contains 21.4 percent imidacloprid
- Long-term curative and preventive action can be realized from one application per year
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### Reelmaster 5010 series fairway mower

- Includes CrossTrax all-wheel-drive traction
- Dual point adjustment cutting units allow for quick adjustment



- Line of accessories includes groomers, broomers and rear roller brushes
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- Powered by a Kubota diesel engine

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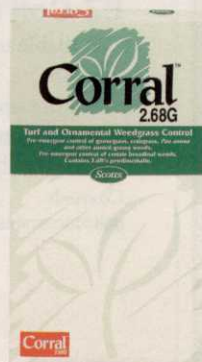
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### Corral granular herbicide

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