

GOLF COURSE NEWS

THE BUSINESS NEWSPAPER FOR THE GOLF COURSE INDUSTRY

www.golfcoursenews.com

INSIDE

Cause for optimism

Attendees at the NCGOA Solutions Summit emerge with plans for reversing golf's downward trend 3

Foliar feeding frenzy

More courses are spoon-feeding greens to reduce the amount of nitrogen used, but more research on efficacy is needed 6

COURSE MAINTENANCE 6

- Organic fertilizer companies offer unique technologies
- SUPERideas: Farley's invention keeps tree bases tidy
- Tools of the Trade at Rink's Hickory Stick Golf Club

DEVELOPMENT & RENOVATION 10

- Pete Dye discusses technology, design changes
- Guest commentary: Ron Fream on renovation at Augusta
- Sunday River finalizes land deal with Harris Golf

COURSE MANAGEMENT 13

- KemperSports revisits Harding Park management
- Private Club network takes home awards, signs deal
- Heritage Golf adds two Washington courses

SUPPLIER BUSINESS 16

- Flowtronex augments IWM product line with reverse osmosis and oxygenation
- Syngenta to test products and solutions at Pursell Farms
- New product roundup

POINT

The USGA's James Moore and Dr. Michael Hurdzan debate the merits of USGA greens vs. California greens.

Page 4

COUNTERPOINT

BASF packs specialty portfolio

By ANDREW OVERBECK

RESEARCH TRIANGLE PARK, N.C. — With the integration of its TopPro Specialties subsidiary, the pending approval to market fipronil insecticides and the expected registration of two new fungicides, BASF's professional turf and ornamental group is poised for rapid expansion.

The group also recently reorganized its upper management, sales force and customer service teams. Former TopPro vice president Stephen Briggs is the new director of BASF's Specialty Products Department (SPD) which includes the turf and ornamental group.

"When BASF acquired MicroFlo [TopPro's parent company] in 1998 they didn't have a specialty group so they kept it as a subsidiary in Memphis, Tenn.," said Briggs. "With the American Cyanamid acquisition in 2000, they now had two specialty groups that were going to the same or similar markets with similar customers. It was decided based on customer input and efficiency within the organization

Continued on page 17

Investors snag Western Golf

New owners move company to Southern California, hand reins to longtime exec. Heath



Western Golf Properties Inc. manages eight golf courses, including Stonewall Golf Club in Gainesville, Va., pictured above.

By DEREK RICE

SANTA ANA, Calif. — A group of private investors based in Southern California, including former western operations executive Bobby Heath, acquired Phoenix, Ariz.-based Western Golf Properties Inc., an 18-year-old management and development company, last month. Financial terms were not disclosed.

As a result, the company planned to relocate its headquarters to Santa Ana location.

The new owners selected Heath to become the company's presi-

dent, effective in March. Heath, who will replace Western Golf founder Joe Black, said he hopes to guide the company through what are rough times for the golf industry.

"We are faced with an increasingly competitive environment at each property, making the focus on driving revenue paramount, while adjusting operating costs as necessary to achieve net operating income," Heath said. "That being said, my vision is to infuse a heightened level of business and marketing savvy into our current

management style."

Officials at Western Golf declined to discuss the transaction in detail before *Golf Course News* went to press. In a statement, the

Continued on page 14

Carlson leads on county green standards

By ANDREW OVERBECK

VENICE, Fla. — When superintendent Tom Carlson here at The Venice Golf and Country Club achieved Audubon certification, he wasted little time sharing the club's accomplishments with the surrounding community.

From giving Sarasota County water management and environmental officials tours of the course to making presentations at other area clubs during member-guest outings, Carlson has

been busy spreading the word.

However, his latest community

sory committee that is creating future golf course development and management standards for Sarasota County.

"When I came to Venice Golf and Country Club I made it clear that I was not comfortable living up to standards, I wanted to set standards," said Carlson. "I hope these actions lead to sustainable community development."

Sarasota County's Board of Commissioners charged



Carlson is restoring natural wetlands at Venice G&CC.

effort will have a much broader impact. Carlson is part of an advi-

In spite of drought Black Hills blooming

By DEREK RICE

RAPID CITY, S.D. — In the shadow of the Black Hills in South Dakota, architect Ron Farris is putting the finishing touches on the Golf Club at Red Rock, nine holes of which should open this month, against Farris' advice.

"You'd love to have as much maturity as possible on a golf course," he said. "It's not perfect, but that's mostly because of the drought last year."

Red Rock is one of seven active South Dakota projects according to the National Golf Foundation. The crown jewel of this group, Farris said, is the Graham Marsh-designed Sutton Bay Golf

Continued on page 12

Continued on page 20

**GREAT NEW BENEFITS. NICE, NEAT LITTLE PACKAGE.
JUST WHAT YOU'VE BEEN ASKING FOR.**

Always read and follow label directions.
Pendulum is a registered trademark and AquaCap is a trademark of BASF.
©2003 BASF Corporation. All rights reserved.

INTRODUCING **NEW**
PENDULUM *Herbicide*
AquaCap[™]

Pendulum[®] preemergent herbicide has always offered you unbeatable weed control and unmatched value. But in keeping with our commitment to the industry, we've made it even better. BASF Professional Turf is proud to introduce new Pendulum AquaCap[™].

Pendulum AquaCap encapsulates a new water-based formulation of the industry's leading preemergent active ingredient using a process patented

by BASF. The result is a nice, neat little package of new benefits, including:

- Water-based formulation
- Virtually no odor
- Reduced staining potential
- Increased ease and flexibility of handling, mixing and cleanup
- Improved storage stability

To learn more about how you can unwrap the potential of new Pendulum AquaCap, visit www.turffacts.com. Pendulum AquaCap is currently labeled for commercial lawn care and golf course use.



WE DON'T MAKE THE TURF. WE MAKE IT BETTER.

BASF

NGCOA conference tackles financing challenge

By DOUG SAUNDERS

PALM SPRINGS, Calif. — As more than 600 golf course owners from the United States and Canada gathered for their annual conference and trade here in late February, there was a noticeable air of trepidation among the assembled group. Last year's triple whammy of post-9/11 jitters, the oversupply of courses and the challenges of a slumping economy all added to the pressures felt by golf course owners nationwide, and it left many wondering what the future held.

But the gathering of 620 members, up from last year's attendance of 550, carried on with many positive messages as the Solutions Summit strived to tackle tough questions and provide answers that owners could implement this year to improve their bottom line.

The theme of the week at the Wyndam Resort retreat in the California desert was emblazoned everywhere: "On the green is good, in the black is better." The five-day event provided a series of seminars that



Thomas Bruff of KPMG Golf Practice, John Seeburger of GMAC Golf Finance, Hilda Allen of Hilda Allen Real Estate and Larry Hirsh of Golf Property Analysts address attendees at the NGCOA Solutions Summit in Palm Springs, Calif.

touched on every aspect of golf operations including financing, golf shop operations, food and beverage management, labor laws and environmental activism.

"I am very pleased with the turnout we have this year, especially considering that attendance at the other two industry trade shows (PGA Merchandise Show and GCSAA Conference and Show) was down. I think that the realization of the importance of cooperation among all of the golf industry has really come through here this year," NGCOA executive director Mike Hughes said.

That sense of cooperation came through in

the opening session, as Phil Tralies, president and CEO of Club Car, stated the simple facts.

"For us to be successful, the golf course owners need to be successful. That is why we are strongly committed to this organization and the goals of increasing the bottom line for everyone," Tralies said.

Two of the more pressing issues for the economics of the game of golf, available financing and the lagging number of rounds played, were dealt with in a very open manner.

It is no secret that many of the major funding sources for the golf industry have dried up in the past year and the remaining sources are taking a much harder look at the economics of golf.

"Golf is a difficult business because there are so many moving parts to it. It is not like building a commercial building and leasing floor space. With so many variables it is clear that golf doesn't provide the profitability of other commercial investments.

Continued on page 22

Link Up 2 Golf to expand in 2003

PALM BEACH GARDENS, Fla. — The PGA of America, the National Golf Course Owners Association (NGCOA) and Golf 20/20 plan to expand Link Up 2 Golf, an industry-supported adult player development initiative, to 27 new markets this year.

The planned new markets span 11 PGA sections and will bring the program's reach to 64 facilities in 34 cities and a number of military bases.

Link Up 2 Golf was created in 2001 by Golf 20/20 and tested at eight facilities in the Raleigh-Durham area of North Carolina. The PGA and NGCOA signed on to provide collaborative leadership, management and financial stability to help the program go nationwide in 2002.

Based on feedback from last year, Link Up 2 Golf will be adjusted to include five 90-minute group clinics incorporating on-course instruction on etiquette, speed of play, proper behavior and three supervised

Continued on page 21

Vendors applaud joint show

By ANDREW OVERBECK and DEREK RICE

The decision by the GCSAA and the NGCOA to combine their annual trade shows continues to meet with wide approval from all in the golf industry. If reaction from vendors is any indication, the first Golf Industry Show, set for Orlando in 2005, will provide the vibrancy both shows have lacked in recent years.



Tim Ford

people around," said Club Car CEO Phil Tralies. "Here's an opportunity for us to be able to consolidate and not incur twice the expense."

For the Toro Co., which recently signed on as a preferred NGCOA vendor, combining shows simplifies its logistics tremendously.

"We are a supporter of this," said Tim Ford, vice president and general manager of Toro's commercial business. "It will bring together two of our primary constituents: the superintendent who uses the equipment and the owner who ultimately signs the check."

Expenses aside, vendors are also excited about being able to get in front of both the superintendent and the owner at one event. This is especially true for companies that did not previously attend the NGCOA show.

"Although we've always realized that owners are important, we have never gone to their show," said Tom Levey, director of

Continued on page 21

Vandals damage greens at La Costa

CARLSBAD, Calif. — Damage inflicted by vandals on three greens at La Costa Resort during the World Golf Championships-Accenture Match Play Championships was minimal, and the course recovered quickly.

Vandals used a salt-like substance that left burn marks on the 16th, 10th and 14th greens sometime during the night on Saturday, March 1, or Sunday, March 2.

On the 16th green, the substance was used to burn the letters KSL into the green. KSL Resorts has owned La Costa since 2001. Suspicion for the

vandalism has centered on supporters of the Hotel Employees and Restaurant Employees Union Local 30, with whom KSL has been in negotiations.

The damage, according to PGA Tour representatives, was mostly cosmetic. However, Mike Shea, senior PGA Tour rules official, told the San Diego Union Tribune that there was the potential for more damage down the road.

"Our biggest fear is that depressions might develop. If that happens we might have to do some topdressing if needed," Shea said.

NEED SPEED?

Start Fast...Finish Faster

SpeedZone™ contains the newest chemistry for broadleaf weed control in turf.

University tests and field trials have consistently shown fast control of tough weeds such as clover, plantain, ground ivy and spurge.

SpeedZone also gives you a big lead on easy-to-control weeds like dandelions. Get your weed control program on the fast track with SpeedZone Broadleaf Herbicide For Turf.

- Visible results in just 24 hours
- Fast-acting, cool-weather performance
- Clover control in as little as one week
- Rain-fast in 3 hours
- Low odor formulation
- Sites include home lawns, golf courses, commercial property, schools and many other turf sites.
- CAUTION signal word
- Available in SL Augustine formulation for most southern grasses

Gordon Corporation
An Employee-Owned Company
1-800-821-7925
www.phigordon.com
Always Read and Follow Label Directions.

SpeedZone™
BROADLEAF HERBICIDE FOR TURF
SpeedZone is a trademark of PBI-Gordon Corp. © 2003 PBI-Gordon Corp.

With spring comes renewed sense of optimism

As I write this, the icy fingers of winter are loosening their grip. The snow is receding, I can see patches of brownish green sward and temperatures are forecasted to reach the 60s this weekend.



Andrew Overbeck, editor

This means two things: 1. My wife and I have reached a détente over the proper thermostat setting in our house (for some reason my argument that, "If it was 60 degrees outside you'd be out there wearing shorts," never goes anywhere); 2. A new golf season is on the horizon.

By the time this issue is published, golfers will be peppering superintendents with questions like, "How come this place isn't as green as Augusta?" But you can't blame them, and I doubt many of you will. After this brutal winter, golfers and superintendents alike are itching to get back on course, eager to see what a new season holds. With spring comes a renewed sense of optimism.

From the Midwest to the Mid-Atlantic to the Northeast, much of the country got pounded this winter. Places that usually don't

get much snow got dumped on: parts of Pennsylvania, Virginia, Indiana, Ohio and North Carolina got 80-plus inches of the white stuff.

The snowfall totals for the eastern half of the country, however, are

welcome news. Groundwater supplies, depleted by last year's drought, have been recharged. Instead of starting the season under water restrictions, this year courses will gladly tolerate a prolonged "mud season."

Golf course operators are looking forward to relieving pent-up golf demand as well. Because of last year's drought and a longer than expected winter, there should be plenty of golfers ready to hit the first tee once courses re-open. This could give many courses the revenue spike they sorely need.

While the Eastern half of the country is counting its collective blessings this spring, the drought situation out West is becoming increasingly dire. Throughout parts of the

Southwest, Mountain West, Northwest and Central Plains, drought worries will loom large this year. Water restrictions are already being shaped in Nevada and many of Colorado's reservoirs are less than half-full, despite higher snowfall totals.

through the season.

We here at *Golf Course News* know that superintendents are a creative lot. Now we're going to prove it. In our new monthly feature, SUPERideas, we will showcase a superintendent and their innovative idea (see page 6). If you



Although the City of Denver has reopened its courses after closing them due to drought conditions in January, it will clearly take much more than optimism for courses out West to make it

have a SUPERidea you would like to share, e-mail me at aoverbeck@golfcoursenews.com. If we publish your idea, we'll send you a *Golf Course News* golf shirt. They are available in three colors: white, white and white.

POINT

Three good reasons to stick with USGA greens

By JAMES FRANCIS MOORE

As most are aware, the tremendous boom in golf course construction experienced over the past decade has resulted in thousands of new courses across the country. Often, these new courses offer the best greens the game has ever seen. These greens enjoy the combination of excellent drainage, architecture that is in keeping with the changes in the game and the finest grasses researchers can produce. Older courses are finding it difficult to compete and many have realized they must update their facilities if they are to keep their existing players, much less attract new ones.

Given the importance of putting in golf, it is no surprise that many courses are rebuilding their greens. When they do, the USGA feels very strongly they should follow the guidelines for greens construction the Green Section has provided for over 40 years.

Our staff is frequently asked to explain why we feel so strongly about the USGA method (or "specs" as many call them). After all, the USGA does not make a dime on the procedure and in fact has spent hundreds of thousands of dollars over the years on scientific research to improve it. There are many reasons we continue to recommend greens be constructed in this manner, with the following three being the most important.

HISTORICAL PERFORMANCE

The USGA method was first published in 1960. Since that time thousands of greens have been built to the method. Today there are functioning greens that were built before the superintendents



James Francis Moore

Continued on next page

COUNTERPOINT

California greens offer many advantages

By DR. MICHAEL HURDZAN

While I am a great believer in the USGA method of green construction, for it is the most highly studied method available, I don't believe there is any one best way to build a golf green and rootzone.

My point of view is a result of 40-plus years of seeing greens built out of every imaginable combination of sand, organic matter, inorganic matter and soil, and yet all of them produced acceptable quality putting surfaces for their time and place. Consequently, I have come to believe that if there is indeed a preferred method, it must be the one best suited to any given combination of microclimate, irrigation water source, turfgrass, construction budget, maintenance goal and golfer expectations – and it is not always the USGA method.

However, as we learn more about the complex interactions of the physical, biological and chemical aspects of golf green rootzones, many more scientifically sound construction methods or modifications will be found to be successful. One of these is the California method of green construction.

A common misconception is that any 100 percent sand green is a California green, and that is simply not true. The difference is the particle size of the sand used for construction. California greens require sand that falls within a very narrow range of particle size distribution. A USGA green falls within a wider range of particle size distribution. So you cannot take sand that is good for USGA greens and deem it suitable for use in California green construction without lab testing.



Dr. Michael Hurdzan

Continued on next page

Publisher
Jonathan Whitney

Editor
Andrew Overbeck

Managing Editor
Derek Rice

Contributing Writers
Kevin Ross, CGCS
Doug Saunders
John Torsiello

Production Director
Joline Gilman

Editorial Advisory Board
Raymond Davies, CGCS
CourseCo
Kevin Downing, CGCS
Willoughby Golf Club
Tim Hiers, CGCS
The Old Collier Golf Club
Laurence Hirsh
Golf Property Analysts
Ted Horton, CGCS
Ted Horton Consulting
Dr. Michael Hurdzan
Hurdzan, Fry Golf Course Design
Mary P. Knaggs
Bass Rocks Golf Club
Kevin Ross, CGCS
Country Club of the Rockies
Matt Rostal, CGCS
Interlachen Country Club
Steve Thomas
Pelican Hill Golf Club

Editorial Office
Golf Course News
106 Lafayette St., P.O. Box 997
Yarmouth, ME 04096
207-846-0600; Fax: 207-846-0657
aoverbeck@golfcoursenews.com
drice@golfcoursenews.com

ADVERTISING OFFICES
Golf Course News
106 Lafayette St., P.O. Box 997
Yarmouth, ME 04096
207-846-0600; Fax: 207-846-0657

Midwest, Western U.S. Sales:
Jonathan Whitney
207-846-0600, ext. 263
jwhitney@golfcoursenews.com

Eastern U.S. Sales:
Michael Pajak
207-846-0600, ext. 223
mpajak@golfcoursenews.com

Marketplace and Classifieds
Anne Washburn
207-846-0600, ext. 230
awashburn@golfcoursenews.com

Subscription Information
Golf Course News, P.O. Box 3047
Langhorne, PA 19047
215-788-7112

For reprint information on orders of 500 copies or more, please call PARS International at (212) 221-9595, or e-mail jeclipse@parsintl.com.

United Publications, Inc.
Publishers of specialized business magazines.
Chairman: Theodore E. Gordon
President: J.G. Taliaferro Jr.



Copyright ©2003 by United Publications Inc. All rights reserved and reproduction, in whole or in part, without written permission from the publisher is expressly prohibited.



***Why do
over 90%
of landscape
professionals
reach for the
penetrating power
of Roundup PRO®?***

***They value its reputation
built on trust and
PROformance™
technology.***



Cut back callbacks with the proven power of Roundup PRO®.

You can't afford herbicides that let you down. That's why you get to the root



of your weed problems with Roundup PRO herbicide, the herbicide trusted and used by 9 out of 10 landscape professionals like you.

Only Roundup PRO has the patented power of PROformance technology. Its proven performance goes right to the root to deliver powerful results the first time...with no regrowth. So you get fewer

callbacks. **Plus it comes with a one-hour rainfast warranty.** No wonder it's the most trusted choice of landscape managers since its introduction in 1996.

Trust Roundup PRO. Talk to your dealer today, call 1-800-ROUNDUP or visit www.monsanto.com/ito.

The logo features the word "Roundup" in a large, bold, black font with a green swoosh underneath. Below it, "PRO" is written in a smaller, blue, bold font. Underneath "PRO" is the word "Herbicide" in a very small font.



The Brand You Trust

You've waited 25 years for 24 hours.

The latest herbicide innovation from the maker of Roundup PRO® herbicide, QuikPRO™ herbicide combines quick action with complete control, roots and all. You and your customers will benefit from fast, visible results as well as continued, superior weed control.



Before QuikPRO



1 day after QuikPRO



5 days after QuikPRO

Weed-killing power, right to the root.

- Visible results are evident in as little as 24 hours.
- Controls entire weed, from the leaves to the roots, in one application, preventing regrowth.
- Rainfast in one hour – guaranteed.
- Quick uptake moves weed-killing power right to the roots, where it can't wash away.

Easy to use with easy-to-see results.

- All-in-one, quick-mixing formulation reduces hassles and errors of tank mixing.
- Doesn't settle out and forms a true solution that will not clog nozzles.
- Dry formulation is easy to handle and easy to clean up.

Experience the difference QuikPRO can make in your weed-control program and on your bottom line. See your dealer, or call 1-800-ROUNDUP for more information or visit our Web site at www.monsanto.com/ito.

QuikPRO™
Herbicide

Powered by **Roundup™**
TECHNOLOGY™

USGA greens have 40 years of success

Continued from previous page

managing them were born.

This year marks the 50th anniversary of the Green Section Turf Advisory Service. During that period, USGA agronomists have visited thousands of courses with greens built to every method imaginable. While we have seen many greens fail due to poor construction techniques, we simply have not seen greens fail due to problems with the USGA method itself. True, even USGA greens are rebuilt periodically, but this is to obtain new architecture, convert to better grasses, and/or to correct layering that occurs through mismanagement. As a result, the USGA green has more than 40 years of outstanding success and performance to its credit. No other method or modification can come close to this track record.

VIABILITY

The original 1960 USGA guidelines were revised and republished in 1965, 1973, 1982, 1989 and 1993. If the method is so good, why constantly change it? The USGA constantly reviews its recommendations to make certain the method keeps up with the many new challenges of green maintenance. Consider just a few of the changes in golf course maintenance over the past few decades. Lower cutting heights, increased play, poorer quality water and greater golfer expectations all place additional demands on greens. To meet these challenges, and keep the method viable, the USGA funds the largest turfgrass research effort in the world. A significant portion of this research is directed toward learning more about green construction. As insights are gained, they are evaluated by an international committee of experts representing all aspects of golf, including architects, superintendents, agronomists, builders and turfgrass scientists. This effort has not only resulted in better USGA greens, it has helped reduce costs – both in construction and maintenance.

DOCUMENTATION

The USGA guidelines are extensively documented. If you choose to follow the method, you will have no problem finding plenty of information regarding all aspects of the construction process. In addition to step-by-step guidelines, the USGA and others have published extensive quality control procedures. Sand and gravel plants, as well as other material suppliers, recognize the USGA method as the standard for green construction and thus strive to ensure their products meet the

specifications outlined in the guidelines. Physical soil testing laboratories use protocols developed for testing USGA greens mixes. And like the method itself, these procedures are the subject of USGA-sponsored research to improve them and better meet the demands of our increasingly litigious society.

With all this going for USGA greens, why build anything else? The most common response is that they cost too much to build. The USGA recognizes that one of the greatest challenges facing golf is affordability, and that a key component of this is the cost of course construction. There are many ways to build more affordable golf courses – reduce the number of bunkers, reduce fairway acreage in favor of rough and/or naturalized areas, and reduce the number and severity of features, which in turn will reduce the amount of dirt moved during construction.

In terms of reducing greens construction cost, why not reduce severe contouring so 5,000-square-foot greens can provide enough hole locations to make 7,000-square-foot greens unnecessary. Smaller greens that receive plenty of light, air movement and have multiple entrance and exit points will always outperform the larger green lacking such conditions.

How about learning to use the ranges provided within the guidelines when it comes to rootzone materials? The unfortunate

tendency within the industry to demand rootzones that drain in excess of 12 inches per hour has resulted in many locally available sands being ignored in favor of sands that have to be trucked from miles away – and therefore cost much more. How about recognizing that USGA greens drain wonderfully without mechanical pumping systems that drive the cost of construction through the roof – and are unnecessary on a properly built green? Leaving organic matter out of the rootzone to save money makes no sense if you then add tons of far more expensive inorganic amendments and a witches brew of products with little or no scientific credibility. Leaving out the gravel layer saves money up front but research indicates that without this layer, moisture levels vary widely. Money saved on gravel may be spent many times over in hand watering.

Yes, the Green Section believes strongly in the USGA method. The method is historically and scientifically proven, is constantly undergoing improvement to ensure it remains viable, and it is extensively documented. And while you can build greens more cheaply, we feel strongly the advantages of the USGA green make it the better value by far. These are the main reasons it is the most widely used method throughout the world.

James Francis Moore is the director of the USGA Green Section's Construction Education Program.

California method has its place

Continued from previous page

For California greens, 90 to 100 percent of the particles must be between 0.1 and 1.0 mm and 50 to 70 percent of it should fall within the 0.5 to .25 mm range. This allows for consistent performance, the sand stays very stable in the rootzone mix and it has a predictable air flow and water holding capacity.

Before deciding which type of greens construction to use, my approach is to identify possible problem sources and select a rootzone with the most stress-combating physical properties, be it USGA, California, or some well-thought-out modification of them. Factors that would cause me to lean more toward the California method include water quality problems, cation exchange capacity (C.E.C.), reduced water use, better air flow and cost.

One important factor is water quality. Although USGA greens drain more quickly than California greens, California greens drain more thoroughly. Therefore, water that may be high in salts or bicarbonates, or have a high SAR, will keep moving through the profile. In addition, the California green will initially have a low C.E.C., meaning less buildup of aluminum, sodium, or other cation salt(s). The old myth that California greens need more water is just that, a myth, for research has shown that California greens move water more slowly through the profile than the USGA method, and so they use less. This also means slower or less

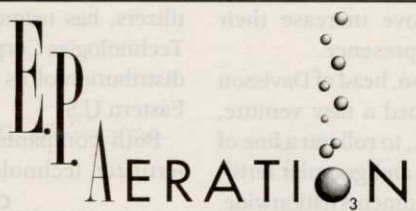
leaching of materials from the rootzone.

Recent research has also shown that pure sand has better air flow than sand amended with organic matter, which is a plus if an air exchange system is planned. The best system for air movement is a USGA green, but without any organic material blended in. And yes, the USGA recommendations allow for pure sand, with zero organic amendment.

Cost is often a significant factor in green construction, with California greens costing much less than the USGA method or variations thereof. The reason, of course, is that once sand has passed by laboratory criteria for California construction, it is hauled directly from the sand source to the green with no cost involved for a gravel blanket or amending the sand with organic matter. The difference can be in excess of several hundred thousand dollars on a 18-hole golf course, which might be better spent for an upgraded irrigation system or more sod.

There is no magic to the California construction method, but rather it is plain old plant and soil science. The fact that California greens are easier to build and cost less are secondary factors, however, because in many site specific situations they simply perform better than other methods.


Dr. Michael J. Hurdzan, ASGCA, is head of Hurdzan/Fry Golf Course Design in Columbus, Ohio.



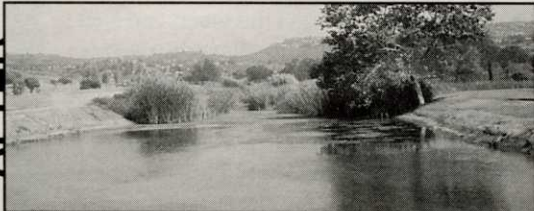
THE LEADER IN SUB-SURFACE ACTIVATED OXYGEN/AERATION SYSTEMS

Your Water, as Nature Intended It . . .

BEFORE



AFTER





Need we say more?

Call for information on the most cost-effective, bottom-laid aeration equipment for lakes and ponds, and high-output ozone generators for closed-loop, recirculation systems. Proven in 100's of installations!

1-800-556-9251

2615 Meadow St., San Luis Obispo, CA 93401
FAX 805-541-6149 www.epaeration.com





Get Zoysiagrass from seed without getting clipped.

Now, affordable hybrid Zenith Zoysia fairways, roughs, and tees from seed (anywhere in the Transition Zone):

- Eliminates costly reseeding of rye and bluegrass fairways and tees.
- Can provide full coverage in one growing season.
- Costs a fraction of the cost of sod.
- Delivers the zoysia characteristics you expect – from seed.
- Gives golfers the best ball lie year round.
- Provides for Poa annua control – Finally!

For a free informational CD and pricing call 800-634-1672

Zenith® Zoysiagrass a product of Patten Seed Co.
www.pattenseed.com

MAINTENANCE



BRIEFS

IGM PROMOTES FOUR

CHAMPIONSGATE, Fla. — International Golf Maintenance (IGM), has promoted four superintendents to regional positions. Both Paul Haines and Bill Seigle were promoted to regional superintendents within the state of Florida. In addition to his responsibilities at The Eagles G&CC, Haines will oversee four other properties. Seigle, superintendent at Tiger Point G&CC and north Florida regional superintendent, is responsible for overseeing four clubs in the Florida panhandle. Tyler Minamyler and Jeff Miller are regional superintendents representing East Coast markets for IGM. Minamyler is now IGM's Mid-Atlantic regional superintendent, overseeing six clubs in the southern Virginia area. As IGM's new Southeast regional superintendent, Miller oversees four properties while fulfilling his duties as superintendent at the Golfers' Club at Fort McPherson (Ga.).

HANKS JOINS VALLEYCREST

CALABASAS, Calif. — Larry A. Hanks has joined the team of ValleyCrest Golf Course Maintenance as business development manager for the Southeast/Gulf Coast region. In his new position, Hanks will be responsible for the acquisition of new maintenance contracts and spearheading industry awareness of ValleyCrest Golf throughout the area. In addition, he will support the efforts of ValleyCrest Golf superintendents and existing clients. Prior to joining the company, Hanks served as sales director for OneSource Landscape and Golf Services Inc.

MTF APPOINTS SMITH

LANSING, Mich. — The Michigan Turfgrass Foundation (MTF) has appointed Thomas M. Smith as its new executive director. Smith spent the last year as the assistant executive director and has served nine years on the MTF's board of directors. In his almost 30 years of industry-related experience Smith has worked in the golf industry and been a research and teaching assistant at Michigan State University.

Editorial Focus: Fertilizer

With foliar feeding on the rise, nitrogen use declines

By KEVIN J. ROSS, CGCS

While the principle of fertilization has remained the same — supplying nutrients to the plant for optimal health — technology has changed the amount used, application techniques and sources of nutrients.

Analyzing greens fertilization today, we see two very big changes. First, the total amount of nitrogen used per 1,000 square feet has dropped dramatically over the past 25 years. James B. Beard's 1973 textbook "Turfgrass Science and Culture" (widely regarded as the Bible of turfgrass management) stated that the nitrogen requirement for bentgrass should be 0.8-1.4 #N/M per growing month. Looking back, even Beard himself acknowledges that was too high. Today, we have some greens being managed with as

low as 1-2 #N/M per year. Disregarding a grow-in situation, the nitrogen amounts have dropped from Beard's first recommendations to the current 0.25 - 0.50 #N/M range per growing month.

The second change is the incredible popularity of foliar feeding. This may be the one practice that has led to the use of less nitrogen. Spraying low amounts of nitrogen, with the use of a solubles/liquids, has become one



Spraying low amounts of soluble/liquid nitrogen is one of the most popular methods of fertilization.

of the most popular methods of fertilization over the past 10 years. This method, or "spoon-feeding"

as it's been called, is not strictly limited to greens. Many courses

Continued on page 9

Editorial Focus: Fertilizer

Companies put new spin on organic fertilizer products

By A. OVERBECK and D. RICE

GLEN BURNIE, Md. and NORTH AMHERST, Mass. — Two organic fertilizer manufacturers have formed new distribution ventures and dramatically expanded product offerings in an aggressive move increase their golf industry presence.

Tim Davisson, head of Davisson Golf, has formed a new venture, Bio Basics LLC, to roll out a line of organic liquid and granular fertilizers and amendments nationwide.

Davisson Golf has been distributing organic fertilizer and other products in the Mid-Atlantic region since 1991. EcoOrganics Inc., a firm founded in 1999 by three professors at the University of Massachusetts to develop organic fertilizers, has teamed up with Soil Technologies Corp. to increase the distribution of its products in the Eastern U.S.

Both companies offer unique fertilizer technology that could

Continued on page 8

ValleyCrest signs Somerset GC

LOCUST GROVE, Va. — ValleyCrest Golf Course Maintenance has signed an agreement to perform golf course grow-in and long-term golf course maintenance for Somerset Golf Club here. Under the agreement, ValleyCrest will provide turnkey grow-in and maintenance services for the 18-hole daily-fee golf club. The addition of this facility increases the company's maintenance portfolio to 43 and is its first contract in Virginia.

Situated 15 miles west of Fredericksburg, Somerset Golf Club was originally built in 1996, and is currently undergoing extensive course renovation to all of its greens, tees, bunkers and several complete holes. Architect Rick Robbins of Robbins & Associates Inc., Cary, N.C., completed the redesign and is overseeing the work. The course features bluegrass and ryegrass tees and fairways with fescue roughs and bentgrass greens. The layout is due to reopen in June.

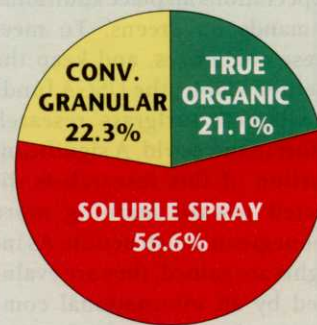
"The ValleyCrest team has

Continued on page 8

GOLF COURSE NEWS POLL

THE BUSINESS NEWSPAPER FOR THE GOLF COURSE INDUSTRY
www.golfcoursecnews.com

What types of fertilizer material do you use on your greens?



SUPERideas

Farley's 'dead ringer' keeps tree bases neat

One of the first things I did when I arrived at Teal Bend Golf Club was spray the tree bases for weeds. Nothing can bring down the looks of an otherwise tidy course than weeds and scraggly grass at the base of trees. In order to help my spray technician apply herbicide in a perfect circle of consistent size I fabricated a simple device. For lack of a better name I call it "the dead ringer."

It simply consists of a steel hook and a piece of rope with a loop on the end. The steel hook is hooked around the tree and the end of the paint gun goes in the loop. Then all you do is pull the rope tight and pull the trigger as you walk



The "dead ringer" gives the spray tech a guide to follow.

around the tree, painting a perfect circle. You just have to decide how large of a diameter you prefer around your tree bases.

Continued on page 9

TOOLS OF THE TRADE

Rink tests effluent waters at Hickory Stick Golf Club

By ANDREW OVERBECK

GREENWOOD, Ind. — While many courses across the country are using effluent water, superintendent Ben Rink is breaking new ground here at Hickory Stick Golf Club by using treated wastewater from the local water utility as an irrigation source.

When Rink arrived on site in April 2000, the Tim Liddy course was just being flagged for irrigation. The only problem was finding enough water to irrigate with. Groundwater, usually abundant in the Midwest, was scarce because the property sits on top of a rock formation that sucks all the water too deep. With well drilling out of the question financially, the developers and Rink turned to Bargersville Utilities to see if they could tap into its treatment plant.

This proved a chore since state officials had no regulations on the books regarding the use of effluent on golf courses. Connecting a pipe directly to the treatment plant was forbidden because state officials said the effluent would be considered sludge when it got to the course. Eventually, Rink and Bargersville officials worked out a compromise with the Department of Natural Resources that allowed the effluent

to run downstream into a lagoon and then be pumped to the golf course.

"Hickory Stick paid to have five miles of six-inch pipe put in, and the utility paid for the pump and the lagoon," said Rink of the compromise solution. "We pay \$.40 per 1,000 gallons, which covers the electrical and maintenance costs. While a well would be ideal, this is far cheaper than a well or being on city water."

As it stands, the current water delivery method is rather crude, said Rink.

"I have to call them and tell them to turn the pump on and they run it for eight hours to fill the lagoon backup," he said. "Eventually we'll put a switch in my pumphouse that will have floats to turn the pumps on and off automatically."

While Rink learned about effluent delivery methods on the fly, he also faced a steep learning curve when it came to using the wastewater for irrigation.

"I have not become an expert yet," he said. "I know the quality of the stuff in my ponds is not that great and the effluent is not a whole lot different. I have terrible soil here and that is compounded by high bicarbonate levels, pH and salts in the effluent. Agro-

nominically, there is salt buildup. The greens get flushed in the summer, but when you have tight clay fairways and tees it is tough to flush those."

Rink's biggest challenge has been delivering nutrients to the turfgrass.

"Disease is not such a big deal, nutrient availability is the problem," Rink said. "Fertilizer is not lasting as long as it should."

Budget problems have further compounded the agronomic issues.

"We started out bad and we are making it worse," said Rink. "Because of money issues, we were not able to fertilize like we should, which started everything in a downward cycle last year."

However, with new owners coming in this season, Rink is optimistic that things will turn around and the agronomic problems will be solved.

"We were using this water for a couple of years and getting away with it, and then all of a sudden we were using twice the fertilizer and we were in trouble," he said. "With the new owners in place, I hope we can get an acid injection system so we can lower the pH and get rid of the bicarbonates."

Rink would also like to work with the state in standardizing regulations for the use of effluent water on golf courses.

"We use effluent because it is



Ben Rink

RINK'S TOOLS

GREENS MOWERS:

5 Toro Greensmaster 1000

TEE MOWERS:

2 Toro 3100 3WD

FAIRWAY MOWERS:

2 Toro 5200 D

ROUGH MOWERS:

1 Progressive Pro-Flex 120

RIDING BUNKER RAKE:

1 Toro Sand Pro 3020

FLAGSTICKS:

Par Aide

COMPUTER & ACCESSORIES:

1 Toro CPU

PRIMARY HERBICIDE:

Millennium

PRIMARY INSECTICIDE:

Dursban

PRIMARY FUNGICIDE:

Daconil



Effluent is pumped into a lagoon before being piped to the course.

TURF UTILITY VEHICLES:

5 Yamahaulers, 2 Toro Workman

TOPDRESSERS:

1 Toro pull-behind

IRRIGATION PUMP STATION:

Flowtronex, 1,200 gpm

IRRIGATION SYSTEM:

Toro 750 heads, LTL Plus controllers, Site Pro software

GOLF CAR FLEET:

65 Yamaha gas

PRIMARY SLOW-RELEASE FERTILIZER:

Nutralene

OLDEST PIECE OF EQUIPMENT:

1981 Jacobsen Greensking

TOTAL SQUARE FOOTAGE OF MAINTENANCE BUILDING:

5,000 sq. ft.

ANNUAL ROUNDS OF GOLF:

18,000

NORMAL GREEN SPEED:

10.5'

convenient, but it is better for the environment," he said. "There are plenty of courses that have bad quality wells so it is an option to

consider. I also think it is a matter of time before courses are required to use alternate water sources and treatment plants seem to be a good fit."

Shouldn't your Grounds Crew look as groomed as your greens?



Golf Shirts

\$795

with your logo

GOLF SHIRTS • CAPS
JACKETS • PANTS • RAINSUITS

CHESTNUT
IDENTITY APPAREL

800-336-8977

www.chestnutid.com

Fertigation

Turf Feeding Systems, Inc.

The leader in fertilizer injection - over 1200 systems worldwide

Fast Grow-in

Save
\$15,000-\$40,000 annually

Lease for as little as
\$195 a month

Manage
Color & growth

Reduce Labor

Improve Turf quality

Six models,
ten capacities

(800) 728-4504

Call today for a quote
or a brochure

WWW.TURFFEEDING.COM



INTRODUCING TERRACYTE... A DIRECT HIT AGAINST MOSS.

Don't spend your time and money on products that don't provide a long-term solution to moss.

Use TerraCyte and observe visible results in 1 to 2 days!



TerraCyte™

FOR MOSS ELIMINATION

Contact your local turf chemical distributor or call BioSafe Systems Toll Free at 1.888.273.3088 or visit us on the web at biosafesystems.com

Organic fertilizer makers expand

Continued from page 6

change the way courses use organic products.

In addition to its customized line of Bio Basics liquid fertilizer and ZeoPro soil amendment, Bio Basics has teamed up with Purdue Agricycle Inc. to take pasteurized dry poultry waste (DPW) and turn it into golf course grade fertilizer.

“What comes out of these chickens is incredible,” said Davisson. “They are feeding chickens the same things we feed turf. The analysis correlates almost directly with the ratios that we look for in the tissue analysis in our liquid program.”

Bio Basics makes a straight DPW product and also combines

it with air-ground carbons and sugars to enhance nutrient uptake and growth. The Enhanced DPW can also be mixed with synthetic fertilizer to provide higher nutrient analysis.

On the liquid side, Bio Basics offers leaf tissue analysis so superintendents know exactly which nutrients the turf is getting.

Rick Holanda, superintendent at Aronimink Golf Club in

Newtown, Pa., which is holding this year's Senior PGA Championship, uses both the DPW and the liquid fertilizer products.

“The DPW is a good granular product for roughs, bunker banks and green surrounds. I use it in the spring and fall,” said Holanda. “I have been using the liquid product for several years, however. The turf tissue analysis allows you to control the nutrients in

your greens. Every 14 days I take a look and see what is being over-applied or what is deficient, then I tweak the next application.”

Davisson said Bio Basics is in the process of signing five distributors this year and will eventually have 15 to 20 distributors across the country.

DEVELOPING HIGH-NITROGEN ORGANIC FERTILIZER

EcoOrganics is taking a similar approach to market by expanding distribution, but it has come up with a high-nitrogen organic fertilizer that it said could be used 100 percent on greens.

The EcoOrganics product line is based on soy trypticase broth, which is used in laboratories to grow bacteria.

“Trypticase broth is 90 percent isolated soy protein,” said Dr. Bill Torello, vice president of marketing for EcoOrganics and an associate professor of plant and soil sciences at the University of Massachusetts. “They're not recyclable waste products, they are food- and animal-grade proteins, very safe and very clean.”

“Our premier product is a 15-2-0. That's a very strong biostimulant. There is 15 percent organic nitrogen here. It's not a bridge product. There is no urea – it is 100 percent organic,” added Torello.

The product has also been shown to increase microbial activity in the soil profile, releasing another form of natural fertilizer material.

The fertilizer is available as a wettable powder for spray applications and can be used as the sole source of nitrogen for greens fertilization programs. According to Torello, on-course testing has showed excellent results at application rates between 1/24 to 1/4 of a pound per 1,000 square feet. EcoOrganics has also developed a greens-grade granular 11-2-3 product, which has the consistency of sand. It can also be used on fairways, roughs and tees.

“Classically, the problem with organics is that they are low in nutrient content, particularly nitrogen,” said Torello. “With the advent of this product, you can have the 100 percent organic management of greens.” ■

ValleyCrest

Continued from page 6

been an important element in the redesign strategy and in improving the overall look and agronomy standards,” said Arthur Jeffords, President of Lighthouse Golf Group, which manages the facility. “We are excited about the facility's potential as we proceed with plans to integrate the golf course amenities with those of the proposed 100-room Hawthorn Suites hotel/conference center on adjacent land.” ■

The Blenders Choice

Why do more blenders of quality fertilizers choose Nitroform® or Nutralene® as their premier nitrogen source?



They know that nitrogen is crucial to effectively manage turf and ornamentals and that the fine tuned, controlled release mechanisms in Nitroform and Nutralene give plants the nitrogen they require when they require it, season long.

Nitroform and Nutralene are the blenders choice because of these many benefits:

- Growth is sustained and controlled, properly balanced between roots and top growth.
- No growth flushes after heavy rains or due to granule breakage during handling or application.
- Stronger plants resist damage from diseases, weeds, insects, drought and traffic.
- Vigorous, controlled growth and color with fewer grass clippings.
- Non-burning.
- Excess nitrogen does not find its way into ground and surface waters.

The next time you buy fertilizer, remember to look for blends that display the original Nitroform or Nutralene logo, it's your assurance of quality nitrogen. For the name of a blender in your region contact us at 1-888-370-1874.



Nu-Gro Technologies, Inc. 2680 Horizon Drive SE, Suite F5, Grand Rapids, MI 49546
www.nugrotech.com

Nitroform and Nutralene are registered trademarks of Nu-Gro America Corporation

Foliar feeding is the rage, but more research is needed

Continued from page 6

have used this approach on tee surfaces and, of late, fairways. The ability to spray these materials at a greater frequency, while using extremely low rates, has shown great benefits to turfgrass health. This type of approach can't be accomplished with traditional granular fertilizers.

When it comes to greens fertilizer programs, there is no true standard in today's industry. It is certainly a matter of experience and preference of the individual superintendent. The general program that seems to be emerging in popularity is one or two granular applications, usually in the spring and/or fall, and a spoon-feeding approach for the remaining months. For example, to calculate the total nitrogen of this type of program, it might be a spring and fall application at 0.5 #N/M of a granular material, and applications of soluble/liquids at a rate of 0.1 #N/M every 10 days throughout the season. In an approximate seven-month growing season, this nitrogen total is in the 2.5 #N/M range.

However, along with the amazing popularity of spoon-feeding, questions are being raised regarding the efficacy of foliar feeding. What are the maximum amounts of nutrients that the plant can absorb through the leaf tissue? Does the type of nitrogen matter? How

much is lost to volatilization?

There has been very little research done on foliar feeding of turfgrass. In the agriculture industry, foliar research has been conducted for many years. The initial work that has been done indicates that a maximum of 0.1-0.125 of #N/M may be absorbed through the foliage. Research has

shown that about 50 percent of the material is absorbed during the first hour after spraying, then 25 percent will be absorbed during the next 24 to 48 hours, and the remaining will most likely be lost. This will also vary depending on mowing and irrigation schedules. Research has also shown that water pH of the spray

mix and type of nitrogen used will greatly influence how much is absorbed by the plant. A tank mix with high water pH has the potential to convert the nitrogen to the ammonium form and have a high volatilization potential. Nitrogen compounds that are positively charged can also be absorbed electrically by the plant cells, whereas negatively charged nitrogen compounds cannot.

So what does all this mean for the industry? Even though foliar feeding has become the rage of greens fertilization programs, there are still many questions that remain to be answered from a scientific basis. Research needs to be conducted to answer the questions that are being asked. Only time will tell if foliar feeding will become the standard method of fertilization. ■

Farley's SUPERidea

Continued from page 6

Most of my trees are young and have trunk sizes of around six to 12 inches and are generally 10 to 20 feet tall. For those trees I use a section of rope one and a half feet long, giving me a ring of three feet across. This is proportionally correct and gives the mowers ample room to work, allowing them to stay away from the tree's base.

When it comes to the native valley oaks, I like to come all the way out to the drip line of the tree's outer canopy. In fact the course's EIR (Environmental Impact Report) requires us to keep all turf and irrigation away from these particular trees. For those situations I pull a section of rope out to the drip line and boom, there's my radius.

— John Farley, superintendent, Teal Bend Golf Club, Sacramento, Calif.

...

Got a SUPERidea of your own? Email your ideas to editor Andrew Overbeck at aoverbeck@golfcoursenews.com. If your idea is selected for publication, we'll send you a Golf Course News golf shirt. ■

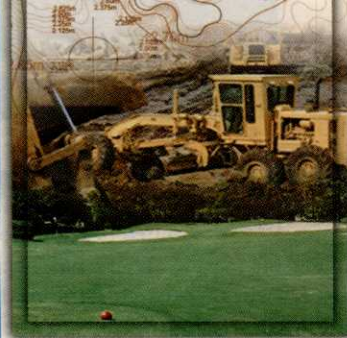
GOLF COURSE NEWS

24/7
workaholic.



252-937-4107 • 800-394-1551 • www.aquaaid.com
5484 S. Old Carriage Road, Rocky Mount, North Carolina 27803

DEVELOPMENT & RENOVATION



Editorial Focus: Design and Construction

BRIEFS

MACCURRECH RENOVATING NEW ORLEANS CC

JACKSONVILLE, Fla. — MacCurrach Golf Construction Inc. began its renovation of the New Orleans Country Club in January. The project, which should wrap up by mid-summer, is in conjunction with architect Bobby Weed, who recommended a complete redo. The course will be re-grassed with an updated infrastructure to include drainage, irrigation, car paths, tees, greens and bunkers. The project also includes the removal of several large trees to expose and preserve the larger heritage live oaks that line the course. Sand from a horse track that existed prior to the course's construction in the early 1900s is being used to cap some of the muck soils on the site.

JACOBSON GEARS UP FOR BUSY YEAR

LIBERTYVILLE, Ill. — Golf course architect Rick Jacobson has signed on for a number of projects in 2003, including two design projects with Jack Nicklaus — the Americana Bayside Resort in Sussex County, Del., and South Market Golf Club in Prince William County, Va. In addition, Jacobson has groundbreakings in Wisconsin and Virginia, openings in Illinois and New York, and several renovation projects.

TURNER CONSTRUCTION TO RENOVATE TWO

GAITHERSBURG, Md. — T. A. Turner Construction Services Inc. has been awarded construction contracts in Virginia and Bradenton. The company will perform renovation work along with Palmer Design Company on the Palmer Signature Course at Keswick Club in Keswick, Va. Turner will also take on an extensive renovation of the Gene Bates-designed El Conquistador Country Club in Bradenton, Fla. At Keswick, the renovation will add 400 yards to the course, while the El Conquistador renovation involves installing a new irrigation system and expanding the course's irrigation ponds.

Dye takes technology, developers to task

By DEREK RICE

In the last year, the debate over technology in golf has intensified, with the American Society of Golf Course Architects calling for more regulation of golf equipment in order to keep golf course length, and by extension costs, from spiraling out of control.

Pete Dye has seen a lot of changes in his more than 40 years designing courses, including technology. Never one to temper his opinions, during a panel discussion at the Golf Course Superintendents Association of America conference in Atlanta, Dye appealed to the USGA and other organizations to take a more heavy-handed approach to regulating technologies.

"[The industry] needs to get together and try to stop the golf ball for the great players," Dye said. "This hitting a golf ball 400 yards is ridiculous. You can't make

golf courses 8,000 yards long, with the environment and the costs — it's crazy."

Dye said one solution would be having two sets of rules — one for professional golfers and another for the average golfers who make up the vast majority of the golfing population.

"The ball's going farther for the good player, but they're not going any farther for Mabel Smith, who tees off on Tuesday morning and hits the ball 135 yards. Not one



Never one to mince words, architect Pete Dye (second from right) covered a range of topics during a panel discussion at the GCSAA show in Atlanta.

ball today goes one inch farther than the ball they made 50 years ago," he said. "So Martha Burk ought to be

yelling at the golf ball manufacturers that they're discriminating

Continued on page 12

Editorial Focus: Design and Construction

Weathering the construction slowdown

By DEREK RICE

With golf course construction declining, some builders are finding it hard to get enough work to keep their staffs busy, but in the case of at least two builders, 2003 is shaping up to be busier than 2002.

Lithia, Fla.-based Quality Grassing & Services Inc., winner of the 2002 Golf Course News Large Builder of the Year Award (GCN, March 2003), expects to complete more than the seven projects it finished in 2002, said company president J. Howard Barnes.

"We've got a lot going on this year, more than last year," Barnes

said. "We've got three major renovations we're starting, and we've got some new stuff going on that we'll finish with no problem."

Fidel Garcia, president of Ryangolf Inc., located in Deerfield Beach, Fla., said while the slowdown will have an effect on a lot of builders, his company will be busier than last year, mainly because of the quality of clients it works with.

"Going forward, we are fortunate to have a clientele that's immune to the economy, to be honest with you," he said. "I knew there would be a certain number of projects that they would be start-

ing and I would have my fair share of those. So I didn't worry and it has come through."

While most of the year is booked already, Garcia said Ryangolf will probably take on a couple more projects this summer.

Barnes said established relationships with owners, architects and developers, as in any business, are the X-factor that often figures into the hiring decision for a builder.

"It's good to have those relationships, and I don't begrudge anybody who can get them," he

Continued on next page

Guest Commentary Augusta uncrowned

By RONALD W. FREAM

The history of Augusta National has always been recorded, Masters by Masters, since 1934, as if a sacred ritual, the continuation of a mysterious tradition. The mystique has been mas-



Ronald W. Fream

saged and enhanced year after year as TV coverage projected the world's great players — taking their turns as champion — putting on the green jacket, after a usually breathtaking final round before a huge gallery.

Augusta National Golf Club has long considered the Masters as an "inheritance to posterity." The origins of the course, inspired by Robert Tyre Jones Jr.

Continued on next page

Sunday River, Harris Golf close land, sales deal

By DEREK RICE

NEWRY, Maine — As expected, Sunday River Ski Resort and Harris Golf finalized their purchase and sales agreement last month, paving the way for construction on the planned 18-hole Robert Trent Jones Jr. course to begin.

At press time, closing on the deal was expected to take place in early May.

The only thing standing in the way now is the weather, which continued to be unseasonably

cold well into March. However, that shouldn't delay the course, as construction is slated to begin this summer with a summer 2004 opening date planned.

Harris Golf currently owns and operates two golf courses, Bath Country Club and Boothbay Country Club, as well as Harris Golf Shop in South Portland. The group includes brothers Jeff and Jason Harris, as well as their father, Dick Harris, a Maine golf icon who was principal in the

development of Falmouth Country Club nearly 20 years ago.

Jeff Harris said the company is looking forward to building the course because of both the designer and the scenic location.

"The opportunity to build a Robert Trent Jones Jr. course at Sunday River is one that we couldn't pass up," he said.

The course will become the second Jones course in Maine, giving the state a distinction among

Continued on page 12

GOLF COURSE NEWS

Augusta uncrowned

Continued from previous page

and co-designed by Dr. Alistair MacKenzie were, as Horton Smith said, "a cause of character, individuality and personality." Over the years, modest changes were inserted into the original design. In recent years, cosmetic changes became common but remained modest. The most significant changes evolved as the standards of maintenance improved. The growth of turfgrass maintenance, agronomic knowledge and equipment sophistication led to the recent years' "immaculate perfection" standards – not a blade of grass unkempt.

Of the four recognized major golf tournaments of the year, only the Masters is played year after year at the same venue. This continuity of site helped enhance the legend of famous players, famous holes, famous shots and famous victories. Past shots and past scores could fairly be compared and certainly were. These past glories are obsolete now.

Throughout the years, the basic playing character was more or less true to the original design and the founders' original intent. The continuum was in place. Now, in an effort to counter or defend against recent technological advances by club and ball manufacturers, as well as the unique ability of Tiger Woods, Augusta is undergoing a vigorous redesign that has dramatically changed many of the holes. Where now are the continuum, the tradition and the playing link to the course Jones and MacKenzie produced? In fact, if Jones or MacKenzie were alive today, they would not recognize the Augusta National of 2003. Whatever great shots, superb lightning-fast putts or grand Sunday afternoon final nine charges that were the stuff of legends and so faithfully documented will not now be a continuum and link to past performances. The new course may well look like another Tom Fazio course, one of many, but not one of one. Lengthening and moving tees, bunkers and approach shots bring new golf not directly comparable with Masters tournaments of 2001 or before. Growing a "second cut" or semi-rough to hinder slightly wayward tee shots removes the long and proud distinction of not having rough at the Masters. Adding instant trees surely has altered how some of the holes were previously played. It is different now.

Will Augusta National still be automatically ranked as one of America's truly great courses or is it now actually one of several long, demanding courses set into surrounding woodlands? Augusta was never a course of unique natural setting or spectacular and memorable vistas. The pine forest actually became more claustrophobic as trees grew taller and wider and were joined by new additions of trees. The glory was in the link to a historic source of original design and a masterful management of the early legends.

While the "splendor, splendor, splendor everywhere" will return, it will surely be difficult now to claim the legacy or compare the scoring traditions of earlier Masters. From 2003, it is a new course, a new tournament and a new record to establish. Will Augusta National again warrant its lofty stature based

upon its illustrious heritage? Perhaps not. Perhaps now Augusta National will be another rolling, long, pine tree-lined course with nice spring flowers that merely hosts a prominent tournament and still provides enviable immaculate perfection in turfgrass management. While modern technological advances are helping the individual golfer's length of play, technology is doing nothing for the memories and traditions of golf, which are too few as it is. ■

Ronald W. Fream is the founder of Santa Rosa, Calif.-based Golfplan, which he founded in 1972.

Construction slowdown

Continued from previous page

said. "You always like to have that unfair advantage. People get aggravated about it, but that's just business and that's the way these things get done sometimes. You just have to accept it and move on."

With course openings declining in 2002 (GCN, March 2003), the picture looks to get worse before it improves. Financing is often tough to come by, so builders have to get creative and competitive with their bidding. "Financing has been difficult for our

clients," said Quality Grassing general manager Robert Price. "As a result, there has been an increase in joint ventures and partnerships for private investment."

To combat rising insurance premiums, Quality Grassing has also had to get creative, relying on some of those business relationships and staying on top of the situation, Price said.

"Insurance rates continue to rise while our bonding costs have stayed the same, so we have established close relationships with our insurance and bonding agents," he said. "We continue to compare their performance and rates with competitors." ■

Feed Your Greens the High-Protein Diet

Roots Turf Food 15-3-8

Nutritional Facts

Amount per app: 5 lbs./1,000 s.f.

Applications per Year: 4

Nutrients delivered in total year per 1,000 sq. ft.

	Lbs.
Nitrogen	3.0
Phosphate	0.6
Potash	1.6

AMINO ACIDS 6.3

ROOTS® Turf Food gives your greens the Amino Acids they need.

Protein is 90% amino acids and most chemical fertilizers don't have any. In a season, liquid amino acid products can deliver up to 1/2 lb. of amino acids per 1,000 square feet of turf grass. The ROOTS Turf Food Program delivers **over 6 lbs.** of amino acids per 1,000 square feet.



roots^{inc.} Lawn Care Division

3120 Weatherford Road • Independence, MO 64055
tel: 800-342-6173 www.rootsinc.com

Black Hills find green

Continued from page 1

Club scheduled to open this year in Agar. "Sutton Bay is just a beautiful golf course," Farris said. "It sits on what used to be a 30,000-acre ranch, so they won't have any development anywhere around them."

The development of quality golf courses in South Dakota may lead to a greater

influx of tourists, Farris said, but there is no formal plan underway to draw them. He said he hopes golf will complement two of the state's already strong tourist attractions: Mount Rushmore and pheasant hunting.

"I was always surprised that golf was not as promoted. Granted, people don't look at South Dakota and think, 'What a weather Mecca,'" Farris said. "We have a tremen-

dous amount of pheasant hunting that takes place here. People fly in from all over just to come pheasant hunting here, so Sutton Bay will have a hand in that.

"There's also three million people who come out here to visit Mount Rushmore every year," he added. "Red Rock is about 15 minutes away. I just don't think people

have really marketed it."

While the private Sutton Bay will offer hunting, fishing and a sporting clay course based out of its lodge accommodations, Red Rock will offer \$27 green fees, which Farris described as a steal.

"There's something for everybody here," he said. ■



Architect Ron Farris said Sutton Bay is the crown jewel among the courses set to open in South Dakota this year.

Dye blasts changes in design, technology

Continued from page 10

against all those women who play the golf courses every Tuesday morning."

Dye also said many golf course developers start off on the wrong foot when building golf courses. According to Dye, too many owners and developers try to cut costs by not hiring a superintendent until after construction and sometimes grow-in are complete. Dye said ideally, a superintendent should be on-site long before groundbreaking.

"Hell, they should be there before I get there," he said. "The developers who start these things, they don't have any knowledge about what they're doing. They always think they can save \$3.75 by letting the contractor run around out there, screwing up the golf course. Then they wait until after we're gone and bring the poor guy in there blind and he's trying to fix all the mistakes. You can sympathize with them a little bit because they don't know."

However, Dye said he wouldn't refuse a job simply because the developer hadn't yet hired a superintendent.

"I go in and say, 'Look, you should have a golf course superintendent,' but the owners are putting up the money, so you've got to go along with it because you want to live, you don't want to starve," he said. "I try to get them to hire a superintendent on the job. I believe the superintendent doesn't come there just to watch, he comes there work, and he puts his crew together right there in the beginning because they're going to have to take it over."

If a contractor won't hire a superintendent during construction, Dye said he hopes they will do so before grow-in at the very least.

"I can't ever understand why they want a golf course contractor to grow in a golf course. That's about the damndest thing I've ever listened to," he said. "I think the superintendent should take charge and grow in every golf course. It's crazy to have a guy running a bulldozer one day and the next day cutting the greens. But it happens all the time."

One area where Dye differs from many architects is in contracts. He said while he realizes he should have one for every job, he never signs one.

"I should have a contract when I design a golf course for people, but I've always found that no matter whether I have a contract, the owner has a hell of a lot more money and a lot more lawyers than I do. So I don't have a contract," Dye said. "He can fire me anytime he wants to, and a lot of them have."

When it comes to bunker placement in his designs, Dye said his philosophy has changed over the years, mainly because he has designed so many TPC and other tournament courses. Today's players, he said, have more or less perfected their bunker play.

"I used to put all my bunkers real tight to the greens, but they can get in there and pop it up, no problem," he said. "So now I'm trying to make the bunkers where the ball will kick farther away and make a longer bunker shot to the green." ■

Sunday River course

Continued from page 10

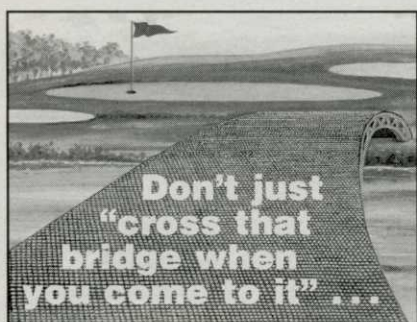
its neighboring New England states. Jones designed the course at Sugarloaf/USA, which is also owned by Sunday River's parent company, American Skiing Co. In a statement, Jones expressed his pleasure that the course would go forward.

"I am so pleased to hear that the Sunday River golf course is going to be completed. In the initial design phase we were delighted to find that the terrain was terrific and well-suited for golf with a lot of similarities between

the land and nearby Sugarloaf Golf Course," Jones said. "I know this will be a great golf course with fairways that are a little wider, more forgiving and player-friendly. We think it's a great venue and look forward to the first round."

Harris Golf will oversee construction at the course, while Ty Butler in Jones' Charlotte, N.C., office will make occasional visits to the course during the development.

Golf Course News will continue to follow this project as it progresses in our backyard. Look for updates on the construction in future issues.



Don't just "cross that bridge when you come to it" ...

Cover and Protect It with BRIDGEGUARD50

- Eliminate Costly Repairs and Maintenance on any Surface
- Re-Surface Damaged Areas and Prevent Further Wear
- Pebble-Grain Surface Has Excellent Traction for Safety

1/2" thick nylon-reinforced genuine rubber bridge runners come in 3" or 6" widths, lengths to 100'. 20' sections, with optional interlocking tabs also available. Ribbed underside "works into" the surface to prevent sliding or shifting.

LRP Linear Rubber Products
5416 46th St., Kenosha, WI 53144
Fax (262) 657-6705
www.rubbermats.com

Factory Direct Prices! 1-800-558-4040

GOLF COURSE NEWS

THE BUSINESS NEWSPAPER FOR THE GOLF COURSE INDUSTRY
www.golfcoursenews.com

Congratulates Its 2002 Builders of the Year



Howard Barnes

Large Builder of the Year

Quality Grassing & Services, Inc.

Lithia, Florida • Howard Barnes, President

2002 Projects Completed

- Adios Golf Club, Coconut Creek, FL
- Admirals Cove Golf Club, Jupiter, FL
- Coosa Bend Golf Course, Gadsden, AL
- Costa Caribe Resort and Country Club, Ponce, Puerto Rico
- Delray Dunes Golf and Country Club, Boynton Beach, FL
- Harmony Golf Course, St. Cloud, FL
- Old Hickory Golf Club, Woodbridge, VA



Jim Glase

Small Builder of the Year

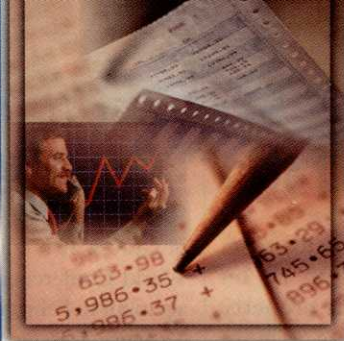
Glase Golf, Inc.

Bonita Springs, Florida • Jim Glase, President

2002 Projects Completed

- Bay Colony Golf Club, Naples, FL
- Quail Creek Country Club, Naples, FL
- Tiburon Golf Club, Naples, FL

MANAGEMENT



BRIEFS

LAKE WINDSOR INTRODUCES NEW MANAGEMENT TEAM

WINDSOR, Wis. — Lake Windsor Country Club, which is owned by Meadowbrook Golf of ChampionsGate, Fla., recently promoted Mindy Foster to general manager and hired Brian Norton as head professional. Foster has been with the club for 10 years and previously served as assistant general manager at the club. Norton spent the last eight years working at Odana Hills Golf Course in Madison as first assistant golf professional.

FREEDOM GOLF SIGNS FOREGO FOR WEB SERVICES

HERSHEY, Pa. — Golf course management and consulting firm Freedom Golf Services (FGS) has signed a three-year contract for Internet services with Forego Systems Inc. of Harrisburg. Forego will design and host Web sites for FGS-managed courses, and will also help FGS with search engine optimization.

DORAL NAMES DIRECTOR OF GOLF

MIAMI, Fla. — Doral Golf Resort and Spa, which recently hosted the PGA Tour's Ford Championship, has named James Devine its new director of golf. Devine brings more than 10 years' experience in golf operations and instruction to his new position at Doral. Prior to joining Doral, Devine served as general manager for Bull Run Golf Club in Virginia.

WESTBROOK CC NAMES NEW MEMBERSHIP MANAGER

SAVANNAH, Ga. — Vernice Rackett has been named membership director for Westbrook Country Club at Savannah Quarters, a 2,588-acre master-planned community here. Rackett will be responsible for new member enrollment and working with businesses to educate them about the benefits of corporate membership.

KemperSports comes back to Harding Park

Company also takes over management for three former Gotham Golf Partners courses following lender's foreclosure

By DEREK RICE

NORTHBROOK, Ill. — Two years after bowing out of negotiations with the San Francisco Recreation and Park Commission, KemperSports Management has agreed to manage the city's Harding Park Golf Course.

The company also assumed management of three former Gotham Golf Corp.-managed properties for commercial lender ORIX Capital Markets LLC, which reacquired the courses in lieu of foreclosure.

The Harding Park deal culminates a turbulent four years in the course's history, which saw two management companies back out of deals (Arnold Palmer Golf Management was the other one) and several false starts in attempts to give the course a much-needed facelift.

KemperSports pulled out in

2001 because of what it said were unrealistic expectations on the part of the city. According to Steve Skinner, KemperSports president, the city's desire to have the renovation project privately funded made any deal nearly impossible to complete.

"The last time it came up, they wanted a private developer to come in and pay for the improvements, and then lease it from them. But they also wanted resident rates to be very affordable and have 60 percent of the tee times go to residents," Skinner said. "The num-

bers never really worked to get private investment in and still have such a favorable rate for the residents."

At that time, KemperSports

CEO Steve Lesnik said his company would consider managing the property if some of the requirements and expectations

Continued on page 15



The old clubhouse at Harding Park will be replaced, but in the meantime, the course will operate out of a temporary facility, according to Steve Skinner of KemperSports Management.

Private Club Network collects awards, adds ChampionsGate

By DEREK RICE

MANHATTAN, Kan. — Private Club Network, a reciprocal play network for private country clubs, has signed an agreement with the Meadowbrook Golf-managed ChampionsGate Resort in ChampionsGate, Fla.

Under the agreement, which is the company's second foray into the central Florida market, Private Club Network's more than 30,000 members will receive special pricing at the resort's two courses as a supplemental benefit to their primary reciprocal private club privileges.

Steve Graves founded Private Club Network in 1999, and formally introduced its service in May 2002. The concept for the network developed out of Creative Golf Marketing, which Graves began in 1990 to help clubs grow their membership levels.

In its 13 years in business, Creative Golf Marketing has helped a number of clubs reverse their declining membership trends. One of those clubs is Riverside Golf and Country Club in Portland, Ore., which was able to realize a major turnaround in a very short time.

"In less than 45 days, we went from 448 members—with over 20 of

those on a waiting list awaiting refunds—to full membership at 500," said Bill Johnson, president of Riverside. "Additionally, we cleared the list awaiting refunds and we now have 13 prospects on a waiting list join. All that during an economy in the state with the nation's highest unemployment figure."

In 2002, Creative Golf Marketing generated more than \$15 million in initiation fee and dues income for its clients, Graves said.

The industry is also taking notice

Continued on next page

Heritage Golf acquires two

SAN DIEGO, Calif. — Golf course owner-operator Heritage Golf Group added two courses, Washington National Golf Club in Auburn, Wash., and Trophy Lake Golf and Casting in Port Orchard, Wash., to its portfolio last month.

Heritage acquired both courses from Scottsdale, Ariz.-based OB Sports LLC. The additions, which are Heritage's first foray into the Pacific North-



Bob Husband

west, bring the company's portfolio of courses to 10. The remaining eight courses are located in California, Georgia and Florida.

Bob Husband, president and CEO of Heritage, said the

two courses were a perfect fit for his company's operational philosophy.

"Both Washington National and Trophy Lake are premium golf properties, and we are

Continued on next page

Troon adds seven courses in six months

SCOTTSDALE, Ariz. — The first quarter of 2003 has brought a flurry of activity for golf course management company Troon Golf, with the signing of several properties.

At press time, Troon had signed management contracts with four facilities in 2003: The Traditions Club in Bryan, Texas; Gaillarda Golf and Country Club in Oklahoma City, Okla.; Corte Bella Golf Club in Phoenix, Ariz.; and TPC Snoqualmie Ridge Golf Club in

Snoqualmie, Wash.

Combined with the addition of three facilities in the fourth quarter of 2002, and it's been a busy six months for Troon.

In addition, the company also kicked off the third year of its Troon Rewards program. The frequency program offers frequent Troon customers benefits as a bonus for their loyalty. Among these rewards are free rounds of golf, bonus miles from Troon's airline partners and discounts on golf and merchandise.

Through the opening of the Mahoney Instruction Club at Talking Stick, Troon's director of education Tim Mahoney founded the new Tim Mahoney Golf Academy. Mahoney's academy will operate under the umbrella of the Troon Golf Institute, and will complement Troon's other golf instruction schools, among them Resort Golf Schools at Legend Trail Golf Club in Scottsdale and Golf Digest Schools located at a number of Troon's properties.

— Derek Rice

Western Golf sold

Continued from page 1

company said its long-term focus will continue to be on driving revenue at the property level, while assuming a more aggressive growth strategy. Part of this strategy is to take equity positions in deals as the right opportunities present themselves.

"We understand how the golf business has changed over the last few years. Owners need partners in their business, in addition to operators," Heath said. "We intend to focus our growth on course owners who want long-term vision and support from an established, sound business network."

The exact reasons behind the sale are not clear, but Western Golf is currently one of the defendants, along with Thunderbirds Golf Course in Phoenix, in a pending \$20 million lawsuit filed by the family of 15-year-old Nils Beeman. Beeman died last July after contracting a virus suspected to be linked to water-handling procedures at Western Golf-managed Thunderbirds. Last August, 84 people in Maricopa County contracted the Norwalk Virus, with the common denominator being the water at Thunderbirds. In November, the medical examiner's office determined the cause of Beeman's death was asphyxia due to vomiting caused by the virus, making him the lone casualty of the outbreak.

His death led to widespread changes in the way water is handled on golf courses, not only locally, but nationwide. However, the negative press generated by the incident led to severely decreased rounds at the course, which was sold to a pair of local businessmen for \$4.8 million in a foreclosure auction last December (GCN, Feb. 2003).

Western Golf first became affiliated with Thunderbirds prior to its opening in 2001. The company served as a construction consultant for the course, which was designed by PGA Tour Design Services Inc. with cooperative efforts of local professional golfers Tom Lehman, Howard Twitty and Billy Mayfair.

Intrawest Golf took over management of the course when the course's lender, Bank One Corp., foreclosed on the property in September for defaulting on a \$6.6 million loan, but the new owners ended that contract at the time of the sale and said they plan to run the course themselves as MGC Properties LLC. ■

PCN seeing success

Continued from previous page

of Graves' two companies. At the World Conference on Club Management in February, Private Club Network was recognized as New Product of the Year. Creative Golf Marketing was recognized as Membership Marketing Firm of the Year for the third straight time.

"We couldn't be more pleased

to be recognized with these awards, especially three years in a row," Graves said. "We feel it validates the services we're able to deliver to our clients."

Graves said he hopes to eventually have 250 member clubs in Private Club Network.

"Obviously, the industry continues to weaken and the prominence of my two companies creates a strong demand," Graves said. ■

Heritage Golf

Continued from previous page

extremely fortunate to be able to add them to our portfolio," Husband said. "Our mission all along has been to associate the Heritage name with the finest golf properties in the country. We continue to fulfill our mission with the addition of Washington National and Trophy Lake to our

family of clubs."

Washington National is a John Fought-designed 18-hole daily-fee course with a University of Washington theme. Trophy Lake, designed by Fought and design partner Tom Lehman, is located near Olympic Range and Mount Ranier and offers both golf and fishing at its location. Both courses opened in 1999. ■

— Derek Rice

RATED
PG-2.0 Pounding grubs with 2.0 pounds per acre of a.i. for all grub species.

DOW AGROSCIENCES AND MACH 2 PRESENT A GRUBGONE PRODUCTION
KEITH VAN MOWER JIMMY TURF DARRIN "APPLY PRIOR TO SECOND" INSTAR

Game over, grubs. MACH 2* specialty insecticide is *the* proven season-long force against grubs – not to mention cutworms, sod webworms and armyworms. And now, it's available with a standard 2-lb. per acre a.i. rate for all grub species. That's more power for the same cost. With its wide application window, you can control grubs clear through the second instar – without the need for immediate irrigation. The competition can't make that claim. Fact is, nobody's better at putting insects two inches below six feet under, baby.

Kemper gives Harding Park a second look

Continued from page 13

were changed.

Skinner said KemperSports suggested the city fund the course publicly, which the city then did, opening the door for KemperSports' return.

"They got some grants to fund it publicly, so now it is a pure management contract from our stand-

point," Skinner said. "It allows them to do what they need to do and control local rates. It's obviously a golf course that's very close to the hearts of many San Francisco golfers over the years. It just got too hard to balance if they had a private investor in there as well."

TAKING OVER FOR GOTHAM

The three former Gotham Golf

courses KemperSports is managing are Edgewood in the Pines in Drums, Pa., Robin Dale Golf Club in Brandywine, Md., and Lake Arbor Golf Club in Mitchellville, Md. The company also manages another foreclosed property for ORIX in Wisconsin.

Skinner said the courses are great properties that are simply in need of some sprucing up.

"There are tough times at a lot

of places and I think they got caught up in Gotham's other issues elsewhere, so they haven't had the attention, care or financing they need," he said. "We're just getting our feet on the ground there."

Skinner said the three properties are not unique.

"There's a lot of other courses caught up in it, so the uncertainty is not good for the golf courses, or

the golf business in general," he said.

GRAND RE-OPENING

Harding Park is poised to open this summer, most likely in July, Skinner said. This is just over a year after the facility closed down to undergo what he called a significant renovation.

"It was a complete renovation

'There's a lot of other courses caught up in [the Gotham deal], so the uncertainty is not good for the golf courses, or the golf business in general.'

— Steve Skinner

from top to bottom," Skinner said. "They thinned out a lot of trees that had become overgrown, they kept the corridors pretty much the same, did a lot of shaping and rebuilt everything — all the fairways, all the drainage and irrigation."

Skinner said the renovation benefited from the good weather the area has enjoyed since the course closed last year (GCN, June 2002).

"The renovation is complete. It's in grow-in now. They've got a couple of drainage issues that they're correcting now, but the golf course should be ready to go by mid-summer," he said. "The new clubhouse is not up yet, but that construction will begin this summer, so we'll operate out of a temporary facility."

The initial plan was for Harding Park to be added to the PGA Tour's rotation of sites for the annual Tour Championship this year. Skinner said he wasn't sure when that would start now, but that the Tour will be bringing an event to Harding Park in the near future.

"They're negotiating with the Tour, but the Tour is bringing one of its international events, probably starting in 2006 to give us a chance to get the golf course in good shape and get the clubhouse up," Skinner said.

When the course reopens, it will also debut its nine-hole Fleming course, which also went under the knife, as well as a new First Tee facility. Skinner said he wasn't sure what the green fees would be, but city residents will pay significantly less than visitors.

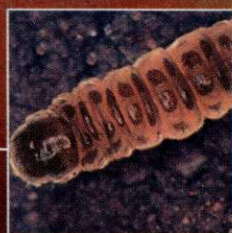
"It's going to be exciting. It is so important to so many people out there in San Francisco, and to see the shape it was in before the renovation was just a shame," he said. "It's really going to be spectacular." ■

MACH 2 PRESENTS

MAX POWER 2: DELIVERANCE DAY

from the Director of *"More Decimation, Same Dollar"*

No more prayers for rain, baby.

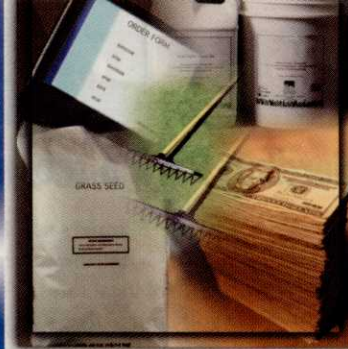


A SARAH HUNT FILM "MAX POWER 2" THE CHAFER TWINS SVEN "EUROPEAN" CHAFER MARIO "MASKED" CHAFER
MAY JUNE BEETLE AS HERSELF MUSIC BY LEPIDOPTERA CO-PRODUCERS SCOTT "ORIENTAL" BEETLE AND DARA "JAPANESE" BEETLE

Maximum power for
season-long grub control.

Dow AgroSciences
MACH 2^{*}
Specialty Insecticide

SUPPLIER BUSINESS



BRIEFS

BASF APPOINTS TOCE

RESEARCH TRIANGLE PARK, N.C. — BASF Corp. has appointed Mike Toce business manager for the company's professional turf and ornamental group. Toce will assume responsibility for all aspects of sales and marketing in addition to overall business development involving new products and acquisitions. Prior to this appointment, Toce was the business manager for BASF's Forestry group. Before that he was sales manager for the turf and ornamental group.

GUGLIOTTI JOINS BIOSAFE

GLASTONBURY, Conn. — Melissa Gugliotti has joined BioSafe Systems as sales director for the aquatics market. Gugliotti's addition to the BioSafe team is in preparation for projected growth throughout 2003. Her responsibilities will include managing distribution, customer relationships and product development of GreenClean Pond Treatment as well as other products introduced into the aquatics market by BioSafe Systems.

FORE-PAR EXPANDS OFFERINGS

BUENAPARK, Calif. — The Fore-Par Group, based here, recently purchased and consolidated the operations of Fore-Par, Range Land USA, Santiago Golf Car Supply and American Turf Services to become one of the largest distributors and manufacturers of driving range equipment, golf course amenities and golf car parts and accessories. The company has also signed a contract with Evergreen Alliance to supply its 45 golf courses with a full range of accessory and amenity products.

AQUATROLS NAMES CONARD

CHERRY HILL, N.J. — Aquatrols has named Kathleen Conard territory manager for the Mid-Atlantic region, including eastern New York, eastern Pennsylvania, New Jersey, Delaware, Maryland and Virginia. Conard has worked Aquatrols' corporate marketing department for more than 15 years.

Flowtronex adds RO, oxygenation to IWM offering

By ANDREW OVERBECK

DALLAS — Flowtronex PSI Inc. has added reverse osmosis and oxygenation systems to its growing stable of Integrated Water Management solutions. In addition to its line of pump stations, the company sells fertigation, pH control, irrigation and filtration products.

The new reverse osmosis (RO) product has been developed in conjunction with Water Equipment Technologies, a Florida company also under the ITT umbrella. The RO system is made up of a semi-permeable membrane that blocks the transport of salts or other solutes.

RO systems were developed for large-scale projects that needed to turn salt water into irrigation-quality water, but they have typically been too expensive for smaller applications. However, as

cost has come down, golf courses have made use of the technology. Systems are in place at multiple courses in Florida that have turned both high-chloride and brackish water into a suitable irrigation supply. The systems are capable of producing 400,000 to 1,600,000 gallons per day (gpd).

"They are now getting the RO units down cost-wise where it is not only an effective means of removing sodium from water but it can be used in brackish water, poor well water or even effluent water depending on what part of the country you are in," said Flowtronex fertigation national sales manager Alan Olson. "In the past they were used when it was impossible to grow grass without it, now they are being used where you are valuing the improvement in grass quality that you get from higher quality water."

While cost for an RO system

depends on the size, capital costs for brackish water RO ranges from \$0.60 to \$0.90 per gpd of capacity for equipment, installation and commissioning costs. Operating costs range from \$0.70 to \$0.85 per 1,000 gallons of product water based on a power cost of \$.08/kwh and membrane life of five years.

"Since most municipal supplies range from \$1.50 to \$3.50 per thousand gallons these plants are a very competitive alternative to purchasing

water," said Water Equipment Technologies general manager Jorge Menningmann. "They also



Flowtronex's new ultra-efficient oxygenation system

have an advantage over reclaimed wastewater by providing a con-

Continued on page 18

Simplot T&H looks for strong 2003

By ANDREW OVERBECK

BOISE, Idaho — Despite a slowing golf economy, Simplot Turf and Horticulture posted 10 to 15 percent sales growth in 2002 and is looking ahead to an equally successful 2003.

"With the economy, golf course budgets being slashed, and construction plateauing, it is obviously a time of change for our industry," said Joel Barker, vice president and general manager for Simplot Turf & Horticulture. "But when we look at our business and the activity in golf, we feel good about where we are."

Barker said the company's Simplot Partners distribution arm, which it formed in 2000, is driving much of the firm's growth in the golf market. Simplot Partners covers every part of the country except the Southeast.

"They have had a real renaissance within the past year," he said. "We have concentrated on pinpointing

Continued on page 18

DLF completes Cebeco integration, changes name

By ANDREW OVERBECK

HALSEY, Ore. — DLF-TRIFOLIUM has completed the integration process following its take-over of Netherlands-based Cebeco Seeds Group Jan. 31. The deal was initially signed in mid-December.

As part of the process, the combined company has changed its name to DLF International Seeds and has relocated its offices to Cebeco's Halsey location. As a result of the merger, the company has reduced its workforce by 25 percent. DLF's



Claus Sass is the new general manager, Cebeco's Brad Dozler is the national sales manager and DLF's

Rick Myers is handling domestic sales manager responsibilities.

While the buy-out was largely driven by the two companies' desire to increase their dominance in the European market, the

purchase will affect the U.S. marketplace. DLF will expand its presence in the forage market, but it has also gained instant access to the golf market through Cebeco.

"DLF had done very little in golf,"

said Myers. "Golf is now strong. Cebeco has rights to the American Golf contract and they have a strong presence in the Southeast through a distribution contract with Harrells. It fills a very large void for us as far as the golf market goes."

Myers also said the combined company will be bringing more new products to market in the very near future.

"We will be introducing a lot more new products through our research and development in Europe and the United States," he said. "There will be new products coming down the line."

Lesco reports higher sales, dramatic expansion plan

CLEVELAND — In its full-year 2002 report, Lesco Inc. said it posted higher sales and net income for 2002. The company also announced that it has opened three new regional distribution hubs and that it was moving forward with plans to dramatically expand its Service Center outlets.

Net sales were \$511.7 million, up 1.5 percent from the \$504.3 million reported in 2001. Lawn care sales increased 5.4 percent to \$281.7 million, but golf sales remained flat for the year (\$152.7 million versus \$152.6 million).

Fourth quarter results, however, were promising with lawn care and golf sales up 5.9 percent

and 2.7 percent, respectively.

"We used the second half of 2002 to position Lesco for growth in 2003," said president and CEO Michael P. DiMino. "We have restructured the sales force, increasing our direct sales force by 60 and changing our commission programs to reward superior performance. These efforts have already contributed to sales growth as demonstrated by the sales increase in the fourth quarter."

To increase sales, Lesco has added new distribution hubs in Chicago, Atlanta and Plano, Texas. The hubs are state-of-the-art distribution facilities, each designed to serve more than 70 Lesco Service

Continued on next page

Syngenta partners with Pursell Farms

FAYETTEVILLE, Ala. — Pursell Technologies Inc. has added another industry sponsor to its budding 18-hole research and demonstration golf course. FarmLinks at Pursell Farms is set to open in early June.

Pursell Technologies developed FarmLinks to provide the industry with an outdoor working laboratory to test new products and maintenance practices that will benefit the industry.

"Syngenta will be using the FarmLinks facility to test products and management solutions," said Joe DiPaola, Ph.D., golf market manager for Syngenta. "We'll be supplying pest control products for the course and working with the FarmLinks staff to demonstrate our solutions approach to turf problems."



The 17th hole at PTI's FarmLinks

FarmLinks at Pursell Farms is the venue for the PTI Tour program. Each year, Pursell Technologies brings in more than 1,000 professionals from the golf, turf and horticulture industries to visit Pursell Farms for two to three days of learning, recreation and relaxation. FarmLinks is designed to showcase 18 holes of experiments to tour attendees, where they can learn about products, equipment and turf management practices.

Lesco expanding

Continued from previous page

Centers and 30 Lesco Stores-on-Wheels with regional stocking assortments and improved transportation services.

The company is also opening new Service Centers, which are expected to generate approximately \$10 million of net sales in 2003, bringing the total net sales increase to a range of 6 to 8 percent. Lesco opened a new Service Center in Haverhill, Mass., on April 2, the first of 25 new outlets that the company plans to open in 2003. DiMino said Lesco has identified major U.S. markets that could support more than 500 additional stores.

"In order to maximize the long-term value inherent in the Lesco model, we have to open additional Service Centers. We should always have a group of stores entering their third year of operation," said DiMino. "In the third year stores become profitable and defray the costs of new stores. Unfortunately, Lesco has not opened new stores since 1998 and for the next two years we will have to pay for store openings through the sacrifice of short-term earnings." ■

BASF set to grow

Continued from page 1

to tie these two divisions back together and have one specialty group."

Briggs has already made inroads by integrating the mostly post-patent chemistry from TopPro into the BASF product line. The turf and ornamental products include Curalan and Propiconazole fungicides, Vantage and Basagran herbicides and Amdro Pro fire ant bait.

While work on selecting which products will be pulled forward is ongoing, Briggs said

the new portfolio will be comprehensive.

"BASF is strong in herbicides and TopPro has one of the broadest turf fungicide portfolios," he said. "BASF is awaiting two new fungicides [Insignia and Emerald]. So if you take what BASF has coming in 2003, and the post-patent chemistry from TopPro, we will have the market needs covered."

According to Briggs, approval from the Environmental Protection Agency is expected on Insignia and Emerald by mid-summer. The products will likely not be available until the 2004 season.

Another significant boost to BASF's

product offering is slated to come with Bayer ES's divestiture of its fipronil products, which include insecticides Chipco Choice, Top Choice and Firestar. Briggs said the deal would allow the licensing back of the products, including the trade names, to Bayer ES. The U.S. Federal Trade Commission approved the deal Feb. 14, and at press time both parties were waiting to hear from the European Commission.

"Fipronil will really complete the line," said Briggs. "It is a very effective insecticide." ■

GET YOUR OWN FREE MONTHLY SUBSCRIPTION TO GOLF COURSE NEWS!

GOLF COURSE NEWS

THE BUSINESS NEWSPAPER FOR THE GOLF COURSE INDUSTRY
www.golfcoursenews.com

Do you wish to receive/continue to receive *Golf Course News* FREE?

Yes No

Signature: X Date: _____

PLEASE PRINT OR AFFIX BUSINESS CARD HERE

NAME: Mr. Ms.
TITLE: _____
COMPANY: _____
ADDRESS: _____
CITY: _____ STATE: _____ ZIP: _____
TELEPHONE: (____) _____ FAX: (____) _____
E-MAIL: _____

Please check here if you prefer not to receive business information via email from companies other than *Golf Course News*: g.

IMPORTANT All information, including signature and date, must be provided for this request to be processed

Publisher reserves the right to serve only those who meet the publication's qualifications. Free offer is for United States only. For subscriptions going to other countries, please include payment of \$150.00 USD which includes air delivery. Non-qualified subscriptions within the US and Canada are \$65.00 USD.

- 1 My primary title is: (check one only)**
 - A. Golf Course Superintendent
 - F. Course Owner
 - L. Golf Course Management Company Executive
 - B. Green Chairman/Grounds Director
 - C. Director of Golf/Head Pro
 - D. Club President
 - E. General Manager
 - K. Assistant Superintendent
 - G. Builder/Developer
 - H. Architect/Engineer
 - I. Research Professional
 - Z. Others allied to field: (please specify) _____
- 2 My primary business is: (check one only)**
 - 21. Public Golf Course
 - 22. Private Golf Course
 - 23. Semi-Private Golf Course
 - 24. Municipal/County/State/Military Golf Course
 - 25. Hotel/Resort Course
 - 26. Par 3/Executive Course
 - 27. Practice Facility
 - 29. Other Golf Course (please specify) _____
 - 30. Golf Course Management Company
 - 31. Golf Course Architect
 - 32. Golf Course Developer
 - 33. Golf Course Builder
 - 39. Supplier/Sales Rep
 - 99. Other (please specify) _____

SUBSCRIBE TODAY!



Mail to:
**Golf Course News
Circulation Dept.
PO Box 997
Yarmouth, ME 04096**



Fax to:
(207) 846-8576



Or visit our website
to subscribe online:
www.golfcoursenews.com

- 3 Number of holes:**
 - A. 9 holes
 - B. 18 holes
 - C. 27 holes
 - D. 36 holes
 - F. More than 36 holes
 - Z. Other (please specify) _____

- 4 Purchasing involvement: (check all that apply)**
 - 1. Recommend equipment for purchase
 - 2. Specify equipment for purchase
 - 3. Approve equipment for purchase

THANK YOU FOR SUBSCRIBING TO GOLF COURSE NEWS!

HA03



Simplot T&H expects L-93 decision soon

Continued from page 16

areas of the country that are strategic to us and we have further defined our product line. We have also added key sales representatives and streamlined operations and logistics to allow us to get more direct contact with the superintendent.

"Superintendents are faced

with tightening budgets and higher expectations, so we need to build on what we did last year by continuing to bring value to their business," Barker added.

This spring, Simplot Partners will also introduce improved formulations of its surfactant, adjuvant and soluble fertilizer products that it acquired from

now-defunct Eco Soil Systems.

Activity is also picking up on the Jacklin Seed side of the business. In the latest National Turfgrass Evaluation Program (NTEP) trials, the company had seven out of the top 10 Kentucky bluegrass varieties. Work is also progressing on its new T-1 and T-2 bentgrass. The seed is available on a limited basis as samples and will be entered into NTEP trials

this summer. The bentgrass will go into limited production in 2004 and will fully roll out in 2005 in conjunction with the release of the NTEP data.

There have been some challenges on the seed side, however. The company is trying to regain Plant Variety Protection for L-93 creeping bentgrass.

"L-93 is in the appeal process," Barker said. "There is confusion

in the marketplace caused by a false perception that L-93 is off-quality. No matter the outcome of our appeal, L-93's quality and performance is unmatched among bentgrass varieties." A decision on L-93 is expected this spring.

Another related marketing issue popped up late last year when L-93's developer, Dr. Virginia Lehman, in cooperation with distributor Emerald Commodities and seed marketer Columbia Seeds, unveiled L-03, a new variety of the popular bentgrass.

Barker said Jacklin Seed has issued a cease and desist letter and Emerald Commodities has agreed to stop using the L-03 name. According to Columbia Seeds' Scott Harer, the name has been changed to LS-44.

Marketing issues aside, Barker expects a strong year on the seed side of the business.

"We see supply and demand starting to come back in line in the industry," he said. "Especially if you look at some of the harsh weather conditions we had this winter. We think there will be high demand for turf replacement." ■

more direct requests more total circulation more key buyers

Golf Course News' recent December 2002 independent audit shows a significant increase in the number of our first year, direct request subscribers. We now surpass *Superintendent News* in this vital category, 16,133 to 13,761.* This increase reflects the importance our subscribers put on getting their news from *Golf Course News* and our continued commitment to creating value for our advertisers.

But we're not stopping there. Beginning with our May 2003 issue, *Golf Course News* will increase its circulation by adding 2,000 superintendents and 1,700 owners/managers. Our total number of these key decision makers will exceed 22,500. By adding new subscribers and focusing our circulation where it's most important – superintendents and management – we now offer a more valuable circulation, with more reach, creating more impact for you.

GOLF COURSE NEWS

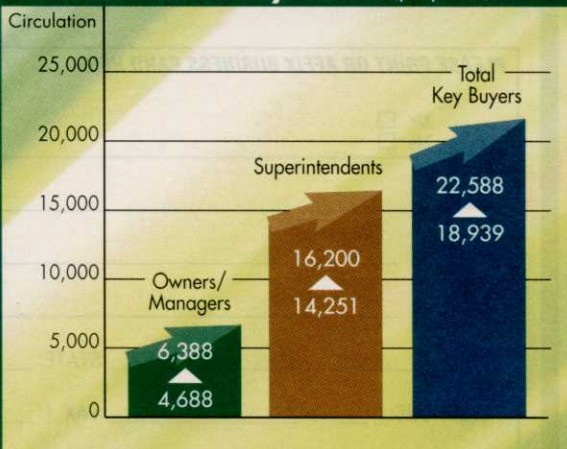
THE BUSINESS NEWSPAPER FOR THE GOLF COURSE INDUSTRY

www.golfcoursenews.com

Golf Course News, the newspaper of record for the golf course industry since 1989, continues to deliver the most powerful combination of circulation and news in the industry.

Reach your key buyers today.

Increase in "Key Buyers" Circulation
Dec. 2002 to May 2003 (projected)



Increase in First Year Direct Requests
June 2002 to Dec. 2002



Flowtronex IWM

Continued from page 16

tinuous, highly reliable supply with a much higher quality."

HIGH-TECH OXYGENATION SYSTEM

Flowtronex is also marketing a new high-tech oxygenation system made by Canadian-based GLR Solutions. GLR takes the typical fountain or subsurface aeration system up a notch by engineering custom units that are sized to target the exact oxygen saturation required by a body of water.

"The GLR system uses a patented device that produces a micro-bubble," said Olson. "The smaller the bubble, the more efficient it is in saturating water with oxygen. This is six times more efficient than anything else out there." The system has no moving parts and sits above water.

Olson estimated that nearly 90 percent of courses aerate some body of water on the property to control algae and odor, among other things. However, he said there may be agronomic benefits to oxygenating irrigation water.

"Superintendents are aware of the aesthetic reasons to aerate ponds, but we are trying to key into the agronomic reasons to do it," said Olson. "Research is ongoing, but the theory is that if we saturate water with oxygen, as you water the golf course you provide more oxygen to the plant through the root zone which translates into better plant health."

Prices for GLR units range from \$5,500 for a system that treats four million gallons, to \$22,000 for a system that treats 20 million gallons. ■

*Source: December 2002 BPA Statement

NEW PRODUCTS



The TigreCar GST77 features three-sided hydraulic dumping

Redexim rolls out the TigreCar

Redexim Charterhouse has rolled out a new utility vehicle, the Carraro TigreCar GST77, designed specifically for use on golf courses for a wide variety of turf maintenance tasks.

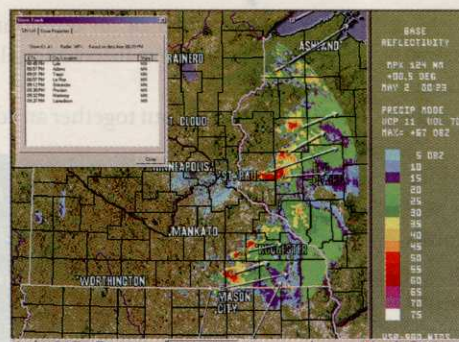
The TigreCar features a rear flatbed complete with three-sided hydraulic dumping capability and protective grid between the flatbed and the operator's seat. The four-wheel drive unit is front steering and offers a carrying capacity of 4,000 pounds. The vehicle is manufactured by Antonio Carraro S.p.A, a well-known Italian tractor maker that specializes in compact, multi-function vehicles.

For more information, contact: 800-597-5664.

Meteorlogix introduces Turf Edition

Meteorlogix has released MxVision WeatherSentry Turf Edition which is designed to ensure employee safety and protect business profits. The PC-based platform delivers timely, accurate and complete weather information, without the wait of downloading from the Internet. The high-resolution real-time radar and storm tracking feature shows not only where storms are, but where they are headed and when they will get there up to 30 minutes in advance.

The Lightning Manager offers an extra level of safety by allowing users to monitor real-time lightning strikes around their course. The system con-



A screen view of the WeatherSentry Turf Edition

tinually assesses weather conditions and sounds an audio alarm when a strike is detected within a customized zone of protection. For more information, contact: 800-328-2278 or www.meteorlogix.com.

Nature Safe adds UFLEXX nitrogen

Nature Safe Natural & Organic Fertilizers has teamed up with Agrotain International to offer 21-3-7 with UFLEXX Stabilized Nitrogen. The two-particle blend formulation improves nitrogen efficiency and reduced nitrogen loss from volatility and leaching.

UFLEXX incorporates technology

consisting of a nitrification and urease inhibitor to stabilize urea. It provides a safe, predictable nitrogen release for up to eight weeks. Nature Safe is a blend of various plant and animal meals that are a balance of proteins, fats, yeast, sugars, starches and carbohydrates. For more information, contact: 800-252-4727 or www.naturesafe.com.

BioSafe ready with OxyGROW

BioSafe Systems is ready with OxyGROW, an improved, patented mycorrhizae formulation. OxyGROW improves upon mycorrhizae by adding a packaged pure oxygen source and calcium that accelerates the establishment of beneficial mycorrhizae on root systems of turf grasses.

OxyGROW provides a slow release oxygen source overcoming compacted or anaerobic soil conditions. The oxygen is released slowly over time, providing the root system of turf an environment for the establishment of mycorrhizae and other beneficial organisms. Calcium enhances the strength of the cell tissue for greater resistance to disease and adverse weather conditions. OxyGROW is also formulated with more than eight species of ecto and endo mycorrhizae fungi that allow the plant to become much more efficient in its ability to take up nutrients, water and resist soil pathogens.

For more information, contact: 888-273-3088.

GOLF COURSE CLASSIFIEDS

To reserve space in this section, call Anne Washburn
207-846-0600, ext. 230

EMPLOYMENT

HELP WANTED

Olipphant Golf Construction, Inc., a nationwide golf course contractor, has job openings for all positions: project manager, superintendents, shapers, irrigation personnel and others. Please call (608) 662-0505 or fax resume to (608) 662-0506. Olipphant Golf Construction, Inc. is an equal opportunity employer.

GOLF COURSE CONSTRUCTION

TDI International, Inc. is seeking experienced Project Managers, Supervisors and Shapers for golf course renovation and construction projects throughout Florida and Eastern U.S. One of the nations leading contractors, TDI continues to be busy and has great opportunities for full time careers in the golf course construction industry. Must be willing to travel. Fax resume to 1-800-330-5981 or email to acarere@tdigolf.com.

HELP WANTED

McDonald & Sons, Inc. seeking qualified project managers, assistant project managers, shapers and operators for high end golf course renovations and new construction. Fax resumes to 410-799-5840 or email McDonaldandSons@aol.com.

PGA EMPLOYMENT SERVICES

Complimentary Assistance for Hiring

PGA Professionals

"Golf's Leaders in Managing Your Business and Growing the Game"

PGAEmployment.com

1-800-314-2713

MANAGEMENT COMPANIES

SEEKING MANAGEMENT COMPANIES

The Board of Munster Parks & Recreation is seeking letters of interest from management companies to finance, construct and operate a 9-hole golf course, driving range, clubhouse, entry road and parking lot at Lakewood Park in Munster, Indiana. The majority of the golf course and driving range will be located on a town-owned, closed sanitary landfill site. Interested parties should contact Chuck Gardiner, Director of Parks & Recreation at (219) 836-7275.

SERVICES

Glorso Murray Surveys, LLC

GPS (Global Positioning Services)
Survey grade accuracy - horiz & vertical
GOLF COURSE MAPPING
Phone: 303-755-8300
e-mail: dglorso@juno.com

NATURAL ROCKWORKS INC.

Construction with all types of natural indigenous rocks. Twenty years of experience enhancing the aesthetics of golf course projects. See our website: www.naturalrockworks.com.
Telephone: 928-286-1569, cell: 904-806-6183

Golf Course News - Online!
www.golfcoursenews.com

REAL ESTATE

GOLF COURSE FOR SALE

9-hole Executive Public Golf Course. Metro Phoenix, near new Coyote Hockey & 101 Frwy. 35 year lease w/ 2-10 year options. New Hotels soon. Asking 1.45M - cost 3.5M. Illness forces sell. Contact T.J. at Thunderbird Realty, 480-994-1047.

ORDER A CLASSIFIED AD

RATES: \$90 per column inch (25-35 words, including a bold headline). Each additional 1/4 inch is \$30. All line ads must be prepaid. All rates are per insertion. A minimum 2X insertion is required. For more information, call Anne Washburn at 207-846-0600, ext. 230. To place your classified ad, mail this form with ad copy and enclosed payment to:

Golf Course News,
Attn: Anne Washburn
106 Lafayette Street, PO Box 997,
Yarmouth, ME 04096
or fax to: 207-846-0657

Your Name _____
Company Name _____
Address _____
City/State/Zip _____
Daytime Phone _____
Fax _____
Email _____

Payment enclosed, or
 Charge to my credit card
 Visa/MC #: _____ Exp. date: _____
 Am Ex #: _____ Exp. date: _____
Signature _____

Carlson to help draft development standards in Sarasota County

Continued from page 1

its Development Services department to come up with golf course development standards because it was too time-consuming to handle approvals on a case-by-case basis.

"The Board of Commissioners asked for design and performance standards for golf course development because as it stands today, there is nothing that specifically addresses golf courses," said Dorothea Zysko, resources protection services manager for the county. "They felt it was more appropriate to look at courses in general and devise standards that would apply to all courses. This would also give developers an idea ahead of time of what the county expects of them."

The standards, which are still being formulated, will integrate the best management practices developed by the Florida Department of Environmental Protection and the Florida Water Management District and will cover requirements including site acreage, buffer zones, setbacks, open space, stormwater and drainage, water use, habitat management, and construction and post construction monitoring. Requiring courses

to become members of an environmental program like Audubon International is also being considered.

Zysko decided to put together an advisory committee made up of interested parties to discuss the proposed standards. In addition to Carlson, members from Audubon International, the Audubon Society, the Sierra Club, the GCSAA and two developers and engineering firms attended the first meeting in February. The committee aims to have final regulations in place by the end of May.

According to Zysko, Carlson was a natural choice for the committee because of the work he has done at Venice G&CC. "We felt there was a need for a more comprehensive approach to water use and conservation and habitat preservation. Tom has done quite a bit on his course, so we asked him to participate," she said.

Carlson, who came to the club two years ago, immediately pushed the members to

become Audubon certified.

"This is the perfect course for it," he said. "We have wetlands, pinelands, uplands and oak hammock. It's a perfect mix of terrain and vegetation."

Carlson started by building a new maintenance facility from the ground up, putting in a state-of-the-art

mix/load station, a washwater system and fuel tanks. Then he went to work restoring habitat and wetland areas on the course.

"We have fresh-water wetlands, but they are disconnected and no longer flow naturally," he said. "We had upland plants that were moving into them, so we are working with the county to use a nearby lake to inundate them once a year to bring them back to their natural cycle."

"We also cleaned up the buffer zones and converted turf to natural areas to connect habitat and give wildlife cover," he added.

A new high-tech irrigation system helped reduce water use by 34 million gallons last

year and using Polyon-coated slow-release pesticides has helped reduce chemical use.

Showcasing the course's environmental improvements has been an important step in the process, said Carlson.

"We had the county's Integrated Water Management officials over for a tour and they didn't realize that golf courses were working on mitigating environmental impacts. They had no idea. They didn't know Audubon International existed," he said.

Carlson is quick to admit that his situation at Venice G&CC allows him to spend the extra time on environmental projects.

"I am fortunate here because I can spend time on this," he said. "I have a good staff and a great assistant that runs the course and frees up my time. Although I do get a lot of work done when people leave for the day."

He also said the development standards being discussed would likely make golf course construction more expensive, but it would do away with practices that have given the golf course industry a black eye.

"Yes, it will bring up the cost of construction," said Carlson. "But it will ensure that what is built is responsible. By having requirements right off the bat, it will select out those who don't want to be responsible." ■

'Having requirements right off the bat will select out those who don't want to be responsible.'

— Tom Carlson

GOLF COURSE MARKETPLACE

To reserve space in this section, call Anne Washburn at 207-846-0600, ext. 230

Fairway Feel[®] PLUS

Natural Fiber Range Mats with a Surface that hits and feels like grass...

Reliable Golf Course Supplies

For More Information Call or Log On:
1-800-274-6815
www.reliablegolf.com

Sand Boss[™]
"The Divot Filler"

NO MORE → **LIFTING**
→ **CARRYING**
→ **BENDING**

The Sand Boss Fills Divots At Least 4 Times Faster Than Conventional Methods

To learn more about our product, call toll free:
87-SandBoss (877 263 2677)
Or look us up at: www.sandboss.net

Patent No. 6450268 others pending
Taylor Pritchard, Inc. 24584 Lone Star Court, Tallahassee, FL 32310 OEM

Formost Construction Co.
Serving the nation for over 30 years.

Golf Course Builders
"Doing One Thing Well"

P.O. BOX 559
TEMECULA, CALIFORNIA 92593

(909) 698-7270
FAX (909) 698-6170

STATE LIC. #267960

TURBO TURF
HYDRO SEEDING SYSTEMS

PRICES START @ \$1295.00

For a FREE hydro seeding info pack & video call:

TURBO TECHNOLOGIES, INC.
1500 FIRST AVE., BEAVER FALLS, PA 15010
1-800-822-3437 www.turboturf.com

From an exclusive Caribbean resort to the Great Lakes, Quail Valley cultivates the right sports turf for your project.

Quail Valley certified grasses are available in stolens, pads, big rolls, washed sod, and washed stolens. We offer sprig planting, hydro-mulching, hydro-seeding and sod installation. We export washed sod and washed stolens.

Tee to the Green — Certified Sportsturf

Featuring: Meyer Z-52 Zoysia, Cavalier Zoysia, EL Toro Zoysia, Tifton 419 Bermuda (Tifway), Tifdwarf Bermuda, TifSport Bermuda and Midlawn Bermuda.

Quail Valley GRASSES

PO Box 56440
Little Rock, AR 72215

800-666-0007 quailvalley.com barefoot walkin' thick

EPI
The Liner Company

1-800-OK-LINER
www.geomembrane.com

...protecting water resources for future generations

Bridge Design, Engineering, and On-Site Construction

Custom Timber Bridges from the Professional Bridge Company

- Vehicular Bridges
- Golf Cart/Maint. Bridges
- Boardwalks
- Pedestrian Bridges

1-800-226-4178

YORK BRIDGE CONCEPTS
The Professional Bridge Company

Visit www.ybc.com for more information.

Superintendents
Get on the course and play golf.

Hide those problem areas with **PINE STRAW**

Georgia Pine Straw, Inc.
1-800-944-4753

POND & LAKE LINERS

AquaWeve, HDPE
PondGard 45 mil Rubber, GeoTextiles

Full Installation, 20 Year Warranty
Excellent Customer Service

YUNKER PLASTICS, INC.

800-236-3328 • www.yunkerplastics.com

Vendors applaud GCSAA, NGCOA show merger

Continued from page 3

marketing for Flowtronex. "We think meeting with owners, especially if they are side-by-side with the superintendent, at one big show will be a great opportunity."

Even chemical and fertilizer companies are eager for the opportunity to be in front of both members of the buying team.

"With our product line on the chemical side of the business, there is a lot of differentiation of our product versus our competitor's product," said Peter Farno, turf and ornamental market manager for Bayer ES. "This opens up the owners to why there are differences, why they should value our products versus competitive products. It's an audience we don't always get in front of."

The joint show will offer owners a larger perspective on the golf industry than they might normally get.

"This year was the first year we had done

the owner's show," said Dave Heegard, vice president of sales and marketing for Pursell Technologies Inc. "I spoke to a lot of owners who were glad we were there because it gave them an understanding of

who the players are in the business. In those situations where the owners are an integral part of the decision-making process,

it makes sense for them to go to the show and see what's going on."

As a result, many expect more owners to attend the show than before.

"That is the expectation," said Toro's Ford. "With times being as lean as they are, owners are taking a more active role in where money is being spent. Our product is a capital expense so it makes more sense for them to be involved."

Bayer ES's Farno agreed.

"There's a fair amount of owners that come to the GCSAA show, and that's great, but there will be a whole lot more," he said. ■

'We think meeting with owners, especially if they are side-by-side with the superintendent, at one big show will be a great opportunity.'

— Tom Levey

Link Up 2 Golf expands

Continued from page 3

on-course experiences. The program will culminate in a four-hole scramble.

This year's new markets will be:

Carolinas Section - Raleigh, N.C., Charlotte, N.C., Greensboro, N.C., Greenville, S.C., Columbia, S.C.

Colorado Section - Denver, Colorado Springs, Fort Collins/Greeley

Connecticut Section: Springfield, Mass., Hartford, Ct., New Haven, Ct.

Michigan Section: Detroit, Traverse City

Middle Atlantic Section: Washington D.C., Baltimore, Md., Richmond, Va.

New England Section: Worcester, Mass., Boston, Mass., Providence, R.I.

North Florida Section: Tampa, Sarasota, Jacksonville, Orlando, Tallahassee

Northern Ohio Section: Toledo, Cleveland, Akron

Southern California Section: Ventura County, Bakersfield, San Diego

Southern Ohio Section: Cincinnati, Columbus, Dayton

Tennessee Section: Nashville

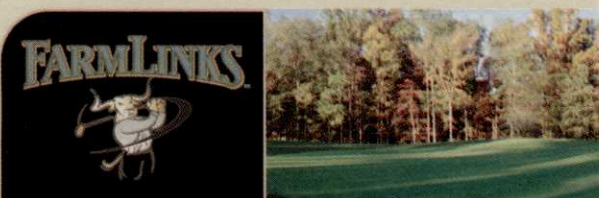
Since its creation, Link Up 2 Golf has attracted more than 1,200 students.

QUOTED

Barker, Joel	.....	Simplot Turf & Hort.	.....	16
Barnes, Howard	.....	Quality Grassing & Svcs.	.....	10
Briggs, Stephen	.....	BASF	.....	1
Bruff, Thomas	.....	KPMG Golf Practice	.....	22
Carlson, Tom	.....	Venice Golf and CC	.....	1
Davison, Tim	.....	Davison Golf	.....	8
Dye, Pete	.....	Pete Dye Designs	.....	10
Farley, John	.....	Teal Bend Golf Club	.....	6
Farno, Peter	.....	Bayer ES	.....	21
Farris, Ron	.....	Farris Golf Designs	.....	1
Ford, Tim	.....	Toro Co.	.....	3
Garcia, Fidel	.....	Ryngolf Inc.	.....	10
Graves, Steve	.....	Private Club Network	.....	14
Heegard, Dave	.....	Pursell Technologies Inc.	.....	21
Hirsh, Laurence	.....	Golf Property Analysts	.....	22
Holanda, Rick	.....	Aronimink Golf Club	.....	8
Hughes, Mike	.....	NGCOA	.....	3
Johnson, Bill	.....	Riverside Golf and CC	.....	13
Levey, Tom	.....	Flowtronex	.....	3
Menningmann, Jorge	.....	Water Equipment Tech.	.....	16
Myers, Rick	.....	DLF-TRIFOLIUM	.....	16
Olson, Alan	.....	Flowtronex	.....	16
O'Malley, Tom	.....	Saddleback Golf Course	.....	22
Price, Robert	.....	Quality Grassing & Svcs.	.....	11
Rink, Ben	.....	Hickory Stick Golf Club	.....	7
Skinner, Steve	.....	KemperSports Mgmt.	.....	13
Torello, Bill	.....	EcoOrganics Inc.	.....	8
Tralies, Phil	.....	Club Car	.....	3
Zysko, Dorothea	.....	Sarasota County	.....	20

GOLF COURSE MARKETPLACE

To reserve space in this section, call Anne Washburn at 207-846-0600, ext. 230



What's New Down At The Farm?

Come visit FarmLinks, Pursell Technologies' new research and demonstration golf course. Join us for a PTI Tour and find out how industry-leading companies in the golf industry came together to create this unique development. To reserve your spot, call 1-866-PTI-TOUR or visit www.polyon.com


Geese are Gone for Good

RejeX-it

FOG FORCE and MIGRATE Bird Repellents


*Nontoxic and Proven Effective
 *Pleasant Odor, Yet Highly Irritating to Birds
 *Birds Develop Aversion to Area and Don't Return
 *Available As Fogging Agent or Spray

For complete details, call 1-800-232-5907 or visit www.beckerunderwood.com

- Pedestrian and Vehicular Bridges • Shelters • Gazebos
- Amphitheaters • Standard and Custom Designs

Design and Engineering Support Available
 Over Sixty Years of Manufacturing Quality Wood Structures



Morrisville, NC • 800.777.8648 • www.enwood.com

Anytime is the RIGHT TIME...



...to increase fertilizer effectiveness with Probiotics

Probiotic® biological supplements work with fertilizers to optimize turf development and oxygenate soil.

TRY our PBS-8x4 Test Kit. It includes:

- DRENCH** loosens and oxygenates soil.
- THATCH** breaks down mat and returns nutrients to soil.
- ENERGIZE** releases soil nutrients to the plant and cleanses soil of toxic chemicals.
- STRENGTH** helps translocate nutrients throughout the plant

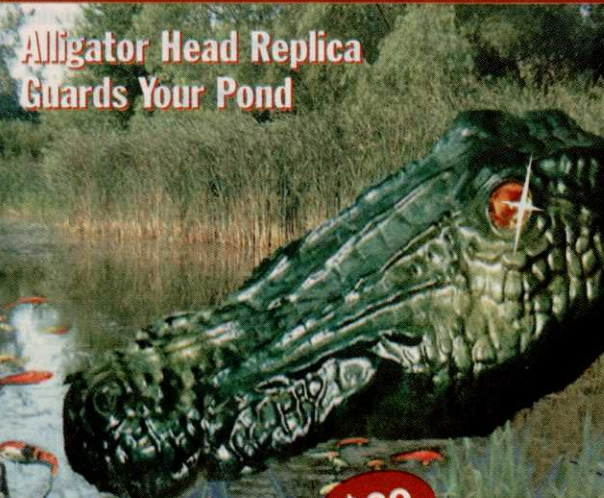
Test 6,000 sq. ft. for only **\$39.95**

ORDER OR CALL TODAY FOR INFO/CATALOG
1-800-969-5920
MARKERS, INC. www.markersinc.com
 33597 Pin Oak Parkway Avon Lake, Ohio 44012

REPEL GEESE, HERON & OTHER PESTS

GatorGuard

Alligator Head Replica Guards Your Pond



\$69

- Realistic • Eyes flash in the sun
- Moves & bounces in the wind
- Environmentally friendly
- Can be anchored

(4 or more \$65 each)

800 662-5021
www.bird-x.com
BIRD-X
 300 N. Elizabeth St. Dept. GCN
 Chicago, IL 60607
 Tel 312 BAN BIRD
 Fax 312 226-2480

POND & LAKE LINERS

- Custom Panels up to 25,000 SF
- Plastic & Rubber Pond Liners
- Installation & Supervision
- Erosion Control
- Soil and Turf Reinforcement

California 877.578.5000
 Colorado 800.524.8672
 Montana 877.448.2777
 So. Dakota 800.661.2201
 Texas 888.546.4641



www.coloradolining.com

Optimism springs from NGCOA show

Continued from page 3

This has driven out several cash sources," explained Thomas Bruff of KPMG Golf Practice.

But *Golf Course News* editorial advisory board member Larry Hirsh of Golf Property Analysts made the point that course owners need to look to their local banks



Attendance at this year's NGCOA Solutions Summit in Palm Springs, Calif., was up almost 13 percent from last year's show.

for financing. He feels that the older and more established golf operations could be in a significantly better position, as they may not be carrying as heavy of a debt load as the newer golf developments.

"I am not ready to conclude that the 'mom and pop' operation will be the significant

player in the future but I do think that there is a trend developing that way as management groups struggle to find ways to increase profitability," Hirsh told an economics seminar.

Hirsh noted that there is a different buyer coming into the golf market now, one who has a passion for golf and can accept lower profits to become involved in the game. Many believe the passion for the game is one that needs to be brought back to the forefront of golf.

But the most important issue to be addressed was the slump in rounds played nationwide and how to reverse that trend. The detailed research carried out by Golf 20/20 put things into perspective. Golf is a \$62 billion industry that has at its core 10 million best customers (those who play at least 25 rounds or spend \$1,000 annually). The survey found another 12 million potential best customers playing golf, and an ESPN.com poll found 45 million people who say they are golfers. So the challenge to the golf industry is how to get this large pool of golfers back to the golf course.

The answers seem to hinge on two points. First, course owners were urged to improve their marketing to the best customer in order

to make them loyal customers. Second, is the challenge of bringing new golfers to the game.

An ambitious project, Link Up 2 Golf, created by the PGA of America, will be expanded this summer (see story on page 3), and course owners are being advised how they can help make golf a better experience for the new golfer.

During the problem solvers sessions many explained some of their ideas for encouraging junior golfers through value passes and encouraging afternoon family days to fill afternoon tee times. Some even presented ideas of creating three-hole and six-hole experiences for beginning golfers to get them comfortable in course situations. All these ideas aim to address concerns that golf takes too much time.

Conference attendees were also very positive about the recent announcement that the NGCOA and the GCSAA conferences will merge in 2005. This obvious linking of trade shows will join superintendents with the controllers of the checkbook, which should improve efficiency for both parties.

Tom O'Malley of Saddleback Golf Course in Firestone, Colo., summed up the feeling of

many about the combining of the two shows.

"I think it is a no-brainer and I really can't see any downside to it," he said. "I don't think that it will take away from our autonomy and I know that it will make our purchasing decisions much easier." ■

Periodicals postage paid at Yarmouth, Maine, and additional mailing office. *Golf Course News* (ISSN 1054-0644) is published monthly by United Publications, Inc., 106 Lafayette St., P.O. Box 997, Yarmouth, ME 04096. Phone number is 207-846-0600.

The publisher assumes no responsibility for unsolicited material or prices quoted in the newspaper. Contributors are responsible for proper release of proprietary classified information. Copyright ©2003 by United Publications Inc. All rights reserved. Reproduction, in whole and in part, without the written permission from the publisher is expressly prohibited.

Reprints may be obtained from PARS International at 212-221-9595 or by email at jeclipse@parsintl.com. Back issues, when available, cost \$7 each within the past 12 months, \$12 each prior to the past 12 months. Back issue orders must be paid in advance either by check or charged to American Express, Visa or MasterCard.

Golf Course News is distributed in the U.S. without charge to qualified personnel of golf course facilities and to golf course builders, developers and architects. Non-qualified subscriptions to the U.S. and Canada cost \$65. All foreign subscriptions cost \$150 annually to cover air delivery. All payments must be made in U.S. funds drawn on a U.S. bank. For subscriber services, please call 215-788-7112. Send address changes to *Golf Course News*, P.O. Box 3047, Langhorne, PA 19047-3047.

GOLF COURSE MARKETPLACE

To reserve space in this section, call Anne Washburn at 207-846-0600, ext. 230

PRECISION
Your Golf Course Supermarket

Sub Surface Blower
A Full Line of Sub-Surface blowers available

- 18hp & 25hp Gas
- 7.5 hp Electric
- Prices Start at \$3,495

All Slide Valves & Fittings In Stock!

www.precisionusa.com
Toll-Free: 800-345-1960

PRECISION
Your Golf Course Supermarket

BreezeMaster Fans
"The Highest Quality Golf Course Fan"

- 30" & 50" Oscillating Fans
- Aluminum or Fiberglass
- Over 100 Sold in 2002

www.precisionusa.com
Toll-Free: 800-345-1960

We'll Seal Your Lake, Empty or Full!

ESS-13 Seals Existing Lakes – also Ideal for New Construction

Seepage Control, Inc.
– Since 1958 –

800-214-9640 www.seepagecontrol.com

UNVEILED AT GCSAA! **NEW**

THATCH-AWAY LIKE SUPA-SYSTEM THERE'S NOTHING LIKE IT!

The world's only Greens Maintenance Cassette System for triplex mowers!

Now you can carry out almost any greens maintenance task with all the speed and ease that your greens triplex gives you.

The amazing NEW Thatch-Away SUPA-SYSTEM is a totally unique concept. These revolutionary multi-purpose units will operate 8 different types of cassettes to handle all those jobs you never had time for before.

The future is here – don't get left behind! 10 SECOND CASSETTE SWAP!

Opening Chassis Verticutter Greens Spiker Groomer Scarifier Star Slitter Rotary Brush Topdressing Brush Deep Slicer

Phone for a demo or your nearest dealer

TURFLINE, INC
1-800-443-8506 www.truegrass.com

WatchDog Weather Stations

Your Resource For:

- ✓ Weather Conditions Specific to Your Course
- ✓ Efficient Irrigation Scheduling
- ✓ Effective Pest Management
- ✓ Optimum Turf Quality

Starting At \$795

Spectrum
www.specmeters.com
Toll-Free 800-248-8873

(wireless model 900 ET shown)

Innovative **PEDESTRIAN BRIDGE** Solutions

CONTINENTAL BRIDGE
A QUNTECH COMPANY

800-328-2047 ♦ Fax: 320-852-7067 ♦ www.continentalbridge.com

HARCO DUCTILE IRON FITTINGS FOR GOLF COURSE IRRIGATION SYSTEMS

Sizes 2" through 18", all configurations including "knock-on" repair couplings. High strength, high corrosion resistance.

HARCO Fittings
P.O. Box 10335
Lynchburg, Virginia 24506
434-845-7094 Fax 434-845-8562
www.harcofittings.com

VARIABLE SPEED AUTOMATIC DIESEL PUMPING STATION

ITS now manufactures a fully automated diesel pump station designed exclusively for golf course irrigation. When three-phase power is unavailable or impractical, the ITS pump becomes an attractive alternative. Available in diesel or natural gas configuration with flows up to 800 gpm.

IRRIGATION TECHNICAL SERVICES, INC.
518 Wallace Road, Wexford, PA 15090
724-935-2339 Fax: 724-935-8233

NATIONAL GOLF ROUNDS PLAYED*

REGION	JANUARY	Y.T.D.
NEW ENGLAND (ME, NH, VT, MA, RI, CT)	-86.2%	-86.2%
MIDDLE ATLANTIC (NY, NJ, PA)	-83.2%	-83.2%
EAST NORTH CENTRAL (MI, OH, IN, IL, WI)	-76.5%	-76.5%
WEST NORTH CENTRAL (MN, IA, MO, KS, NE, SD, ND)	-39.6%	-39.6%
SOUTH ATLANTIC (DE, WV, VA, MD, NC, SC, GA, FL)	-6.0%	-6.0%
EAST SOUTH CENTRAL (KY, TN, AL, MS)	-27.2%	-27.2%
WEST SOUTH CENTRAL (AR, LA, OK, TX)	-9.1%	-9.1%
MOUNTAIN (MT, ID, WY, CO, NM, AZ, UT, NV)	30.3%	30.3%
PACIFIC (WA, OR, CA, AK, HI)	7.5%	7.5%

* The percentages above represent the difference in number of rounds played in the month of January 2002 from the number of rounds played in January 2003.

Source: Golf Datatech

Golf Course News STOCK REPORT (3/14)

Company(Symbol)	Price	Change(%) 2/19/03	52-wk range
Aventis (AVE)	44.06	-6.7	41.85 - 72.06
BASF (BF)	33.97	-8.3	31.22 - 46.85
Bayer AG (BAY)	11.77	-33.7	11.08 - 36.00
Central Garden and Pet (CENT)	23.59	0.7	9.67 - 24.34
Deere & Co. (DE)	39.13	-9.2	37.50 - 51.60
Dow Chemical Co.(DOW)	26.89	-5.6	24.10 - 34.73
Golf Trust of America (GTA)	2.23	-14.2	0.88 - 6.59
Ingersoll-Rand (IR)	37.54	-2.5	29.69 - 54.40
Lesco Inc. (LSCO)	10.71	-15.8	7.32 - 14.60
Monsanto Co. (MON)	16.58	-0.2	13.20 - 33.99
Syngenta AG (SYT)	9.17	-18.0	8.50 - 13.20
Textron Inc. (TXT)	33.16	-13.0	30.45 - 53.60
Toll Brothers (TOL)	18.95	-6.4	17.63 - 31.80
Toro Co. (TTC)	68.95	0.5	46.30 - 70.00

CURRENT U.S. GOLF PROJECT ACTIVITY (MONTHLY CHANGE)

	NEW	ADDITIONS	TOTAL
PROPOSED	349 (-10)	67 (+1)	416 (-18)
IN PLANNING	395 (+13)	72 (+4)	467 (+17)
UNDER CONSTRUCTION	344 (+2)	161 (-1)	505 (+1)
COMPLETED (2003 ONLY)	13 (+6)	3 (+1)	16 (+7)

Source: NGF

Renovation numbers

The National Golf Foundation's monthly Golf Project Report numbers do not include courses classified as reconstructions or renovations. At present, 46 renovated/reconstructed courses are under construction and 2 renovated/reconstructed courses have opened.

GOLF COURSE NEWS

THE BUSINESS NEWSPAPER FOR THE GOLF COURSE INDUSTRY
www.golfcoursenews.com

Information Center

- By Phone
- By Fax
- By Email

RECEIVE INFORMATION DIRECTLY FROM ADVERTISERS IN THIS ISSUE!

Advertiser	Page	Phone	Fax	Website / Email
Aqua-Aid, Inc.	9	800-394-1551	301-654-2025	www.aqua-aid.com
BASF	2	800-545-9525	919-547-2410	www.turfacts.com
Becker Underwood	21	800-232-5907	515-232-5961	www.beckerunderwood.com
BioSafe Systems	7	888-273-3088	888-273-3388	www.biosafesystems.com
Bird-X	21	312-226-2473	312-226-2480	www.bird-x.com
Chestnut Identity Apparel	7	831-336-8977	831-336-8977	—
Colorado Lining	21	800-524-8672	303-841-5780	www.coloradolining.com
Continental Bridge	22	800-328-2047	320-852-7067	www.continentalbridge.com / conbrid@continentalbridge.com
Dow AgroSciences *	14-15	800-255-3726	800-905-7326	www.dowagro.com/turf
E.P.Aeration	5	800-556-9251	805-541-6149	www.epaeration.com / mike@epaeration.com
Environmental Protection, Inc.	20	800-OK-LINER	616-587-8020	www.geomembrane.com
Enwood Structures	21	800-777-8648	919-469-2536	www.enwood.com / mikee@enwood.com
Formost Construction Co.	20	909-698-7270	909-698-6170	formost@inland.net
Georgia Pine Straw	20	800-944-4753	—	www.georgiapinestraw.com
Harrington/Harco Corporation	22	434-845-7094	434-845-8562	www.harcofittings.com / sales@harcofittings.com
Irrigation Technical Services	22	724-935-2339	724-935-8233	—
Linear Rubber Products Co.	12	800-558-4040	262-657-6705	www.rubbermats.co
Markers, Inc.	21	800-969-5920	440-933-7839	www.markersinc.com
Monsanto	5	314-694-1000	—	www.monsanto.com
Nu-Gro Technologies, Inc.	8	888-370-1874	616-949-4882	www.nugro.com
Patten Seed	5	800-634-1672	770-463-3039	www.pattenseed.com
PBI/Gordon Corporation	3	800-821-7925	—	www.pbigordon.com
Precision Small Engine	22	800-345-1960	954-973-8032	www.precisionusa.com / andym@precisionusa.com
Pursell Technologies Inc.	21, 24	800-334-8583	256-249-7428	www.polyon.com
Quail Valley Farms	20	800-666-0007	501-975-6286	www.quailvalley.com
Reliable Golf Course Supplies	20	800-274-6815	518-793-2812	www.reliablegolf.com
Roots, Inc.	11	800-342-6173	816-254-1408	www.rootsinc.com
Sandboss	20	87-SandBoss	850-574-2675	www.sandboss.net
Seepage Control	22	480-763-1180	480-763-1182	www.seepagecontrol.com
Spectrum Technologies, Inc.	22	800-436-4440	815-436-4460	www.specmeters.com
Turbo Technologies	20	800-822-3437	724-846-3470	www.turboturf.com / sales@turboturf.com
Turf Feeding Systems	7	800-728-4504	713-849-9047	turf@feed@aol.com
Turflite	22	636-441-8588	636-441-8180	www.truesurface.com
York Bridge Concepts	20	800-226-4178	813-932-6486	www.ybc.com / ybc@ybc.com
Yunker Plastics, Inc.	20	800-236-3328	262-743-1233	www.yunkerplastics.com

*Appears in regional editions.

When requesting information, please mention Golf Course News 4/03.

While Some Fertilizers Make It Seem Like You're Baling Hay,

Ours Is Saving You Bundles.

POLYON® controlled release fertilizers give you consistent long-lasting performance without surge growth, saving you time and money.

Most fertilizers perform well immediately after application. In fact, they work a little too well, often resulting in surge growth that keeps mowing crews busy and golfers complaining.

Only POLYON fertilizers have the patented polymer technology that provides gradual, predictable feeding for months at a time. This unique nutrient delivery system



means you can get by with fewer fertilizer applications each year, saving you bundles of money on materials, labor and equipment.

So, instead of cutting grass, start cutting costs with POLYON controlled release fertilizers. After all, your success is based on turf quality, not quantity.

Ask for POLYON fertilizers formulated for your area from Harrell's or Simplot distributors, or call Pursell Technologies Inc. at 800-422-4248 ext.7411 for a sales rep near you.

POLYON
www.polyon.com



Fertilizers for the Future