

Builder Excellence AWARDS

IN THIS ISSUE

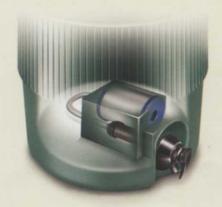
Water quality
Pesticide update
Irrigation system upgrades
Imitating Poa annua's strengths

The Outlaw at Desert Mountain in Scottsdale, Ariz.



The Standard Golf Water Purification System... safe, pure drinking water anywhere on your course.

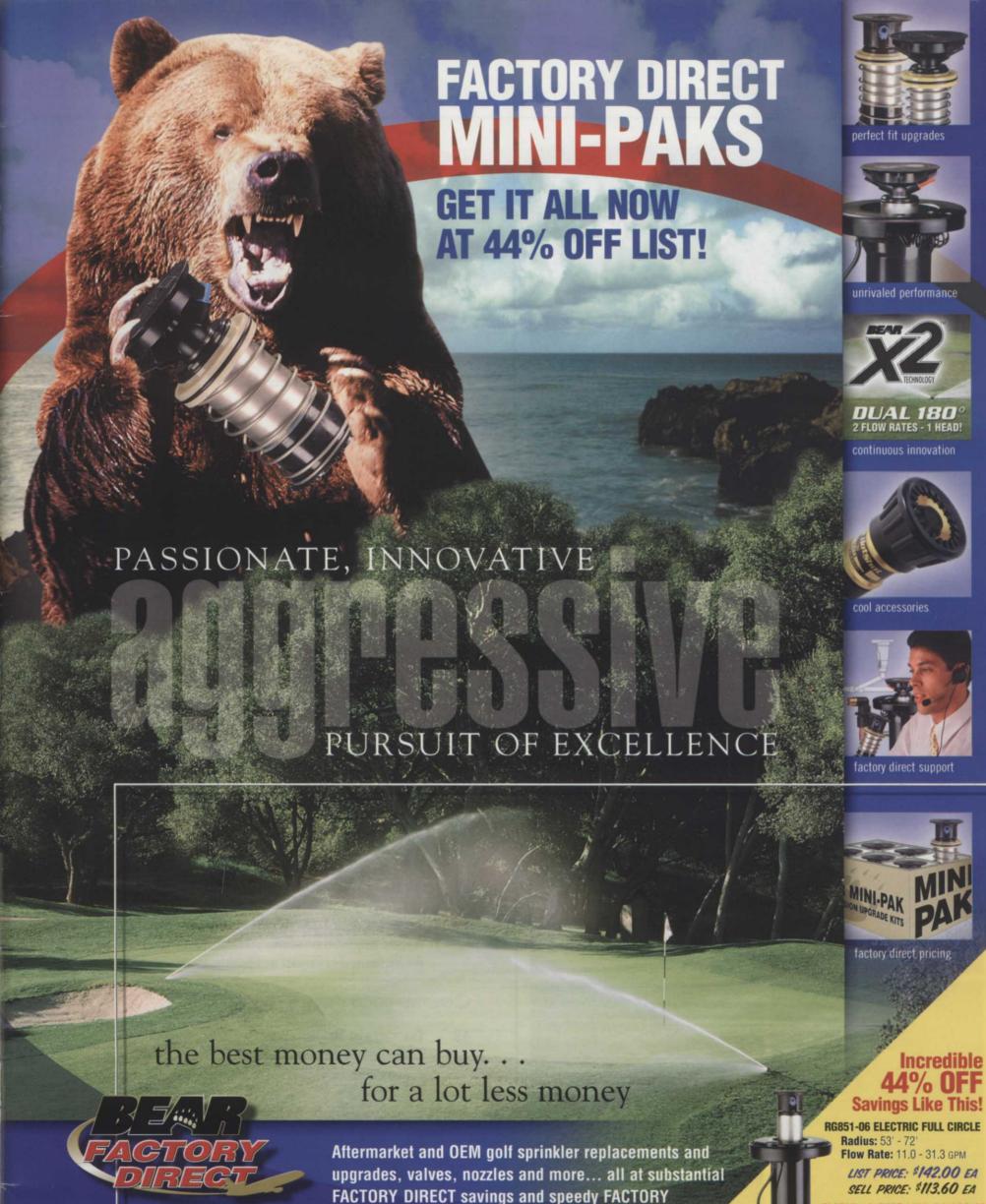
Make sure the only water hazards your players encounter are those that are supposed to be there. Standard Golf's Water Purification System will put an end to your drinking water worries. By purifying water at the time and place of use, the Nature Pure®



purifier eliminates opportunities for microbiological contamination. Just a few pumps give your players pure, great tasting water all the time. To learn more, contact your Standard Golf Distributor or call 1-866-743-9773 and talk with a factory representative.

For toll-free express service, call 1-866-SG-EXPRESS (1-866-743-9773)





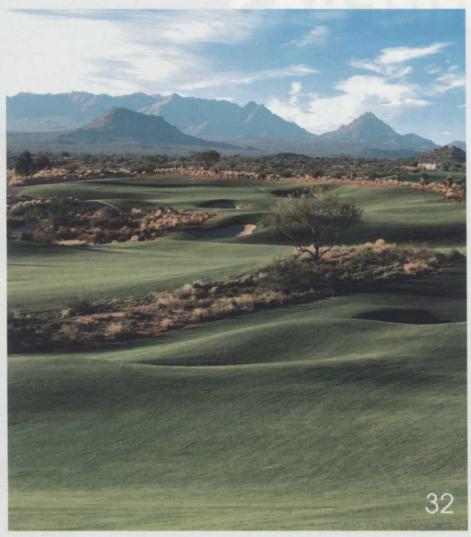
\$7952

USE READER SERVICE #11

DIRECT shipping. Call for a FREE product catalog.

1-800-491-4975

www.bear-irrigation.com









Design solutions: features

Builder Excellence AWARDS

32 MAKING IT HAPPEN

SEMA Golf worked with Nicklaus Design to successfully build The Outlaw course at Desert Mountain in Scottsdale, Ariz., and meet the owners' high expectations.

36 STARTING OVER

Ryangolf overcame challenges reconstructing the North Course at Frenchman's Creek in Palm Beach Gardens, Fla.

Professional development: feature

28 AN EYE FOR DESIGN

A young golf course architect starts his own firm to make his mark and create unique golf courses. Golf Course News interviews Todd Eckenrode.

Turfgrass management: features

40 ANALYZING A NEMESIS

Imitating Poa annua's strengths could be used as a management practice to ensure pure bentgrass greens.

54 PESTICIDE UPDATE

Pesticides are an integral part of a golf course superintendent's turf management programs. An update includes a list of pesticides that are available on the market to superintendents.

Irrigation management: feature

44 DIVE DEEPER INTO WATER QUALITY

A good irrigation suitability analysis should test for elements that impact turf health.

Course maintenance: feature

48 **IRRIGATION IMPROVEMENTS**

Cost, more water-distribution control and better water conservation are at the root of irrigation system upgrades.

Turfgrass management: feature

TOP OF MIND

At Blue Ash Golf Course near Cincinnati, cultural practices changed to provide golfers with a more pleasant experience.

Endorse™— Translaminar Fungicide for Turf

THE RESERVE TO THE RE

TESTED TOUGH ON TOUGH

Endorse[™] – Broad Spectrum Turf Fungicide With An Exclusive Mode of Action

Endorse™ Turf Fungicide from Cleary Chemical Corporation provides golf course superintendents with an exclusive mode of action to control even the toughest diseases on their tees, greens, and fairways.

Endorse Works Like No Other Fungicide

With outstanding performance against a number of economically threatening turf diseases, Endorse works like no other fungicide around. It obstructs the production of chitin, a structural component of fungal cell walls, while inhibiting spore germination and mycelial growth in the turf plant. It attacks turf disease through both foliar and translaminar systemic activity and can be used in either a preventative or curative management program. Endorse is an ideal rotational or tankmix partner with other fungicides, like Alude™, Protect™, Spectro™ or Spotrete™.

- Convenient 11 lb Bag
- Quick-Dissolve WP
- Treats 1 Acre

The Bottom Line

Endorse gives superintendents an unparalleled disease management tool backed by 65 years of commitment from Cleary.

Broad spectrum control, an exclusive mode of action, 65 years of commitment all total up to another outstanding fungicide from Cleary—Endorse.

For more information about Endorse, visit our web site at

www.clearychemical.com

CLEARY



Count on Cleary







Departments:

- **EDITORIAL** Positive change
- 9 LETTERS TO THE EDITOR
- RESOURCES 10 Calendar of events
- 13 MARKET UPDATE Supply grows slowly
- 14 **INDUSTRY NEWS** Association, course and personnel news
- 26 FINAL ROUND
- 60 TRAVELS WITH TERRY Equipment ideas
- 63 **PRODUCTS**
- 69 ADVERTISING INDEX

Columnists:

- Marketing Your Course Jack Brennan: Seeing other views
- 23 **DESIGN CONCEPTS** Jeffrey D. Brauer: More on trees as hazards
- ADVANCING THE GAME Jim McLoughlin: A career check list
- HUMAN RESOURCES 25 Robert A. Milligan, Ph.D.: Supervision's potential
- 70 PARTING SHOTS Pat Jones: Beer and scribbles

Visit us online

VISIT WWW.GOLFCOURSENEWS.COM FOR: DAILY NEWS UPDATES

> WEEKLY E-NEWSLETTER SUBSCRIPTION A SUBSCRIBER MESSAGE BOARD

ARCHIVED ISSUES

A PRODUCT DATABASE

ONLINE POLLS

ASSOCIATION LINKS

GOLF COURSE NEWS (ISN 1054-0644) is published in January, February, March, May, July, September, October and November. Copyright 2005 GIE Media Inc., 4012 Bridge Ave., Cleveland, OH 44113-3399. All rights reserved. No part of this publication may be reproduced or transmitted by any means without permission from the publisher. One-year subscription rate, \$33 in the United States, \$42 in Canada and Mexico, and \$88 in other foreign countries. One year foreign airmail rate: \$102. Two year subscription rate: \$65. Subscriptions and classified advertising should be addressed to the Cleveland office. Periodicals postage paid at Cleveland, Ohio, and additional mailing offices. Postmaster: Send address changes to GOLF COURSE NEWS, 4012 Bridge Ave., Cleveland, OH 44113-3399.



Smooth on asphalt. Easy on grass. More than you'd expect.









Minimize repair and maximize time.

With four steerable axles, our A300 all-wheel-steer loader, Toolcat[™] 5600 utility work machine, and B300 loader backhoe all minimize turf damage. They also turn smoother on asphalt or concrete. And with dozens of approved attachments—like a trencher for irrigation installation, an angle broom for clearing cart paths, even a sod layer for installing new fairways—they're a lot more than just loaders.



www.bobcat.com/0456

Toll-free for all-new CD-ROM and Buyer's Guide: **1-866-823-7898 ext. 0456**

One Tough Animal.

0456



Positive change

ome people in the industry say the national golf market is struggling for revenue and are cautiously optimistic about the golf business in the future. The cost to play golf and maintain a course, and the decline of the number of rounds played and new golf course openings are often mentioned as reasons why the industry isn't doing that well. But while people see the negative signs and suggest action golf needs to take to improve, there are two very positive aspects of the industry of which people need to be reminded: changes in golf course development and the focus on renovations and reconstructions.

After booming in the late 1990s and into 2000, the golf market, like many other markets in the U.S. economy, started to decline in early 2001 and really plummeted after 9/11. The golf business was hurting despite the popularity of the game. The industry went from opening about 400 courses a year in the late '90s to about 120 completely new ones last year. At the beginning of the year, there were 320 courses under construction, according to the National Golf Foundation; and the number of courses expected to open this year is projected to be slightly more than last year. But if one looks at golf course development during the past 20 years, those boom years are abnormal, and comparing the industry's health to them is misleading.

At the 2005 Golf Industry Show, architect Erik Larsen said new golf course openings will stabilize at between 150 and 200 a year. But the number of golf course openings in a year isn't the only way to measure the vitality of the industry. Just because golf courses open, doesn't mean they've all been thoughtfully planned or will succeed financially. Numerous courses are struggling because they were built for the wrong reasons - some just to help sell homes.

Larsen says stand-alone courses are having more difficulty getting financing and lot sales are subsidizing many golf courses. But a decline of new golf course openings might not be that bad. Because banks are hesitant to finance golf course development, some might pause and think more strategically about where there's truly a need for more golf courses, forcing developers and owners to conduct more research. Larsen also suggests new courses be environmentally sound, economically viable, sustainable and community oriented.

Architects are a factor in wiser develop-

ment. At the Golf Industry Show, a panel of them discussed trends in golf course architecture and development - feasibility, site selection, planning and environmental concerns. Integrating golf courses better into communities is one trend architects foresee. Courses can be more than just a place for people to hit golf balls. They can be used for water retention, revegetation and recreation, as well as view corridors, firebreaks and wildlife habitats. More people will be touched by golf courses in the future regardless of whether they play golf.

The other aspect of the business that doesn't seem to be getting much attention is the number of renovations and reconstructions completed during the past four years. There have been 126 fullscale renovations from 2001 to 2004, according to NGF. They increased from 13 in 2001 to 46 in 2004. There were 53 reconstructed courses opened last year, and 65 reconstructions were still under construction. Bottom line is there's a lot of money invested in course renovation and reconstruction.

I've spoken with several architects and builders during the past few months about the market and their businesses, and they seem to be doing well. Maybe they're doing more renovations than they've done in the past, but they're still working consistently and growing their business, which is done through relationships, quality of work and service done after the work. There seems to be plenty of jobs out there for the people and companies who do quality work.

If architects and builders are busy, superintendents are busy too because they're working on these projects as well. And let's not forget the owners and club members. They're the ones spending the money on these projects. If they can afford to renovate their courses during a slump in the market, things can't be that bad.

Being cautious about the market and focusing on where golf needs to improve is wise, but people shouldn't forget about the market's strengths. Growing the game has its challenges, but the industry is figuring out how golf can fit into the changing U.S. market. The way golf is growing is changing, and it has to to remain healthy. GCN

John Walsh



Vol. 17 No. 3

Editorial Offices: GIE Media, Inc. 4012 Bridge Ave. Cleveland, OH 44113 Phone: (216) 961-4130 Fax: (216) 961-0364

John Walsh Editor jwalsh@giemedia.com

Rob Thomas Associate editor rthomas@giemedia.com

CONTRIBUTING WRITERS

Terry Buchen, CGCS, MG terrybuchen@earthlink.net

> Derek Rice derekrice@maine.rr.com Kevin Ross, CGCS kjross@vail.net

David Wolff dgwolff@charter.net

EDITORIAL ADVISORY BOARD

Terry Buchen, CGCS. MG Golf Agronomy International

Raymond Davies, CGCS. CourseCo

Kevin Downing, CGCS Willoughby Golf Club

Tim Hiers, CGCS The Old Collier Golf Club

Lawrence Hirsh Golf Property Analysts

Ted Horton, CGCS Ted Horton Consulting

Dr. Michael Hurdzan Hurdzan, Fry Golf Course Design

> Pat Jones Flagstick LLC

Jim McLoughlin TMG Golf

Kevin Ross, CGCS Country Club of the Rockies

Matt Rostal Interlachen Country Club

Steve Thomas Pelican Hill Golf Club

Golf Course News is published eight times per year by GIE Media, Inc., which also publishes: Lawn & Landscape, Commercial Dealer, Interior Business, Snow Business, Pest Control Technology and Recycling Today magazines. GIE Media is a leader in custom publishing, book publishing, database marketing, conferences and special events.



Serving the Business of Golf Course Management

SALES OFFICES GIE Media, Inc.

6138 Riverview Road Peninsula, OH 44264 Phone: (330) 657-2871 Fax: (330) 657-2828

Kevin Gilbride

Publisher Phone: (330) 657-2889 kgilbride@giemedia.com

Cindy Code

Account manager, specialty chemicals Phone: (330) 657-2584 ccode@giemedia.com

Jennifer Halas

Classified sales Phone: (216) 961-4130 jhalas@giemedia.com

Annemarie Gilbride

Internet marketing coordinator Phone: (216) 961-4130 agilbride@giemedia.com

Debbie Kean

Manager, books Phone: (216) 961-3140 dkean@giemedia.com

Maria Miller

Conferences manager Phone: (216) 961-3140 mmiller@giemedia.com

GRAPHICS / PRODUCTION

Andrea Vagas, Art director Mark Rook, Creative director Helen Duerr, Production director Samantha Gilbride, Production coordinator

CORPORATE STAFF

Richard Foster, President and c.e.o. Dan Moreland, Executive vice president Jeff Fenner, Director, conferences & seminars Jami Childs, Director, business resources & IT Heidi Spangler, Circulation director Kelly Antal, Manager, accounting department Doug Adams, Director, marketing and research

Golf Course News is a member of: Golf Course Superintendents Association of America Charter Member National Golf Foundation Golf Course Builders Association of America The Irrigation Association Responsible Industry for a Sound Environment

Copyright 2005 by GIE Media, Inc. All rights reserved and reproduction, in whole or in part, without written permission from the publisher is expressly prohibited.







On the mark

I read John Walsh's article about hiring practices in the golf industry ("The art of hiring," February issue, page 34). Excellent! I'm a golf course owner that has agonized about hiring decisions more hours than I can count. I've been helping a gentleman in my area who has set up a golf course recruiting company. He has 10 years of experience with employee recruitment and placement in the IT sector, and he's now focusing on golf. His Web site is www.oncourserecruiting.com.

SAM SHUMATE Principal The Sulstone Group Charlotte, N.C.

Making holes

I read Kevin Ross' article, "Creative cultural practices," in the January issue (page 58). I'm interested in the aerifying pictures. What size, type, spacing and equipment were used to produce the holes that close together in which a quarter could touch four holes? Also, can a green withstand topdressing equipment to fill the holes without excessive rutting?

I'm interested in trying to achieve a higher surface area removal/impacted than I currently have. I prefer to do it with core aerification than with verticutting because it's hard to fill the grooves with sand. Please share any more information that might help me out.

Woods Course superintendent Kingsmill Resort

Williamsburg, Va.

Ross' response follows:

The tine in the photo is called an ultra tine. It measures 0.625 inches outside diameter and a 0.390 inches inside diameter when new. The wear on that tine is about 0.012 inches per 5,000 square foot green. So after nine greens, it measures 0.5 inches inside diameter. The photo shows a spacing of 1 inch by 1 inch using a GreenCare CoreMaster aerifier. A quarter is almost 1 inch in diameter, so it works well in the photo.

Your topdressing question is a tricky one to answer. Depending on your operation, I like to pick up the cores by hand. This is labor intensive, but it creates a better product. The health and stability of your green surface will determine whether it can withstand the mechanical equipment. Most USGA greens become too soft after this type of aerification. In this case, I recommend a light rolling with a greens roller after the cores are removed, then topdressing with a mechanical topdresser. To work the sand in, I strongly suggest not dragging it in with a utility vehicle and brush. I prefer Fly-mo's (no strings) and a good team of hand brooms. This causes much less damage and results in a superior product. This also is more labor intensive, but for a critical operation such as this, well worth it.

As far as achieving a higher SARI, that might depend on your aerification equipment. If you can get a 1-inch-by-1-inch spacing, that will help out the most. At present, a 0.400-inch inside diameter (when new) is about as big as you can get, but manufacturers are looking at making bigger ones available. A tine of 0.400 inches ID will equate to 12.5 percent SARI when new on a 1-inch-by-1inch spacing.

If you were at the Golf Industry Show in Orlando, you might have noticed that Graden has a new machine that fills the dethatched grooves as you perform the operation. It might be something to keep an eye on.

A great spokesman

Nice interview with Ray Davies ("The right fit," January issue, page 30). Mr. Davies would make a great spokesman for the entire golf course management company industry. In very concise replies Mr. Davies spoke volumes. I would encourage everyone to take the time to reread the article line by line with extra time to ponder what was said. Then compare it to their own operations, regardless of the type of club or management situation. I will make a conscious effort to never again generalize about the entire golf course management company industry. I'm also confident that superintendents enjoy working for Mr. Davies.

BOB TAEGER, CGCS Village Country Club Lompoc, Calif.

Corrections

- · The photo credit for the cover of the February issue, the fifth hole of the Coeur d' Alene Resort Golf Course, goes to Joel Riner/Quicksilver Studios.
- The photo credits for the pictures of Bill Kubly in the February issue on pages 27 and 28 go to Mark Wangerin.
- · The liquid formulation of Heritage, Heritage TL, is labeled for use on turf, not on ornamental plants. The information was incorrect in our February issue on page 64. GCN

Readers with comments are invited to write to

GCN Letters to the Editor 4012 Bridge Ave. Cleveland, OH 44113. Letters can also be faxed to 216-961-0364 or e-mailed to jwalsh@gie.net. Letters might be edited for space or clarity.

Calendar of Events

GGCSA Innovative Superintendent Seminar and Golf Outing Kinderlou Forest Golf Club Valdosta, Ga. Call 706-376-3585 or visit www.ggcsa.com.

March 23

LANDSExpo Texas Station Las Vegas

Call 877-964-6222 or visit www.landsexpo.com.

March 24

IFAS - University of Florida Field Day Davie, Fla. Call 772-692-9349 or visit www.ftga.org.

March 28-29

Rain Bird golf irrigation training GITC Levels 1 and 2 Boston, Mass. Call 520-741-6178 or visit www.rainbird.com.

March 30-31

Rain Bird golf irrigation training G3T Level 2 Boston, Mass. Call 520-741-6178 or visit www.rainbird.com.

March 31

NYSTA Adirondack

Regional Conference Lake Placid (N.Y.) Resort Holiday Inn Call 800-873-8873 or visit www.nysta.org.

April 14

Everglades GCSA Spring Symposium Naples (Fla.) Beach Club and Hotel Call 239-261-1958 or visit www.evergladesgcsa.com.

April 18-20

Trees and Utilities National Conference **Embassy Suites Downtown** Omaha, Neb. Call 888-448-7337 or visit www.arborday.org.

April 29

Florida Sod Growers Cooperative Field Day New Smyrna Beach, Fla. Call 863-675-2144 or visit www.ftga.org.

May 2-3

59th Annual Southeastern Turfgrass Conference

University of Georgia Tifton (Ga.) Campus Conference Center at the Rural Development Center Call 229-386-3416 or visit www.ugatiftonconference.org.

May 3

Rain Bird golf irrigation training G3T Level 1 Chattanooga, Tenn. Call 520-741-6178 or visit www.rainbird.com.

May 11-12

Cactus and Pine GCSA Field Day and Seminar about irrigation uniformity Karsten Turf Center, Campus Research Center Tucson, Ariz.

Call 480-609-6778 or visit www.cactusandpine.com.

May 12

Florida GCSA Spring Board Meeting Naples (Fla.) Beach Club Call 772-692-9349 or visit www.floridagcsa.com.

May 15-17

California GCSA Annual Meeting Harrah's Reno, Nev. Call 559-298-4853 or visit www.californiagcsa.org.

June 14

Cactus and Pine GCSA Seminar about fire, bark beetles and forest service Oak Creek Country Club Sedona, Ariz. Call 928-284-1660 or visit www.cactusandpine.com.

June 21

West Texas GCSA Superintendent Leadership Series program LakeRidge Country Club Lubbock, Texas Call 800-687-8447 or visit www.wtgcsa.org.

Aug. 1

Western Washington GCSA Fifth Annual Equipment Field Day Glendale Country Club Bellevue, Wash. Call 360-705-3049 or visit www.wwgcsa.org.

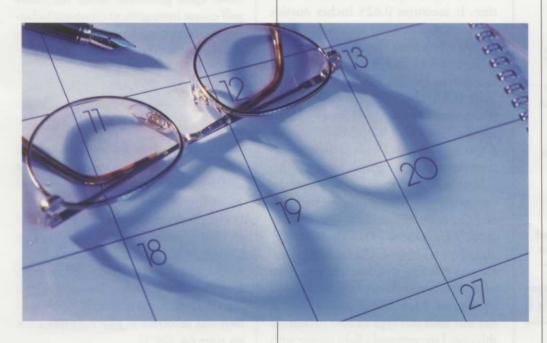
Aug. 9

Western Washington GCSA OSU/WSU Turf Field Day Corvallis, Ore. Call 360-705-3049 or visit www.wwgcsa.org.

Oct. 19-20

Turfgrass, Landscape and Equipment Expo Fairplex Pomona, Calif. Call 800-500-7282 or visit www.turfcouncil.org. GCN

Contact Rob Thomas, associate editor, at rthomas@gie.net or 800-456-0707 to submit conference information.





An employee/labor survey for GCN readers

What percentage of your golf course maintenance budget is allocated for labor?	8. How many overtime hours were worked during 2004? During 2003?					
2. How many people are on your golf course maintenance staff during peak season? During the off season?	9. What is the pay range for hourly employees?					
On season?	10. Of the hourly positions, which has the highest pay? Which has the lowest?					
3. How many on your staff are full-time or salaried employees?	11. What is the pay range for salaried employees?					
4. How many on your staff are part-time or hourly employees?	12. Of the salaried positions, which has the highest pay? Which has the lowest?					
5. What job titles are full-time or salaried positions?	13. What is your position or title? Golf course superintendent Director of grounds maintenance General manager					
6. What job titles are part-time or hourly positions?	Other 13. May we contact you? Name:					
7. How many workers' comp claims did you have during 2004? During 2003?	Phone: E-mail: Thank you.					

Fold along dotted line



PLACE POSTAGE HERE



PO BOX 5817 CLEVELAND, OH 44101-0817

Supply grows slowly

t the end of 2004, the number of golf facilities tallied was 16,057, breaking the 16,000 mark for the first time, according to the National Golf Foundation. Because a golf facility might contain one or more nine- or 18-hole courses, another way to measure golf supply is in 18-hole equivalents. There were 14,988 18-hole equivalents at the end of last year. There were 150.5 course openings and 63 closings for a net gain of 87.5 courses. The .5 counts for a nine-hole course. This is a growth rate of about one-half percent.

Of the new courses, 102.5 are open to the public, and 48 are private, according to NGF. Real-estate courses accounted for 88.5 tracks (59 percent) that opened during 2004. Additions to existing courses accounted for 28 openings, and there were 122.5 completely new courses. The number of courses under construction as of Dec. 31, 2004 is 320, another 409.5 are in the planning stages, and 261 courses have been proposed. The first chart below is a golf development summary of 18-hole equivalents for 2004.

About 150 18-hole equivalents opened in 2004, not including reconstructions; and another 670.5 were in planning or proposed at year's end. In planning means the project is within six months of start, specifications are being written and key product decisions are being made. Proposed means the project is being contemplated, the owner is identified and plans are in a state of refinement. The second chart below shows that all phases of course development have decreased since the late 1990s. GCN

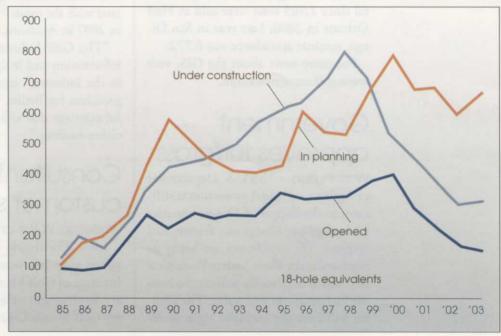
2004 golf development summary - 18-hole equivalents

	OPEN			UNDER CONSTRUCTION		IN PLANNING			PROPOSED			TOTAL COURSES	
Туре	New E	Expansion	Total	New	Expansion	Total	New	Expansion	Total	New	Expansion	Total	UNDER DEVELOPMENT
Daily fee	71.5	15.5	87	152.5	57.5	210	256	36.5	292.5	166	27	193	782.5
Municipal	13.5	2	15.5	20	4	24	36	5.5	41.5	37.5	5.5	43	124
Private	37.5	10.5	48	70.5	15.5	86	64.5	11	75.5	18.5	6.5	25	234.5
Totals	122.5	28	150.5	243	77	320	356.5	53	409.5	222	39	261	1,141

Figures do not include courses classified as reconstructions. • 15 nine-hole, 37 18-hole and one 27-hole reconstructed courses reopened in 2004. • 25 nine-hole and 40 18-hole reconstructed courses were under construction as of December 31, 2004. • Source: National Golf Foundation

Ups and downs

Since 1985, new golf course openings gradually increased and peaked in the late 1990s. From 2000 to 2003, the number of new golf course openings declined rather sharply. However, the industry experienced a slight increase of openings in 2004 and is expected to experience another slight increase in 2005.



Source: NGF course construction database

Industry news

Strong showing for Golf Industry Show

Orlando, Fla. - The 2005 Golf Course Superintendents Association of America Education Conference and inaugural Golf Industry Show wrapped up with record-breaking numbers, according to the GCSAA.

Overall attendance for the GCSAA Education Conference, NGCOA Solutions Summit and Golf Industry Show was



projected to be near 23,000. Prior to opening registration last fall, officials projected final attendance to be about

21,000. Also, it was estimated the number of qualified buyers was to reach 8,000. Last year in San Diego at the GCSAA Conference and Show, there were about 6,200 qualified buyers.

There were 830 exhibitors to showcase their products and services. This number breaks the record of 759 set at the 2001 GCSAA Conference and Show. Exhibit sales covered 270,360 square feet, surpassing the projected final total of 255,000 square feet. Last year at the GCSAA Conference and Show, there were 684 exhibitors covering 240,000 square feet. The alltime best for square footage at a GCSAA Conference and Show was 278,000 in Dallas in 2001.

The GCSAA Education Conference, which ran concurrently with the Golf Industry Show, also had strong interest. There were 7,329 seminar seats processed, marking the second highest total since 7,903 seats were sold in New Orleans in 2000. Last year in San Diego, seminar attendance was 6,772.

For more news about the GIS, visit www.golfcoursenews.com.

Government approves turfgrass

Washington - The U.S. Department of Agriculture issued protection certificates to developers of 11 new varieties of bentgrass, bluegrass, fescue and ryegrass. The certificates are being issued under the Plant Variety Protection Act, which requires the varieties be new, distinct, uniform and stable. The owners will have the exclusive right to reproduce, sell, import and export their products in the United States for the duration of protection.

The 11 varieties and their developers are:

- Penn A-4 creeping bentgrass, Pennsylvania Agricultural Experiment
- · Monte Carlo Kentucky bluegrass, developed by Pennington Seed;
- · Bedazzled and Royale Kentucky bluegrass, Rutgers University - Cook College, William Meyer;
- SR 8600 tall fescue, Seed Research of Oregon;
- Gibraltar strong creeping red fescue, Ampac Seeds;
- · Amazing perennial ryegrass, Ampac
- · Integra perennial ryegrass, Pennington Seed;
- · Promise variety of perennial ryegrass, Turf Merchants; and
- R2 and Kokomo perennial ryegrass, DLF International Seeds and Rutgers University.

NGF partners with Golf Industry Show

Lawrence, Kan. - The National Golf Foundation joined the mix of partners to present the Golf Industry Show. The other allied partners are: the Golf Course Superintendents Association of America, the National Golf Course Owners Association of America, the Club Managers Association of America, the Golf Course Builders Association of America and the American Society of Golf Course Archi-

tects. The CMAA will become associated with the event

in 2007 in Anaheim, Calif.

The Golf Industry Show provides information and insight to key players in the industry," says NGF c.e.o. and president Joe Beditz. "That is a powerful marriage that will lead to better decision-making."

Consultant stresses customer service

Wheeling, W.Va. and Horsham, Pa. - LRA Worldwide c.e.o. Rob Rush served as an instructor at the National Institute of Golf Management in January. Rush taught a class, "How Legendary Golf Brands Create A Unique Customer Experience."

"In an era of predominantly flat-growth or recession for the golf industry, golf course managers are looking for any edge to distinguish themselves in a crowded marketplace with a serious supply and demand imbalance," Rush says. "Many operators are recognizing service and customer experience as a way to separate themselves from the pack. Providing your members and guests with a consistent, exceptional customer experience is the single best pathway to developing lasting, profitable relationships."

Rush's presentation emphasized exceptional customer experience need not only apply to luxury properties. LRA's research indicates course conditions constitute only a few of the key drivers of golfer satisfaction. In contrast, eight of the top 10 post-round satisfaction drivers were based on service elements of the experience.

The NIGM was created by the National Golf Foundation to provide an avenue for golf management professionals to enhance and develop excellence in golf industry leaders through comprehensive curriculum combined with faculty and colleague interaction.

RISE president shares outlook

Washington - Allen James, president of the Responsible Industry for a Sound Environment, released his 2005 outlook for the specialty pesticide and fertilizer industry. Regulation reviews under the Endangered Species Act and the Clean Water Act, as well as local pesticide and fertilizer bans, continue to be top concerns for the industry.

James says the Clean Water Act and its related National Pollution Discharge Elimination System that permit requirements, as applied to certain pesticide applications, need to be monitored by industry. He says activists are using these issues to oppose the industry and hamper efforts to sell and apply pesticides used in or near water.

The threat of local bans on pesticides and fertilizers continues to be in the forefront of the industry's outlook, and the trend will continue in small communities. Activists have been unsuccessful pushing bans at the federal level, so they're using the Internet to reach local government officials, according to

The spread of West Nile virus continues to be a concern for industry officials, and the issue of biomonitoring, which is the measurement of environmental chemicals in the human



body, continues to loom. Industry supporters must continue to insist this measurement be conducted through scientifically valid reporting, James says.

James also anticipates an increase of chemical trespass claims against pesticides by industry opponents. Increased allegations by activists that any detection of pesticides in human blood indicates harm to humans will be the theme of the movement.

Methyl bromide exemption withdrawn

Lawrence, Kan. - The Golf Course Superintendents Association of America withdrew its request for a critical-use exemption for the application of methyl bromide on golf courses. The action was taken after the U.S. Department of Agriculture notified association officials that the GCSAA's 2006 and 2007 applications wouldn't be forwarded to the international advisory group that provides technical expertise on methyl bromide. The basis for the group's decision was that the absence of methyl bromide for golf course use wouldn't result in a significant market disruption. Comparatively, food crops might receive exemptions. If a product doesn't meet consumer standards, it could be imported from other countries. Golf isn't a product that can be imported.

As a participant in the Montreal Protocol and as a requirement of the Clean Air Act, the United States was to reduce its production and net import of methyl bromide to 30 percent of the 1991 baseline for 2003 and 2004. In 2005, the target is 0 percent, except for allowable exemptions. In 2002, the GCSAA applied for, and was granted, a critical use exemption for golf in 2005. In 2004, a similar application was made for 2006 and 2007. The United States was the only country filing an exemption for golf in 2006 and 2007.

Government officials indicate there's

likely to be enough stockpiled to serve golf courses in 2006 and 2007.

Research backs seeding mats

Brunswick, Ga., - Results of two university studies provide details about BlueYellow Engineered Turf System products and their impact on turf establishment and soil and nutrient runoff.

Greg Bell, at Oklahoma State University, conducted a study to determine if BlueYellow mats seeded with Riviera Bermudagrass are effective for rapid germination and/or turf establishment. The study compared BlueYellow mats to seeding with no mulch and seeding with straw mulch.

"Based on one year's research at a single site, we found the use of the BlueYellow resulted in more rapid germination and establishment, speeding up the process by almost two weeks, Bell says. "With BlueYellow, the turf establishment process was faster than seed with straw mulch, as well as seed with no mulch."

Within 24 days after seeding, BlueYellow plots achieved 81 percent turfgrass cover. This compares to seeding with no mulch, which was at 8-percent



cover at the same time, and broadcast seeding with straw mulch at 37 percent.

BlueYellow and conventional seeding with straw mulch are at equal levels of 95-percent turfgrass cover 42 days after seeding. Seeding with no mulch is at 59-percent cover at the same time.

Meanwhile, under the direction of Mike Richardson, the University of Arkansas conducted a study to compare nutrient and sediment runoff on slopes seeded conventionally, hydroseeded and seeded with BlueYellow mats.

We found BlueYellow allowed the soil to take in more moisture until the point of saturation, thereby effectively reducing the likelihood of runoff occurring compared with either of the other two planting treatments," Richardson says.

The standard seeded plots experienced runoff after only 28 minutes of simulated rain and hydroseed at 49 minutes. The BlueYellow plots didn't experience runoff for 77 minutes. Based on the volume of water applied, this correlated to 0.91 inches of simulated rain with standard seeding, compared with 1.6 inches with hydroseed and 2.52 inches with BlueYellow.

Also, the BlueYellow system experienced 50 percent less runoff volume than either of the other two treatments during the same period of runoff evaluation.

Study: fertilizer helps divot repair

Orlando, Fla. - Nitamin-coated sand, a fertilizer developed by Georgia-Pacific, demonstrated significant benefits in divot repair when compared with other fertilizers in a turf study conducted by Penn State University. The results of the research, conducted at the Valentine Turfgrass Research Facility in University Park, demonstrate faster divot recovery when Nitamin was used in the topdressing.

"Over a seven-week period, our research showed that the smallest average divot size was in the Nitamintreated plots," says Maxim J. Schlossberg, assistant professor at the Penn State Center for Turfgrass Science. "Among the fertilizer treatments, Nitamin-treated plots recovered significantly faster, especially over the three to seven weeks following topdressing."

Schlossberg observed that Nitamin has a low-burn potential. Furthermore, the low size guide number (SGN-50) and high-particle density of the fertilizer allows for rapid canopy penetration.

Schlossberg's team induced typical divot damage on 12 blocks of four 2-by-4-foot plots on a PennEagle bentgrass fairway, followed by hand topdressed treatments of Nitamin, traditional sand, traditional sand blended with IBDU fertilizer, and traditional sand blended with ammonium sulfate at equivalent nitrogen rates of three pounds of nitrogen per 1,000 square feet. All plots had ideal soil nutrient levels and were fertilized foliarly with 0.5 pounds of magnesium sulfate per 1,000 square feet to standardize sulfate sufficiency.

Association news

Name change won't be pursued

Lawrence, Kan. - The Golf Course Superintendents Association of America's board of directors accepted a task group's recommendation not to pursue an organizational name change at this time. The task group, which was composed of member superintendents, golf course management industry representatives and communications professionals, studied the issue at the request of the board for approximately nine months. Jon Jennings, CGCS, at Chicago Golf Club, chaired the task group, which conducted interviews

with a variety of member groups including chapter delegates, chapter leaders and members selected at random.



The report also indicated that the reluctance to pursue a new name was based partly on the loss of identity of the superintendent, and because significant progress has been made in raising the profile of the superintendent and the association. The task group suggested, and the board agreed, that the association consider conducting additional research to drop the "of America" from the name.

GCSAA recognizes environmental leaders in golf

Lawrence, Kan. - For preserving a natural and native setting, Tierra Verde Golf Club in Arlington, Texas, and its golf course superintendent, Mark Claburn, were named the overall winners of the 2004 Golf Course Superintendents Association of Americal Golf Digest Environmental Leaders in Golf Awards.

Judges selected winners in three national categories (public, private and resort courses) and an international winner. An overall winner was selected from the four. Additional recognition was given to the top entry from each GCSAA affiliated chapter, and merit honors were awarded to those who didn't earn national or chapter honors, but in the opinion of the judges, deserved special recognition. The national winners include (facility and chapter):

National Public: Mark Claburn,

Tierra Verde Golf Club, Arlington, Texas; North Texas GCSA

National Private: John F. Anderson, The Club at Pronghorn, Sunriver, Ore.; Oregon GCSA

National Resort: Sandy C. Clark, CGCS, Barona Creek Golf Club, San Diego, Calif.; San Diego GCSA

International: Sean A. Kjemhus, Stewart Creek Golf and Country Club, Canmore, Alberta, Canada; Canadian GSA

Winners were recognized during the general session of the Golf Industry Show.

Texas association elects members

Kingwood, Texas - The South Texas Golf Course Superintendents Association elected Ray McFarland, golf course superintendent at Hearthstone Country Club in Houston, the chapter's president for 2005. Additionally, Doug Browne, golf course superintendent at Stephen F. Austin Country Club in San Felipe, and Justin Shulse, general manager at Magnolia Creek Golf Links in League City, were elected vice president and secretary/treasurer, respectively.

Three members of the board of directors also were chosen: Roger Goettsch, golf course superintendent at Redstone Golf Club; Wade Warms, golf course superintendent at the Golf Club at Cinco Ranch in Katy, and Jeff Jowell, golf course superintendent at Weston Lakes Country Club in Fulshear.

Institute celebrates 50th anniversary

Lawrence, Kan. - The Environmental Institute for Golf celebrated its 50th anniversary at the GCSAA Education Conference and Golf Industry Show. The institute started as the GCSAA Scholarship and Research Fund in 1955 to provide scholarships for turfgrass students and fund research projects to improve playing conditions. Now, the institute funds more than \$1 million annually for environmental programs, including scientific research, education, information collection, outreach and scholarships.

Innovation and advancement have guided the organization to help provide solutions for managing golf facilities.

Almost 60 scientific research projects funded by the institute have provided information to the golf course management industry about innovative best

management practices. The continuing education curriculum for the golf course management industry has played a key role in delivering practical information to advance the knowledge, skills and abilities of golf

course superintendents to manage golf facilities in an environ-

Environmental Institute for Golf

mentally friendly manner. Information, tools and resources have been made available to the industry to advance environmental stewardship practices. More than 1,300 scholarships have been awarded to individuals to advance their knowledge of golf course management.

During the past two years, more than 100 volunteers representing many environmental, regulatory and golf organizations invested their expertise to develop a roadmap for the institute. The participants helped identify the most important environmental issues facing the golf industry: water management; integrated plant management; wildlife and habitat management; golf course siting, design and construction; and energy and waste management.

The institute directs funds from donors to support programs that provide essential solutions within these five areas.

GCSANC presents awards to winners

Diamond Springs, Calif. - The Golf Course Superintendent's Association of Northern California announced several award winners at its annual meeting and awards ceremony Jan. 24. Terry Grasso, superintendent at Sequoyah Country Club in Oakland, was named the Superintendent of the Year. Grasso also was recognized by the California Golf Writers Association for his contributions to golf.

The George Santana Distinguished Service Award was given to Gary Carls, CGCS, for his level of pro-

fessionalism while demonstrating a long-standing commitment to the association and the turfgrass industry. Carls is

the golf operations supervisor at Sunnyvale Golf Course and Sunken Gardens Golf Course in Sunnyvale.

The Turfgrass Excellence Award was presented to two individuals. In the private category, Dean Gump, superintendent at Pasatiempo Golf Club in Santa Cruz, was named for the second time. The public category recipient of the award was Tim Powers, CGCS, at Crystal Springs Golf Course in Burlingame.

Greg Fernald of Target Specialty Products won the Affiliate Merit Award for his contributions to the betterment of the association and its members.

GCBAA president talks to managers

Lincoln, Neb. - Tommy Sasser, president of the Golf Course Builders Association of America, addressed Caterpillar and dealership executives, sales managers and rental managers at the annual Cat Rental Ser-

vices meeting Feb. 14 in Las Vegas during the American Rental Association's annual trade show and conference.

Sasser helped Caterpillar managers gain in-

sight into the needs of the golf course construction customer. Sasser presented an overview of the GCBAA and the role the association has in the golf course development industry. He discussed what a typical builder member's business is like and what percentage of the business expenses relate to equipment rentals and purchases.

GCBAA

Lawsuit almost set against Royal Links

Charleston, S.C. - Golf course owners throughout the United States plan to file a lawsuit against Royal Links USA. Royal Links had written agreements with more than 1,000 golf courses in which the golf courses would use Royal Links' beverage caddies to display and sell food-and-beverage items. The no-cost-beverage-caddy program involved golf courses leasing the caddies from third-party leasing companies, and Royal Links agreeing to reimburse the golf courses for their lease obligations. Royal Links proposed to make their revenue from advertising display panels on the beverage caddies.

In October 2004, Royal Links notified golf courses it planned to cease making monthly reimbursement payments to all customers. Each golf course has a written agreement with Royal Links, which obligates the company to pay courses about \$300 per caddy per month. Most lease obligations are for 60 months, and most golf courses have seen less than one year's worth of reimbursements from Royal Links, thus leaving an obligation to pay four more years of lease payments.

A task force of members of the National Golf Course Owners Association has been meeting since October 2004 to discuss the situation. Through the efforts of this task force and the NGCOA, almost 200 golf courses responded to a request for information about their agreements with Royal Links.

TPI president gives perspective

Rolling Meadows, III. - Art Campbell, president of the Turfgrass Producers International, says he's reasonably optimistic about 2005 and what the year has to offer turfgrass sod producers and the green industry.

"If we consider the housing and golf market segments and then add innovations such as automated irrigation systems designed to conserve water, maximizing energy usage and make labor more efficient, and top that with forecasts on the part of the select industry related segments such as manufacturers of turfgrass sod harvesters, installers, forklifts, seeders, tractors, etc., we see a positive trend for growth, efficiency and greater productivity," he says.



Campbell says sensitive issues could influence turfgrass sod producers.

The issue of artificial turf isn't going to go away," he says. "There's a need to better communicate the benefits of natural turf with regard to the environment. There's also a need to be sensitive and to help build awareness of the continuing water shortages that impact many communities and regions throughout the world."

Campbell also encourages his peers to become involved when it comes to issues of importance.

Solutions center provides answers

Orlando, Fla. - Creating and operating a golf course irrigation system with working sprinklers inside the Golf Industry Show combined the skills and knowledge of Irrigation Associa-



tion members. Those who designed and installed the irrigation system and other aspects of the Water Solution Center were on hand during the show to help superintendents and owners solve irrigation and water problems.

The solutions center featured the Center for Irrigation Technology's pump demonstration trailer, which illustrated pump efficiency and variable frequency drives. It also showcased the various components of a golf irrigation system: purpose, usage and installation.

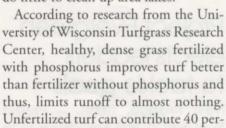
Daily educational sessions covered topics such as the irrigation design process, financing alternatives, project management, sprinkler spacing and uniformity, weather station maintenance, design installation and maintenance, pipe repair and auditing.

RISE battles fertilizer bans

Washington - Businesses and associations, including the Responsible Industry for a Sound Environment and CropLife America, filed a motion and supporting papers with U.S. District Court in Wisconsin, asking the court to strike the City of Madison and Dane County ordinances banning the display, sale or use of lawn fertilizers containing phosphorus. The ordinances violate

state and federal laws, as well as the Wisconsin and U.S. Constitutions.

The plaintiffs argue the bans put retailers at a disadvantage and will do little to clean up area lakes.



Syngenta renews institute grant

cent more phosphorus in runoff.

Lawrence, Kan. - Thanks to a partnership between Syngenta Professional Products and The Environmental Institute for Golf, funding for the Golf Course Superintendents Association of America's e-Learning grant will be extended through 2007.

First established in 2004, the grant helps fund GCSAA's online education program as well as the expanding Webcast series. The grant underscores Syngenta's commitment to advancing the game of golf by delivering up-to-date technical knowledge and education to golf course professionals.

The grant, established specifically to further the development of Web-based education, provides funding to create more online, self-paced courses in addition to live Webcast events.

New USGA grants encourage growth

Colorado Springs, Colo. - The United States Golf Association announced 57 new grants totaling \$1.6 million to non-profit organizations throughout the country to support affordable and accessible golf programs and facilities. The new awards for the first portion of 2005 will reach more than 50,000 individuals with disabilities as part of the USGA's effort to bring golf to nontraditional audiences who otherwise wouldn't have the opportunity to play.

USGA funding has exceeded \$45 million throughout the past eight years and supports golf instruction, equipment, access and course construction costs, as well as help make golf more accessible and affordable.

Also, the Babe and George Zaharias Golf Foundation of Tampa, Fla., was awarded a \$15,000 grant from the USGA for support of its program serving individuals with disabilities from Camp Florida, as well as abused and neglected children residing at the Children's Home of Tampa.

Project Evergreen elects leaders to tackle goals

New Prague, Minn. - Project EverGreen elected new officers to its board of directors for 2005, including president Paul McDonough of LESCO. Other elected officers include Cindy Code of GIE Media as first vice president; Chris Kujawa of Kujawa Enterprises, a landscape architecture and maintenance company, as second vice president; Bill Klutho of John Deere Worldwide Commercial & Consumer Equipment Division as secretary; and Tom



Delaney of the Professional Lawn Care Association of America as treasurer.

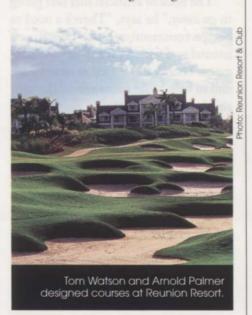
Project Evergreen's goals for 2005 include reaching \$1.1 million in cash and donated services for the trade and consumer media campaign. The national campaign was established to inform U.S. consumers of the positive effects of well-maintained green spaces. A broad range of other goals include:

- · Develop a tag line to be used by supporters at their businesses and on their product materials;
- · Continue to develop consumer pieces for professionals to distribute to their customers;
- · Create news releases and feature stories to national, state and local media describing the benefits of green spaces;
- · Consider a special consumer advisory council to advise Project EverGreen on marketing activities;
- · Create pilot landscape projects for consumers in to-be-determined cities in
- · Continue national surveys of consumers, suppliers and end-user professionals to gauge attitudes and opinions about the green industry and the products and services used to maintain green spaces.

ourse news

Reunion Resort opens 36 holes

Reunion, Fla. - Two of Reunion Resort & Club of Orlando's signature golf courses



opened: the 7,257-yard Independence, which was designed by Tom Watson, and the 7,010-yard Legacy, which was designed by Arnold Palmer. The 36 holes will be available for play by members and resort guests only. The third course at Reunion, a Jack Nicklaus signature design, is scheduled to open in late 2005.

The Independence Course is a traditional parkland style layout bordering the Davenport Creek nature preserve. Its undulating terrain features elevation variations of as much as 45 feet from tee to green. The course is highlighted by wide, rolling fairways; a variety of strategically placed bunkers; and large greens.

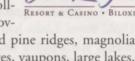
The Arnold Palmer-designed Legacy Course features a combination of natural rolling terrain with mature trees, pristine natural preserve areas and extensive landscaping.

Course to open in Mississippi

Jackson, Miss. - Beau Rivage Resort & Casino plans to build a new 18-hole Tom Fazio-designed championship golf course. Named Fallen Oak, the course will sit on a 510-acre tract and will be a par-72 layout stretching 7,516 yards from the back tees. The course will open for play in early 2006.

A public course, of which guests of Beau Rivage Resort & Casino can enjoy priority access, Fallen Oak runs adjacent to the

DeSoto National Forest and is char- Beau Rivage. acterized by roll- RESORT & CASINO · BILOXI ing landscape cov-

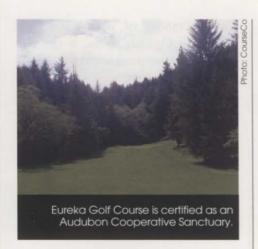


ered in oak and pine ridges, magnolia and pecan groves, yaupons, large lakes, winding streams and marshes.

Beau Rivage is spending more than \$30 million to create this golf facility. The course will have numerous water features and concealed cart paths. An expansive clubhouse reminiscent of an Acadian-style Southern mansion will house a pro shop, locker facilities, lounge and restaurant. The back veranda will provide panoramic views of the ninth and 18th greens.

Eureka achieves Audubon status

Eureka, Calif. - Eureka Golf Course achieved designation as a Certified Audubon Cooperative Sanctuary, given by



Audubon International. Superintendent Don Roller led the effort to obtain sanctuary status and is being recognized for environmental stewardship by Audubon.

CourseCo manages Eureka Golf Course, which is the company's sixth managed course in California to achieve full certification of the 33 courses certified in the state. It is the 517th course in the world to receive the honor.

The course is located in a 4,200-acre subwatershed of the Elk River surrounded by a redwood forest.

Texas community plans new course

Tawakoni, Texas - Architect Jeff Brauer is designing The Lone Oak course at The Villages at Lone Oak, a new 1,000lot lakeside planned community being developed by The Lone Oak Land Development Co.

Jasen Miller of Lone Oak Land Development says Lone Oak plans to get three of the golf holes playable for the residents as quickly as possible. Once that is done, their objective will be to complete nine holes this year and have them ready for play in the spring of 2006. Construction then will begin on the second nine.

New manager runs Highland Park

Highland Park, III. - KemperSports assumed management operations of Highland Park Country Club, which was founded in 1967.

Designed by Dick Nugent Associates, the 18-hole public golf course measures 6,506 yards from the back tees. The par-71 course features nine ponds and mature-tree-lined fairways. The facility also has a banquet facility with a seating capacity of more than 350.

Additionally, KemperSports named Paul Pearce general manager of Highland Park Country Club.

NGF recognizes many golf courses

Jupiter, Fla. - The National Golf Foundation presented the third annual Customer Loyalty Awards to golf facilities that received high approval ratings from their customers in various operational segments. The awards were presented during the PGA Merchandise Show.

The Customer Loyalty Awards were based on surveys fielded through NGF's Customer Loyalty and Satisfaction Program in 2004. Customers rate their satisfaction with facility amenities, course conditions, service and value.

NGF presented the awards in three categories, each containing an overall winner and nine runners-up. The overall winner for the 2004 CLASP Awards in the Premium Daily Fee category was Stevinson Ranch Golf Club in Stevinson, Calif. In the Daily Fee and Municipal Facility categories, the winners were Rock Creek Golf Club in Fairhope, Ala., and Harbor Links Golf Course in Port Washington, N.Y.

Runners-up in the Premium Daily Fee Facility category were: The Bay Club in Berlin, Md.; Bear Trap Dunes Golf Club in Ocean View, Del.; Cowboys Golf Club in Grapevine, Texas; Cyprian Keyes Golf Club in Boylston, Mass.; Shadow Ridge Golf Club in Palm Desert, Calif.; Stonewall Golf Club in Gainesville, Va.; TPC of Myrtle Beach in Murrells Inlet, S.C.; Whisper Creek Golf Club in Huntley, Ill.; and World Golf Village in Saint Augustine, Fla.

In the Daily Fee Facility category, winners were: The Broadlands Golf Course in Broomfield, Colo.; Heritage Ranch Golf & Country Club in Fairview, Texas; Illinois State University Golf Course in Normal, Ill.; King's Deer Golf Club in Monument, Colo.; Los Lagos Golf Course in San Jose, Calif.; Pelican Point Golf Club in Gonzales, La.; Shoal Creek Golf Club in Kansas City, Mo.; Southwood Golf Club in Tallahassee, Fla.; and St. Johns Golf and Country Club in Saint Augustine, Fla.

And in the Municipal Facility category, winners were: Cattails At MeadowView Golf Course in Kingsport, Tenn.; Ed Oliver Golf Club in Wilmington, Del.; Incline Village (Nev.) Golf Courses; Indian Creek Golf Course in Carrollton, Texas; Makefield Highlands Golf Club in Yardley, Pa.; Poplar Creek Country Club in Hoffman Estates, Ill.; Prairie Landing Golf Club in West Chicago, Ill.; Tahquitz Creek Golf Resort in Palm Springs, Calif.; and West Woods Golf Club in Arvada, Colo.

Personnel news

Timothy T. O'Neill of the Country Club of Darien, Conn., was elected president of the Golf Course Superintendents Association of America at its annual meeting in Orlando, Fla. The association's new vice president is Sean A. Hoolehan of Wildhorse Resort Golf Course in Pendleton, Ore. Ricky D. Heine, general manager at The Golf Club Star Ranch in Austin, Texas, was elected secretary/treasurer. James R. Fitzroy director/superintendent at the Wollaston Recreational Facility/Presidents Golf Course in North Quincy, Mass.; Mark D. Kuhns director of grounds at Baltusrol Golf Club in Springfield, N.J.; and Robert M. Randquist, director of golf course and grounds at Boca Rio Golf Club in Boca Raton, Fla., are the three directors. Mark I. Woodward will serve on the board for one year as immediate past president. Gary K. Carls and David S. Downing each have one year remaining on their two-year director's term. All are certified golf course superintendents.

Stuart Levanthal, CGCS at Interlachen Country Club in Winter Park, Fla., was named Superintendent of the Year by Golfweek's SuperNews.

Dale Hendrickson was appointed course supervisor at the new Mauna Kea Beach Golf Course in Kamuela, Hawaii.

Gregg Blew of the Wellshire Golf Club in Denver was named Superintendent of the Year by the Rocky Mountain Golf Course Superintendents Association.

Doug Parker is the Sacramento (Calif.) golf manager overseeing operations at Haggin Oaks, Bing Maloney, Bartley Cavanaugh and Land Park.

Sean Duffy was appointed golf course superintendent for The Club at TwinEagles in Naples, Fla.

Coyote Creek Golf Club in Morgan

Hill, Calif., appointed Michael Higuera Sr. golf course superintendent.

The Oklahoma Tourism & Recreation

Department Parks' Resorts & Golf Division promoted Wesley Chaney to manager of Fort Cobb and Roman Nose Golf Courses.

Corey Crandall of West Wind Golf Course in Ogallala, Neb., is the Nebraska Golf Superintendent of the Year for 18-hole courses.

Richard Pavlasek, superintendent at Brookhaven Country Club, is the president of the North Texas Golf Course Superintendents Association. The association's A.C. Bearden Memorial Superintendent of the Year Award went to Charlie Trammell of Timarron Country Club.

The Georgia Golf Course Superintendents Association named its board of directors for 2005. The president is Mark A. Snyder of Berkeley Hills Country Club; vice president is Richard Staughton of Towne Lake Hills Golf Club; and the secretary is Harold Franklin of Fields Ferry Golf Club. The 2005 directors are: Barry Bennett of Valdosta Country Club; Mike Crawford of TPC at Sugarloaf; Tim Cunningham of Coosa Country Club; Craig Conner of Summit Chase Country Club; Lane Ferguson of Creekside Golf and Country Club; Ray Meredith of Follow Me Golf Course; Brad Owen of Augusta National Golf Club; and Anthony Williams of Renaissance PineIsle Resort.

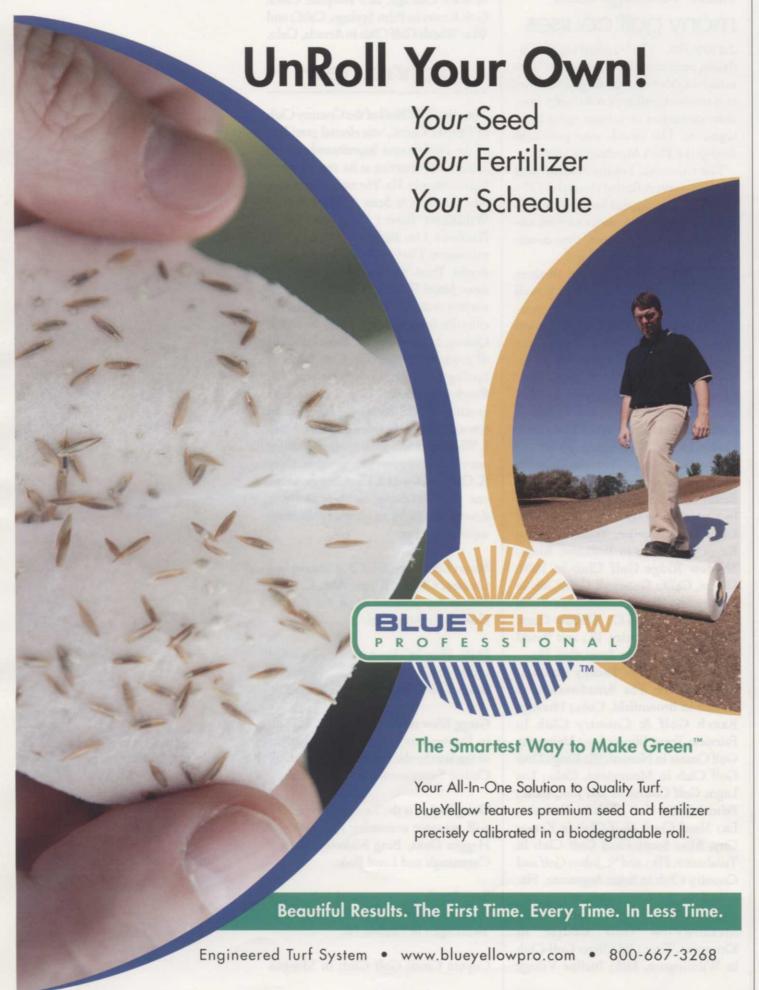
Augusta National Golf Club senior director of golf course grounds Marsh Benson was presented with the 2004 Leo Feser Award by the GCSAA for best superintendent-written article published in the association's monthly magazine.

Mike Jansen was named operations manager at Hoich Enterprises and Lakeview Golf Course in Omaha, Neb., and Megan Stuart was named marketing director.

Golf course architect Kevin H. Hargrave started his own firm. Hargrave has worked for Keith Foster Golf Course Design for the past nine years.

John E. Kaminski, assistant professor of Plant Pathology at the University of Connecticut, is developing a research program about current disease-related issues of highly maintained turfgrass systems and will serve as director of the UConn Turfgrass Disease Diagnostic

Gary Player accepted the Golf Course Builders Association of America's Don A. Rossi Award at the association's Annual Awards Dinner in February. GCN





PERCEPTION



Some people seem to have the perception that all biological products are a little like snake oil or just "bugs in a jug". And frankly, some of them are. We've tested them. We know.

In reality, we've tested ours as well, at over 25 major US universities* and know that our products work and are worth your investment. At Roots®/Novozymes we are serious about research. We employ over 500 scientists world-wide and invest over \$130 million in research annually. So, when we say Roots products work, we mean it and back it up with documented university research and consistent product benefits like:

- 1. Overall better plant health
- 2. Low thatch accumulation
- 3. Reduced chemical fungicide use
- 4. Better stress tolerance
- 5. Better drought resistance

If you want significantly better turf color and quality** during periods of stress compared to organic fertilizer at 3/4 lb N, it's time you give Roots a try.

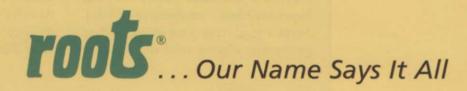
It's Time to Try ROOTS® Turf Food



It's easy. Apply to greens, tees and fairways and see the difference. It's just that simple.

Contact your local Roots distributor today.

- * Rutgers, VA Tech, U of WI, MI State, Penn State and over 20 other major universities.
- ** University of Wisconsin 1999 USGA Spec Bentgrass Turf Color Study.







founded Paladin Golf Marketing in Plant City, Fla., to assist golf course owners and managers with successful marketing. A former associate publisher for Golf Week, he can be reached at Jackbrennan@ij.net.

Seeing other views

n past columns, I've explained that marketing is important to golf course superintendents for a number of reasons. Your next job might depend on how well you market yourself to your employer. How much marketshare your golf course earns this year and the greens fees golfers are willing to pay depend largely on whether the course conditions you produce meet or exceed golfers' expectations. Being able to hire that great new employee depends on how well you market your course, yourself as the boss and the position. Getting a raise depends on how well you market your accomplishments to the owners or the board of directors.

Marketing isn't an element of the job description for most golf course superintendents, but like sales, it's really a part of everyone's job description ... or it should be.

If marketing is so important, what do marketers do that other people don't? The answer is simple, and because of that, is often missed. Superintendents who understand and effectively market themselves, their work and their course have learned not to use their own eyes and ears - they have learned to use other people's. That's it. The challenge is putting this principle into action.

A huge obstacle to see what others see is recognizing how much your own eyes can blind you. I've worked with and around many superintendents, and what an experienced superintendent sees on a course is amazing. For example, an experienced superintendent can tell how a green has been constructed and then accurately predicts many of the ongoing maintenance problems it will have.

But what does the golfer see? The average golfer sees things like approaches, sand traps, turf color and quality, and green speed. To the superintendent, green speed might not be an issue because he is already pushing conditions on that green to the limit, or it's being maintained to the course's specifications. Turf color also might be a temporary condition that will correct itself with an adjustment to irrigation or fertilization and a little time.

From a technical standpoint, the superintendent's perspective is valid. From a marketing perspective, golfers' perceptions also are valid and shouldn't be dismissed too easily. If golfers are turned off enough about course conditions, they might choose to play another course next week.

Managing something as finicky as golfer perceptions always begins by being sensitive to what the other parties might see and feel. This isn't rocket science. Any superintendent who's married or who has been in a serious relationship with a significant other should have a clear understanding of this.

Another aspect of developing a marketing perspective is recognizing the numerous perspectives present. We've all heard the saying, "You can't see the forest through the trees." In marketing, you have to be able to see the trees and the forest. Marketing is intensely individualistic. Each golfer, visitor or neighbor has a perception of your course. Grouped with similar individuals, they make up a group with a common perception - the trees. All the groups together represent your total audience - the forest.

Being able to see what others think means being able to listen to every individual who tells you what he thinks. Most people won't tell you what they think. So

A FUNDAMENTAL

CHALLENGE FOR

SUPERINTENDENTS IS TO

GET IN TOUCH WITH

OTHERS' PERCEPTIONS.

those that do are valuable and usually represent a number of others who won't freely share their thoughts and perceptions with you. Individuals also pro-

vide information about what their special group thinks - senior golfers might view your course and the job you're doing differently than the junior ladies.

Try to be open when considering what other parties see and think. Try to see your course, your work and yourself through the eyes of the owners, the green committee, the board of directors, your employees and your community. A marketing person develops a natural sensitivity to what others are thinking. It's not about you and your agenda in marketing, it's

As a marketing consultant, one of the primary benefits I bring is looking objectively at a course and a market area - even though I'm naturally subjective as an individual. However, anyone can become more objective with practice, and it all begins by listening carefully and trying to see what the other person sees.

Gaining this perspective is invaluable to improve how you and the job you're doing are perceived. For example, your job requires that you sometimes must sacrifice course appearance or playing conditions in the short term for long-term health of the turf, such as when core aerating or trimming tree limbs. From an agronomic perspective, such trade-offs make perfect sense. But being sensitive to your golfers' views allows you to take extra steps to communicate the planned work and take every step possible to make it as painless as possible for your golfers.

Juggling agronomic responsibilities with marketing objectives is a rare but valuable skill for a superintendent to possess. It's a valuable skill because it helps make everyone happy. For example, there's a course in South Carolina that enjoys a great reputation and loyal clientele. The superintendent invests almost his entire budget manicuring the greens, fairway and tees - in that order. But the rough areas are awful and even have had washouts in them. But by focusing attention and work on the areas of the course that

> golfers see and experience most, this superintendent is able to make golfers and course ownership happy because he creates a great golfing expe-

rience - from their perspective - with a reasonable budget.

Finally, the market mind means seeing with the eyes of the past and the future. Marketers must have a respect for the past and tradition, especially in golf, but equally must be about what's possible. Marketing by definition is about the future, and that's a shifting target because the needs and expectations of golfers constantly change.

There's much truth to the saying that perception is reality. A fundamental challenge for superintendents is to get in touch with others' perceptions. It's impossible to conduct too many player or member surveys or have too many conversations with your clients. The value of this depends on your ability to see things from their perspectives. GCN

More on trees as hazards

ast month, I wrote about the historical background of how trees became such fixtures on American golf courses. But there's much more

I'm in favor of removing of trees where necessary, but the trick is figuring out which trees must be removed, which often causes disagreements. A golf course superintendent might want a tree removed for agronomic reasons. But if he removes a tree, members of the club might treat the loss of that tree like a death in the family.

In this sensitive area, superintendents generally prefer an honest dialogue, even if a decision goes against their wishes. Only in rare circumstances would one emulate the superintendent who names his chain saw lightning so he could "honestly" tell members that lightning took down the tree. Other superintendents have staged occasional "construction accidents," often using employees who were leaving anyway as scapegoats. And some architects have made math "errors" on master plans, removing 243 trees instead

My favorite tree-removal story is the superintendent who was ordered to "save" a large tree. He later professed innocent confusion about the members' intent after stacking the logs neatly in the clubhouse fireplace.

I'm not recommending superintendents do any of this. It takes sales skill to demonstrate the benefits of removing long-loved trees. Typical common-sense

approaches might include detailing the resources a superintendent would expend to resod, rope or spray areas that are too shady to grow turf - ex-

penses that appeal to members' pocketbooks. A superintendent might demonstrate that other trees have been removed without ill effect. Few members could pass a test of where trees have been removed, assuming there are plenty left for backdrop or a superintendent didn't take one out where a member buried his dog

Superintendents might feel more comfortable making a potentially political decision with the help of an independent expert. I've been called in to consult on only one tree. Playability, aesthetics and safety are considered when making a decision to keep or remove a tree. Relieving straight-line planting and recovering longlost views are two good reasons to remove a few trees.

Playability issues

The surest way for a superintendent to receive permission to cut down a tree is when he can claim it blocks a shot from the fairway or if it's a double hazard that blocks a direct shot at the green from a fairway bunker.

Throughout the years, golf courses have become fairer. One fairness doctrine asserts that a golfer should always have a chance to recover, which many players view as always being able to reach a green from a bunker. Others feel they should be able to aim at the pin from the hazard.

As a result, we deem architecture that requires the need to clear a bunker lip and stay under or go around a tree as a double hazard, and thus, unfair. Trees beyond bunkers is the most common example of the double-hazard concept, but some argue that any high lip on a fairway bunker or anything less than a firm, perfect bunker lie also is an unfair double hazard.

A smaller and diminishing minority of old-school players believe shots that are equally easy from the short grass or fairway bunker diminish the shot value of the hazard.

I generally agree with the premise that

PLAYABILITY, AESTHETICS

AND SAFETY ARE

CONSIDERED WHEN

MAKING A DECISION TO

KEEP OR REMOVE A TREE.

a good-to-spectacular recovery shot from a sand bunker makes for exciting golf. I like the concept of a half-stroke penalty (meaning, on average, a recov-

ery shot will find the green about half the time, not that one could end up with a score of 4.5). So I usually design fairway bunkers with shallow depth and gentle slopes that allow this to happen. Allowing forward play is practical to ease maintenance and speed up play.

Golfers accept many of these hazards as part of the game. However, they might complain about a tree that has grown across the fairway far enough to block a clear shot to the green. At one club, I was called in for a discussion about whether it's fair to be blocked from going for the green from any point in the fairway. In that case, the tree should be removed further toward the rough, given the large number of players it affected and because it was a short par-4.

I often save specimen trees just beyond normal landing areas to affect strategy. At Cowboys Golf Club near Dallas, there's a specimen tree about 350 yards off the tee on the 12th hole that's trimmed high because it can block the green from the far left of the fairway. A big hook or low-running shot is required to reach the open front green. Golfers learn the right side is preferred. And while golfers have an option to get to the green from the left, they must invent a shot. This creates the half-shot penalty.

I like not providing golfers road signs on every hole, telling them exactly what to avoid. Why is a low-running or bigcurving shot less exciting than a recovery shot from a bunker when it's successfully pulled off?

I also like an occasional tree encroaching into the fairway to force a draw or fade from the tee. I'm always careful to leave enough room to find some part of the fairway with other shot patterns. These work best at about 180 to 210 yards from the tee because the ball reaches its vertical apex and maximum horizontal curve there.

Sometimes trees located close to tees make for better safety, but placing them too close to the landing areas creates another lateral hazard.

Equal consideration

There are many perspectives to consider when trying to reverse the long-term results of continuous tree planting. A course's or club's consulting architect should help superintendents determine which trees should be saved or removed. Playability, safety and aesthetic aspects of any hole should be considered equally with a superintendent's agronomic needs.

Trees are beautiful and necessary on most golf courses and deserve careful consideration. Now I've put a lot of brain power into making decisions to remove trees, so pass the aspirin, and let's go look at the next tree. GCN



licensed golf course architect and president of GolfScapes, a golf course design firm in Arlington, Texas. Brauer, a past president of the American Society of Golf Course reached at jeff@jeffreydbrauer.com.

advancing the game



founder of TMG Golf (www.TMGgolfcounsel.com), a golf course development and consulting firm and is a former executive director of the GCSAA. He can be reached at golfguide@adelphia.net. His previous columns can be found on www.golfcoursenews.com.

A career check list

fter more than 25 years of counseling employers as they seek to hire superintendents, coaching superintendents into jobs and stabilizing families when the superintendent of the house has lost a job, I see two clear patterns that, with hindsight, paint a definitive picture of two kinds of superintendents: career secure superintendents who succeed at their jobs and

realize a balanced life and superintendents who too often have to worry about their jobs and fail to realize the comforts of a balanced life.

Accordingly, I have prepared the following 42-item check list to help superintendents and assistants gain an objective perspective relative to their career and family planning effectiveness. A judicious left-toright, line-by-line reading of the two columns below presents a unique learning opportunity. Should the number of boxes a superintendent or assistant checks on the right side add up to more than a handful or two, they and their families are risking not smelling the roses as they pass through life. Better career and family planning will remedy this situation effectively. Look to improve your test score each year and you will do well. GCN

Career/life successful superintendents		Career/life anxious superintendents
Commit to career planning		Little career planning / react to situations
Ask: "Where do I want to be In five years?"		Tend not to look ahead jobwise
Look to change jobs when appropriate		Tend to stay too long in jobs
Develop own professional library		Do not develop own professional library
Spend own money to advance career		Do not spend to advance career
Delegate effectively		Delegate too little early; too much late
Subscribe to USGA Turf Advisory Service		Hesitate to invite UGSA TAS
Develop tight budgets		Egos tend to drive budget growth
Consistently hire well		Do not always hire well
Read because readers become leaders		Read little
Write because they have something to say?		Do not write
Sensitive to crew welfare		Less sensitive to crew welfare
Assistants find quality jobs		Assistants left on their own
Develop effective crew training libraries		Lack commitment to training libraries
Crews dress crisply / often wear uniforms		Crew dress not a priority
Job descriptions permeate work force		Few job descriptions available
Take pride in record-keeping		Record-keeping a burden and sketchy
Computer dedicated		Computers not essential
Generally, work 40-hour week		Work 60-plus hour week / workaholic
Shun pure c.e.o. role		Overplay c.e.o. role
Use free time and off-season effectively		Generally, waste free time and off-season
Do not bring work home		Generally, bring work home
See less stress and manage it well		See more stress and do not manage it well
Take vacations during season		Few take vacations during season
Spouse included in career planning		Spouse rarely included in career planning
Balance life well / lower divorce rate		Do not balance life / higher divorce rate
Good model for their children		Ineffective/bad model for their children
Clean office and maintenance facility		Sloppy office and maintenance facility
Dress appropriately		Dress down too often
Continue education through career		Do not continue education
Reject glass ceiling job concept		Default into glass ceiling jobs later in career
Remain vital in job		Get bored in job
Invited to more planning meetings		Invited to few planning meetings
Play/report minimum 20 rounds a year		Play less golf / tend to ignore handicap
Always Rules of Golf conscious		Less Rules of Golf sensitive
See job on "team" and "we" basis		Primarily see job on "I" and "me" basis
Able to see the big picture		See the trees, but often not the forest
Earn reputations for good greens		Green quality is often a concern
Seek written contracts		Generally, avoid issue of written contracts
Appreciate career quality of life		Tend to complain about rigors of job
Pioneering use of career Web sites		Years away from considering career Web sites
Feel job secure / hold jobs		Not job secure / lose jobs unnecessarily

Supervision's potential

pring is almost here. And for many of you, that means a new golf season. The fairways and greens will be perfectly groomed soon. Or will they?

As you welcome new members of the maintenance staff, the assembling team will battle the elements, pesticides and golfers' impacts. Will the team be a winner? Will the team create a course that exceeds golfers' expectations?

The determining factor will be your effectiveness as supervisor of team members. You're the Phil Jackson, Don Shula, Mike Krzyzewski or Joe Torre of the team.

Few supervisors fully appreciate the awesome responsibility and enormous potential of supervision. Responsibilities include:

- · Determining the productivity and job-satisfaction level of each employee you supervise;
- · Realizing the interpersonal relationship you have with the employees you supervise is - other than family and close friends - the most important interpersonal relationship in their lives; and
- · Impacting their career though the training, development, coaching and role modeling you provide.

The enormous potential is:

- · Eager employees who excel in their tasks and contribute to winning the battle;
- · Employees who enjoy and cherish their job and whose enthusiasm is infectious with other employees and golfers;
- · Employees with job experiences, successes and personal growth that contribute positively to their personal and family lives;
- · Employees with successful careers at your course/club or somewhere else;
 - · A winning team; and
 - · Exceeding golfers' expectations.

Supervision isn't the only responsibility you have. It might not be the role that takes the most time, but it's the most important. Successful superintendents recognize that the best use of their time is supervising.

But what can you do to fulfill these responsibilities and reap the rewards of the potential? First, we must address a myth about work.

Our intuition and society tell us outstanding job productivity and extraordinary job satisfaction are at odds. But they're not. When productivity came primarily from hard physical work, attaining both was difficult. Today, however - with the changing nature of work and the development of modern personnel management principles - the incompatibility of productivity and job satisfaction is a myth. Successful businesses and organizations are providing evidence that managers and employees can achieve superior performance and extraordinary job satisfactions. Such success doesn't happen by accident. Like any other success, it happens through focus, commitment, knowledge, learning, experimentation, patience and perseverance.

To excel as a supervisor, you must understand what creates superior productivity and extraordinary job satisfaction. Employee success needs can be divided into those provided primarily by the club or course and those provided primarily by the supervisor.

The primarily course-provided-success needs are:

- · Fair compensation. The emphasis here is on "fair." Wages, benefits and working conditions (including hours) must be competitive with similar jobs in the community. You judge the fairness of your compensation compared with other golf course superintendents and others with positions of similar responsibility. Your employees judge fairness compared with similar jobs in the community.
- · A meaningful job. Research about motivation verifies our intuition that all of us want to spend our work time ac-

complishing something meaningful. Two dimensions are critical. We need to see that what we do contributes directly to the success of the course (task signifi-

cance) and what we do to contribute to our community, society and world (the vision of the course).

· Opportunities for growth and advancement. It's often said that every day a business or golf course doesn't grow, it falls behind. The same can be said for us as workers. Every day we don't learn, grow and develop, we fall behind in terms of opportunities for the remainder of our work life.

Many of you are frustrated because you don't have control of these success factors especially compensation. There is, however, a lot you can do. First, you can become an advocate for your employees. On a recent plane trip, I sat next to a gentleman who, six months ago, became the operations manager of a manufacturing plant. In his short tenure, plant productivity increased 20 percent. The employees hadn't had a pay increase in three years. So throughout the last month, he worked with his employees, and together they developed the case for an increase of employee compensation. Part of the case was that he wouldn't accept an increase until his employees did. Work with those you supervise because you are a member of the team as well as the supervisor.

You also must become a great communicator. Communicate that you value what workers do and value them as human beings. Communicate that what they do is critically important to the golfers, course and community.

In a superintendent's role as a supervisor, success needs to include:

- Clear job and performance expectations. Think about your frustration with unclear expectations from the green committee, pro or general manager. Employees feel that same frustration when work rules, job assignments and performance expectations are unclear. That frustration results in poor performance and low job
- Know what's succeeding. One reason most of us enjoy sports is because the

SUCCESSFUL

SUPERINTENDENTS

RECOGNIZE THAT THE BEST

USE OF THEIR TIME IS

SUPERVISING.

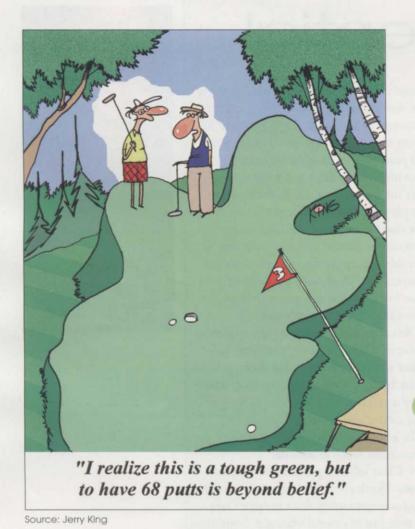
scoreboard tells us who's winning. Similarly, in golf course maintenance, everyone needs to know whether they are "winning," by which winning

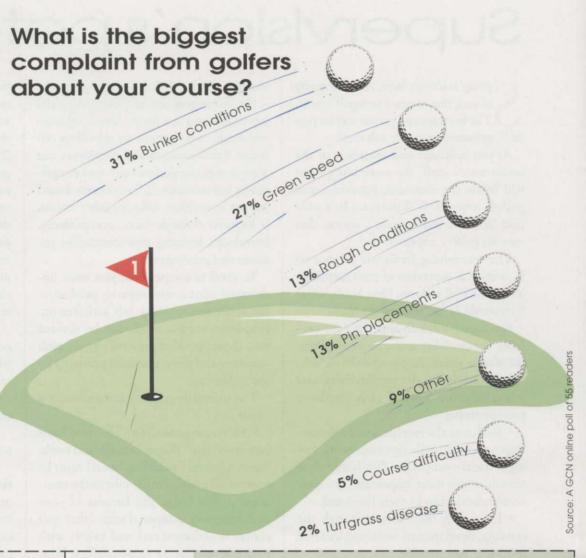
means successfully accomplishing expected performance outcomes. The supervisor must be the "scoreboard" by providing copious amounts of high-quality feedback.

· A trusting, respectful relationship with one's supervisor. Other than the relationships with one's family and some close friends, an employee's relationship with his supervisor is their most important interpersonal relationship.

Embrace the challenge of supervision and work responsibilities to reap the potential of successful supervision. You can be a great supervisor, and successful employees can achieve superior performance and extraordinary job satisfaction. GCN







BY THE NUMBERS

The number of countries golf is played in the world, according to a presentation by Karl Danneberger of Ohio State and Joe Dipaola of Syngenta

The number of PGA professionals who are advancing their careers through an

online business program, according to the PGA

56.8 million

30,730

golf courses in the world, according to a presentation by Karl Danneberger of Ohio State and Joe Dipaola of

Syngenta

The amount of annual revenue generated by the golf industry in Florida, according to the Bureau of Labor Statistics

The number of people the golf industry employs in Florida, according to the Bureau of Labor Statistics

2,406

The number of municipal golf facilities in the United States, according to NGF

The number of private golf facilities in the United States, according to NGF 4,367

The number of daily-fee facilities in the United States, according to NGF

"It's the only golf community worldwide with six courses with such high standards. It's great to have this on our resume." — Bob Steele, president of SEMA Golf about the Desert Mountain golf facility in Scottsdale, Ariz. SEMA built the sixth and final course, The Outlaw, there.

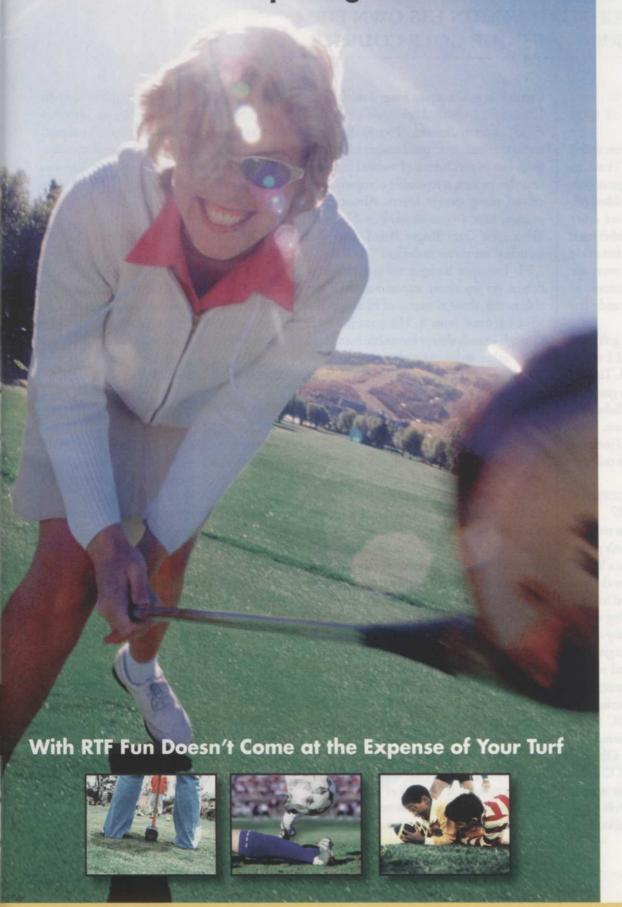
"Golf course superintendents need to be businessmen, good communicators and people persons. They need to be more than good turf managers." — Mark Woodward, former GCSAA president and golf operations manager for the city of San Diego.

"In a society obsessed with speed (i.e., technology, cell phones, Blackberries) it's hard to imagine someone taking four hours to play golf. We need to fit golf into our changing society, and that's a challenge." — Dan Carrothers, vice president of Bayer Professional Products.

"Stand-alone golf courses are having a tough time finding funding. Banks are saying there needs to be lot sales to subsidize golf course development." — Erik Larsen, Florida-based golf course architect and member of the ASGCA.

Rhizomatous Tall Fescue

Beautiful Self-Repairing Turf





THE BARENBRUG ADVANTAGE

RTF is an advanced generation of the turf-type tall fescue that produces a thick rhizome based root system that supports unparalleled thick turf. Turf that actually repairs itself when damaged.

The Key is in the rhizomes.

The new RTF rhizome technology actually fills in damaged bare spots and produces a more attractive, uniform turf area.

If your goal is world class turf in an environment of divot prone golfers, cleat-first sliding soccer players or even over active children on a home lawn, RTF is the advanced solution that comes to the rescue.

If it's Rhizomatous Tall Fescue, it must be RTF. So unique it's recognized with a patent.

U.S.Patent No. 6,677,507

800-547-4101
BARENBRUG USA
www.barusa.com • info@barusa.com



Great in Grass®

Professional development

An eye for design

A YOUNG GOLF COURSE ARCHITECT STARTS HIS OWN FIRM TO MAKE HIS MARK AND CREATE UNIQUE GOLF COURSES

JOHN

GOLF COURSE NEWS

INTERVIEWS TODD

ECKENRODE, GOLF

COURSE ARCHITECT

AND MEMBER OF THE

AMERICAN SOCIETY OF

GOLF COURSE

ARCHITECTS.

When did you know you wanted to become a golf course architect?

WALSH I grew up learning the game at a course called Pasatiempo in Santa Cruz, Calif. That's an old Alister MacKenzie gem. I was ignorant to its history and who he was, but it rubbed off,

and I traveled around to see other courses and realized they didn't stack up. I tried to understand what made the course special and why everyone loved it. That spurred an interest in why the design was unique and what made it good.

I went on to play college golf, and around that time I figured I wasn't going to make the PGA Tour. I thought about what I was going to

do and had an easy answer. I embellished on my interest in golf course architecture. I was intrigued to enter the profession and jumped right into it about half way through college.

What did it take to become a golf course architect?

I was going to UC Santa Barbara, on track to earn a pre-law degree, but that wasn't going to be the proper training tool. It was a liberal arts school and didn't have any other degrees that were applicable to what I wanted to do. I started getting feelers out and talking to architects and was surprised to see many architects write back and take the time to give me advice. The majority of what I heard was to get a degree in landscape architecture and some experience in the field in construction. After I fulfilled my degree from UC Santa Barbara and my college golf commitment, I transferred to Cal Poly San Luis Obispo, which is a great technical school in Central California and went on to graduate with a degree in landscape architecture. Following that, I took the advice of my peers and worked in construction for a bit.

How did you make the transition from general architecture to the golf market? I wasn't in construction long. I worked for Landscapes Unlimited briefly on a nice Tom Fazio project in Colorado. I wasn't there long enough to learn a tremendous amount in the field, but in part because I worked for them and they're such a reputable company, I received many design offers. About three months later, I went to work in Nashville, Tenn., for Gary Roger Baird, and that launched my career in design.

My fortunate background at Pasatiempo helped get my career started because I was able to talk about elements of its design and what I learned from it. The process I went through sounds almost formulaic because so many other architects took a similar route. But there also are architects who entered the profession from unusual backgrounds or unrelated fields. Many have some sort of design or construction-related experience.

At what point in your career did you want to become a member of the ASGCA?

As soon as I knew I was qualified. There's a qualification process that I was aware of, and as soon as I felt I had met the requirements, I pursued it. The ASGCA always interested me, as far back as when I was trying to get into the field, and it was one of my resources for understanding who the architects were and where they worked. The history of the association intrigued me - the founding members who were such quality architects, from Donald Ross to Mr. Trent Jones, Stanley Thompson, Perry Maxwell, Billy Bell Sr. and guys like that.

What are the qualifications? Though I'm not an expert on the quali-

fication process, it consists of eight years of experience in the profession where you're responsible for all facets of the design process, from formulating plans and specifications to construction supervision. Additionally, you must complete at least five golf courses during those eight years. If you're part of a large organization, you have to be the

lead project architect on those specific projects. Beyond that, there's an interview process, evaluation of your professional practices and a peer-review process in which members of the society review your five golf courses and make sure they're up to the high level of ASGCA standards.

You're an associate member. What's an associate member?

The two main distinctions are associate members, which is what everyone comes in as when you're initially accepted, and regular members. You have to be an associate member for three years, complete two more golf courses in that time, and be voted in by the general membership to become a regular member.

What are the benefits of being an ASGCA member?

There's a support system that's tremendous as far as gathering information and contacts and associated things you expect a large society to have. What's most enjoyable is the chance to meet fellow architects and mingle, particularly at our annual meeting and at different trade shows. The annual meetings are special. We generally convene at great golf destinations. This year we're in Monterey, Calif. Last year we were in Hilton Head, S.C. There's a great meeting of the minds, which is really something because all year long you go head to head with these guys whether you're friends or not. It's a competitive business, and you're always competing for jobs. At the annual meeting, you're able to put that aside and enjoy each other's company, meet families, pick each other's brains and see what different people are doing and how they're reacting to the changing industry. There also are many valuable educational sessions daily.

What's the relationship like between architects who are members and those who aren't?

Generally fine. There probably is some friction between certain people, but I can't say that I have any. You'll see architects whose



professional development



qualifications might be suspect who aren't members of the ASGCA. On the flip side, there are a handful of architects who aren't in the ASGCA who are tremendously qualified - Tom Doak is a great example. There are a handful of talented architects practicing who aren't members, and hopefully someday, they'll be because the benefits of it for them and for the society would be mutual.

Why did you start your own firm instead of going to work for a bigger, more well-known firm?

I worked for Gary Roger Baird for a number of years and gained a lot of wonderful experience and knowledge from him about how the industry works and the natural progression of a project, from the beginning with the first plans to finishing the project in the field – all facets of how a design office works. It was a tremendous experience, but it was time to go out on my own. I had my own ideas and wanted to implement them and create unique golf courses around the world. The name of our firm is Todd Eckenrode Origins Golf Design. I have a partner - Charlie Davison, who's all you could ask for in a partner. I'm the lead designer, and Charlie runs the business end of the firm.

Was going on your own

It wasn't that difficult for me. It was a similar process to what I already had been doing. But there was more internal pressure to perform. When you have to go out and get your own business, there's another element to the game than being an employee. Running your own business has its upsides and drawbacks, but is best for me.

Is there advice that you seek from the more experienced

Absolutely. I've made a point to try to meet some of the more experienced members of the society at our gatherings, from Pete Dye to Jay Moorish and Rees Jones. They've been extremely open and kind to sit and talk to me. They have some great stories. There are other guys in the society I've wanted to meet for their particular expertise, such as Bill Love and Mike Hurdzan for their stature in the industry on golf and the environment, and other guys who are doing tremendous work who I've gotten to know, such as Gil Hanse and Steve Smyers.

Would you like to work with another architect on a project?

Occasionally, you'll run into situations in which two architects collaborate. We've proposed it once or twice with fellow architects, but it never materialized. The reasons why using two architects might be preferable are different for each circumstance. I don't feel that it has to be my job only. If I can collaborate with another architect and get a client a better golf course for the money he's going spend, I would be open to it. You saw much more informal collaboration in the old days, and I hope that comes back. Pine Valley is a perfect example in which so many talented architects gave their design input. We try to work that way and invite other guys to see our projects while we're in the dirt and listen to what they have to say. Sometimes more minds are better than one.

Have you worked with a pro? We haven't yet, but we have a project we're planning on doing with Fred Couples. It's a tremendous project in California. We're excited about it.

How did you hook up with Fred Couples?

Occasionally, we've run into situations where a developer asked us to partner with a PGA pro because they would love to have that kind of input on our course, and we've said sure. He's a guy that brings a lot to the industry from his playing background and experience on the greatest golf courses throughout the

world. He's also a guy who's respected and liked on tour. He's someone that would be a joy to work with, and our personalities are compatible.

Environmentally, what are you doing when designing golf

There's so much that goes into building a golf course nowadays, especially in California, that golfers don't see. There are set-back issues that eat up acreage. There are mitigation measures, water quality standards in drainage ways that have to be met, and vegetative and species habitat controls. There are many levels of getting over these hurdles, and it takes a lot of diligence and creativity. You have to adjust because there will be hurdles you'll need to get over. It's not a simple process anymore. If you think your first routing plan is the one that's built, you're kidding yourself. Oftentimes it's the 20th routing plan that gets built. Trying to keep the 20th routing plan truly the best routing plan for the site is the challenge. But it's a fun ride. Fortunately, my design style, in working with the land and not against it, as well as our expertise in the environmental facets of the industry, enable us to achieve success as measured in the quality of the golf course and of the environment.

What's your relationship with golf course builders?

If you have a typical builder/architect relationship, it's important they work as a team. I've been on projects where there's a lot of head butting going on, and that isn't in the best interest of the client or getting the best golf course built. The best golf courses come out of a strong bond between the designer and the builder and when everyone is on the same page. We work hard to make sure that happens and try to limit our teams to contractors who feel the same way.

How do you work on a project? It depends where the course is, but I'm out there at least once a week. I'm a detail freak and a huge field guy. I don't ever want to assume anything will be done exactly how we want it. We're constantly checking details, particularly greens and bunkers and a variety of specs, to make sure it's what we want. You can't miss a week's worth of construction and have that accomplished. So much of our design happens in the field. We design courses in the office to a certain extent, but the best courses come out of the dirt, and you have to invest a lot of time in the dirt to find all the natural features the land offers and to let the design evolve naturally.

professional development

Is there anything you would like to work on that you haven't?

Absolutely. I want to work in the dunes and on a true links site. There's a rebirth of people's understanding of how much fun dunes golf can be. You see it with the Bandon Dunes courses, which are waking up the country to what's so special about playing in the United Kingdom. I was thrilled to see Bandon Dunes created, and commend Mike Keiser for his vision. There are so many dimensions to it. It brings back some old-school-type play and ground-game-type shots. The diverse terrain and naturalness of the dunes is attractive to me, and it's what golf is all about. That's a landscape we want to work in in the future, but the amount of great dunes sites in the world is few. We're waiting for that call.

Are there many young architects?

There are many young architects that probably jumped into the industry during the boom years in the 1990s. Some will be able to continue, some won't. The newer generation is much more aware of quality architecture and the history of architecture. I have a lot of hope for this generation of architects. You're going to see some great work in the next 30 years. There's a synergy between members and a willingness to understand and apply the history of the game, and it's going to lead to many great golf courses. My hope is that this growth of quality golf venues will aid the growth of the game as much as any of the other movements to introduce players, retain players, appeal to alternate markets, etc., which are positive programs.

Is there a need for more architects?

It's extremely competitive right now, so no. The number of courses has declined during the past three years. When we were building 400 or 500 courses a year five to eight years ago, there were many more people trying to become golf course architects. I'm sure there are many more architects today than there were 10 years ago, but the market is probably self-correcting itself.

Have you felt the effects of that competition?

Somewhat. You see it on a few high-profile jobs that search for an architect. We've entered a couple of these during the past couple years in which there are 30 to 40 architects going after a job. That's unheard-of competition, and it's difficult to land those jobs. However, if you're doing good work, there's still plenty of work. The guys that are doing great design are doing fine. There are still about

150 and 200 courses a year being built, and that's enough work to go around for the quality people in the industry. We're fortunate, we have a number of projects in design. Things look pretty great for the future.

Are the number of renovations and reconstruction reasons why there's plenty of work?

Probably. That's something we don't do too often. We keep it at two or three at the most under our current work load. It's less than a quarter of our business. That's the model we look for, but other architects are fully vested in renovations and restorations. We only take on special renovation or restoration projects that interest us. It's either a relationship with a club or a club with a great history or design that intrigues us.

Why is that?

It's much more interesting to create something fresh than to aid a club in its goals to progress in the future, whether that's a renovation or restoration. It's more interesting to take a blank canvas and be creative. That's what gets the juices flowing and keeps me interested. It's a more exciting process. On the flip side, however, special clubs are an honor and a pleasure to be involved with because of their place and importance to the game. I feel a lot of responsibility on these types of courses to further their stature in the game, whether that means a restoration of what's been lost, or improvements based on how different the game is than 100 years ago.

What's your philosophy about building less expensive golf courses?

It's frustrating because many architects try to do that. We're not trying to overbuild golf courses and overspend clients' money. We're trying to get the best golf course we can for the most reasonable cost on a site. But the cost of development for an owner, particularly in California, is so high and that has to do with the amount of time it takes to take down a piece of land, gain the proper permits and approvals and develop it. It's such a lengthy and drawn out process. You see it even more drawn out on the special sites that have an environmental character to them. Those are the type of sites where you might run into environmental hurdles. It's not so much the overspending, overbuilding, an architect's style or construction costs. Costs have increased throughout the years, but it's been a steady climb. It's the cost and the time it takes to move from buying a piece of property to opening day. In the past, it might have been a year or two. Now, it can be a 10-year process on a special site, and that's reflected in the greens fees. These costs are ultimately passed on to the golfer, and that's sad.

What can architects do to reduce those costs?

Use alternate materials. If you're lucky enough to find a site, such as Bandon Dunes, in which you're able to use on-site sand for bunkering, greens. If there aren't suitable alternate sources for greens and bunkering, then you have to go to more industry- or USGA-type of specs, that increase the cost. We always look for alternate sources, and if it's feasible, we're open to that.

There's a fine line for how little acreage of turf you want to develop. There are architects who have pushed the limit down to 40 or 50 acres of turf, and that's way too far. There's a cost savings when doing that, but it's practically unplayable. But on the high end, you don't need 150 acres of turf. You want to be responsible in your turf allocation. Irrigation is a huge cost of golf course construction. That has increased more than any other line item in typical construction costs. I've berated guys in the irrigation industry, and everyone points a finger over their shoulder at the other guy. I don't know why it's increased so much. In Southern California, if a course can't rely on regular rain to establish outside areas, then you're talking about a \$2-million irrigation system. It's unbelievable. You can build an entire golf course in some parts of the country on a suitable site for about \$2 million. That's a major problem.

There are many things you can do to lower the cost, and we're open to all of them. But you have to investigate whether they're feasible or smart from an investment point of view for the client.

What advice would you give people who are considering golf course architecture as a profession?

It's competitive, but it's something that's easy to be passionate about if you're a golfer and have a design eye. If so, there are spots in the industry for people. I would never discourage people from trying to enter this profession, but they have to be realistic. It's extremely competitive, and it's not easy to make a living from unless you've won 20 majors. The inherent rewards of creating a great golf course that can be enjoyed for generations to come, however, are tremendous and unique. GCN

To read a longer version of GCN's interview with Todd Eckenrode, please visit www.golfcoursenews.com.

Making it happen

SEMA GOLF WORKED WITH NICKLAUS DESIGN TO SUCCESSFULLY BUILD THE OUTLAW COURSE AND MEET THE OWNERS' HIGH EXPECTATIONS

JOHN WALSH

uilding the final course of a sixcourse golf facility in the Arizona desert posed several challenges for SEMA Golf, especially when the company never worked with Nicklaus Design before. But despite the challenges, SEMA Golf successfully completed The Outlaw at Desert Mountain course to the satisfaction of its owner, Desert Mountain Properties, and won the 2005 Golf Course News Creative Award for best new construction project.

Bob Steele, president of SEMA Golf, says throughout the years he had priced all the courses at Desert Mountain, none of which

the company ended up building, but finally got to build the last one.

"You're only as good as the last course you build," Steele says. "We've built 150 golf courses. It's a real relationship business with architects and owners. We had never worked with Nicklaus Design, but I knew all the players there. I've been in this industry for 30 years. I have contacts, and people know what I've done in the past."

Bob Jones, senior v.p. of Desert Mountain and Cresent Real Estate Equities, says the company wanted to add another golf course to Desert Mountain, creating one with a unique draw for members.

"Looking at the topography and meeting with Jack (Nicklaus) and Lyle Anderson (a partner with Desert Mountain), the land dictated a links-style course that would be unusual for Desert Mountain," Jones says. "And because of the reclaimed water line under the course, we were allowed to put up 110 acres of grass."

Shawn Emerson, director of agronomy at Desert Mountain, was involved in the planning of The Outlaw course from day one. Emerson says a project manager was hired for the golf course, then a construction superintendent was hired to manage the

"The project manager kept us on budget and on top of the permitting and paperwork," he says. "The superintendent was in charge in the field - the specs and any changes - and he worked with the architect and builder. The Nicklaus group had an onsite coordinator who made sure the integrity and design of the project was kept."

Shapes of things

Tom Soileau, who was the on-site architect for the Outlaw project and who hadn't worked on the other courses at Desert Mountain, says the golf course sits on a sloping site that featured a series of ridges and valleys with vegetation.

"The site was narrow, and that was the reason why the course was laid out the way it was," Soileau says. "We wanted some holes to run up and down the valley, but we ended up going perpendicular to the slope."

Soileau says developing the course was a great opportunity to build on land without housing or obstructed views and that adjoins Tonto National Forest.

But the main concern was that the 190acre site was narrow and small, which dictated a precise routing plan.

"The property was long and had a cross slope to the east, and we needed to make it look natural," Steele says. "Jack didn't want us to disturb the green spaces and wanted the greens to sit next to the hillsides. He wanted a Scottish-style golf course. There were a huge variety of things that he wanted to fit in.

"Having an on-site coordinator from Nicklaus Design was key to the success of the project," he adds. "If something wasn't working right, he could sketch something and send it to Jack."

Water delay

Another challenge the developer faced was waiting for water to be delivered to the site from the city. The owners were dependent on the city bringing the water lines about 12 miles to the course. The city had to go through rock

AT A GLANCE

The Outlaw at Desert Mountain

Location: Scottsdale, Ariz.

Architect: Tom Soileau, associate;

Nicklaus Design

Builder: SEMA Golf

Construction began: July 2002

Course opened: November 2003

Total project cost: \$5.2 million

Course owners: Lyle Anderson and Desert

Mountain Properties

Director of agronomy: Shawn Emerson

Length: 7,107

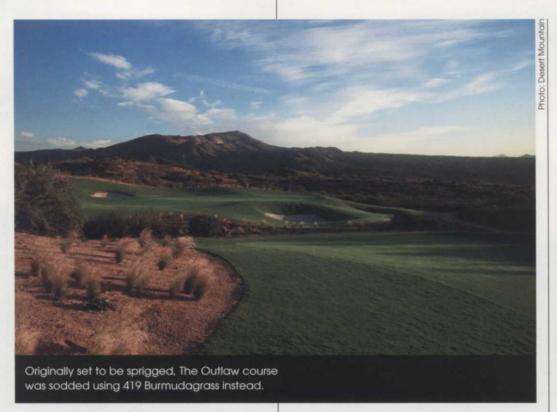
Number of holes: 18

Number of bunkers: 126

Site: 176 acres

Par: 72





and was behind schedule, according to Steele.

"We were at the mercy of the city," he says.

"When we found out the city was two months behind, we had a temporary water line to flush the irrigation system while waiting for the real water. We couldn't have pulled it off if everyone wasn't a team player."

"When the project got stalled because of the water line, SEMA worked on finishing other aspects of the course that didn't need irrigation," Jones says. And the grassing philosophy changed because of the water delay.

"We were originally going to sprig the course, but we ended up sodding the course with 419 Bermudagrass," Emerson says. "We got 60 to 70 acres of sod from West Coast Turf. We built all of the green complexes first, then sodded around the greens, then seeded the greens with Dominant bentgrass.

"We wanted 120 days from seeding the greens to opening day," he adds. "We seeded

in June and opened in November in 100-degree heat. It took great coordination. We wanted to sprig the course because of a \$10,000 to \$12,000 cost difference per acre. We wanted to save on water, fertilizer and labor. There is less wear and tear on equipment when you sprig a course. Originally, we thought we could open up 30 days sooner. But it ended up being a wash because we got the course done on time."

The development of the course was precise, and Emerson says a group of six holes had to be completely finished before moving on to the next group of holes.

"We didn't have time to go back and do a punch list once the entire project was finished," he says. "The last thing we did on each hole was sod. The key was finishing the holes completely. While doing the next six holes, we went back and did a punch list on the previous six. Change orders kill golf course construction. This project had very few."

Sand capping

Sand importation to site was another challenge. Sand was used to cap the entire golf course at an average of six inches. Product location, scheduling and implementation were instrumental in bringing this together. The sand capping was done on time and on budget by continual monitoring and management by the team, according to Steele. This included delivery, scheduling, job-site access and timely proper application of the sand capping.



Quotes from the judges

"Across the board, SEMA had the highest recommendations that were credible from the owner, superintendent and the architect, who is well known as difficult to please. They quantified the cost-benefit ratio – only \$5,000 in post construction work, whereas the other builders said there was minimal or some."

- Jeff Brauer, golf course architect and president of GolfScapes

"Due to the completeness of the proposal, every comment that was made by the superintendent, architect and owner were very favorable. It appeared that Jack Nicklaus had never worked with SEMA before, and they were very impressed and suggested them for future jobs. It's difficult working with a contractor for the first time, trying to learn their process and their people. It sounds like it was a great relationship and a very successful project in the end."

 Chris Wilczynski, golf course architect with Arthur Hills/Steve Forrest and Associates "The thing that stood out in my mind the most was the attention to detail in the blueprints that were furnished. The responses from the owner, superintendent and architect were impressive, along with the letter from Jack Nicklaus."

 Terry Buchen, CGCS, president of Golf Agronomy International

"One of the things that stood out with the Outlaw proposal was that the cohesiveness of the team was apparent in the application. They had clearly worked well together. They had encountered adverse circumstances. They clearly had worked through them as a team. The appearance of the finished product was representative of good finished work and the attention to detail was discernible."

- Henry Delozier, vice president - golf, Pulte Homes

Working as one

Steele, Jones, Emerson and Soileau agreed teamwork and communication made the project successful. The only change orders generated for construction were for work due to delays in water availability, all of which were generated or amended to the contract by the owner, Steele says.

"We met weekly during the project and went over all of the changes," Jones says. "SEMA's reports were timely, and they had our interests first. We found that Bob had contractual numbers given, and when we wanted to move things a bit, those were done without change orders. He didn't have the, 'If you want me to do this, I'll have to create a change order' attitude."

And SEMA was not the low bidder on the project, according to Jones.

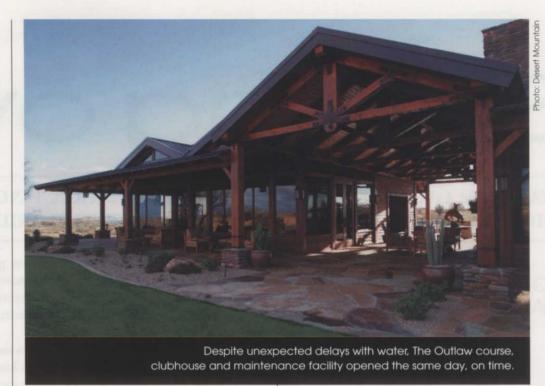
"We have learned that cheaper is not always better," he says.

The scope and cost of the job was bigger than what the company originally planned for, but the design dictated that, Jones says, adding that SEMA was attentive and worked with the owner to not increase the cost of the project.

"This is probably the most complete golf course (including landscaping and cart paths) we've done," Jones. "We did a weekly sign-off on the aspects of the course. It took a unique architect and construction group to pull this off."

Jones says he had met with Steele previously and had gotten to know him.

"I had him look at some smaller projects



in the past, and I saw his personal attention to detail. He let me know he didn't like taking on too many golf course projects because he wanted to focus on them. His personal oversight made the difference."

Soileau says working with Lyle Anderson and the people at Desert Mountain was great.

"They are very professional," he says. "I have been used to doing that type of quality work for Jack for 10 years. We had assembled a really good team: the owners, contractors and architect. Everyone worked toward a common goal. We really worked as one."

The course was expected to have PGA conditions the first day, Emerson says.

"There was a lot of pressure on the project manager and contractor," he says. "It was the best finish job I've ever seen on a golf course. The punch list was finished in less than a week. If we didn't do something right, then we did it over again right there.

"The key to the project was communication and the weekly meetings we had," he adds. "Everything was done in the best interest of the golf course, which was the priority, not money or anything else. I could have played any one of the PGA or LPGA events on the course the opening day. It looks like it's been here for years. It doesn't look new. The clubhouse and maintenance facility opened the same day as the course."

Steele says SEMA was always under a microscope because the owner expected perfection and says the project helped SEMA go to the next level.

"We stayed within our budget," he says. "There were very little change orders because of all the project coordination's weekly meetings. It boils down to communication and knowing what they wanted upfront. To me it's one of the top golf courses we've built. It's one of the nicest golf communities we've been involved with. Desert Mountain is the only golf community with six courses worldwide with such high standards. It's great to have this on your resume. GCN

For more information about SEMA Golf, visit www.semagolf.com or call 480-951-4086.

"The project obviously went well, and everybody was happy as shown by the ratings. The key thing that jumped out was leadership. Both the owner and the project superintendent were noted numerous times for their professionalism and the tone they set on the project, which was reflected by their staffs. The kudos go to those guys."

- Ray Davies, director of golf course maintenance and construction, CourseCo

"They did an excellent job of interpreting the intent of the architect between visits. There were very few changes after the architect returned. They also had water delays, yet the still got the project completed on time and on schedule, even after a four-month delay of getting the effluent water line to it. Obviously, it was a well-or-chestrated project. The project superintendent was praised by everybody involved in the project from the course superintendent to the owner and the architect as being an outstanding leader of the project and the primary reason why the project was so successful."

 Ken Gorzycki, director of golf course maintenance at Barton Creek Resort and senior regional superintendent for ClubCorp



Starting over

RYANGOLF OVERCOMES CHALLENGES RECONSTRUCTING THE NORTH COURSE AT FRENCHMAN'S CREEK IN FLORIDA

JOHN

igh expectations from 600 owners, never working with architect Jim Fazio and four hurricanes didn't de-WALSH ter Ryangolf from successfully reconstructing the North Course at Frenchman's Creek in Palm Beach Gardens, Fla., and winning the 2005 Golf Course News Heritage Award for best renovation or reconstruction.

Frenchman's Creek is a residential com-

munity of 600 families and two golf courses. John Cohen, a resident member of Frenchman's Creek, was the co-chairman of a committee to oversee the reconstruction of the North Course.

"The course is 30 years old, and in south Florida, you can't let courses go that long," Cohen says. "It was time to rehab the course from soup to nuts. We had done some



band-aid work in the past, but now everything is brand new."

But Ryangolf wasn't one of the contractors the owners initially had in mind to do the job.

"We interviewed four others and were close to hiring the contractor who did the South Course," Cohen says. "Another nearby course did the same renovations we did on the South Course, but used Ryangolf as their contractor. We had trouble with bunker drainage, and coincidently, the other course had the same problem. The liner material seemed to have caused the problem. Ryangolf built the bunkers according to the plans and specs, therefore they weren't at fault. Nevertheless, they came back and redid all the bunkers at no cost on the nearby course. We went back to our contractor, and they didn't do what Ryangolf did.

"We got excellent, first-class recommendations from other clubs that used them for renovations," he adds. "Thus, we chose Ryangolf for this project, and they lived up to the expectations.'

Phil Garcia, president of Ryangolf, says the company does a lot of renovation work on golf courses in the Palm Beach area that were built in the 1970s and '80s and need to keep up with new supply coming into the market.

"We thought we were in line for Frenchman's after we did the Boca West Country Club renovation," Garcia says. "Boca West is the crème de la crème. We didn't bid on Frenchman's at first. We never worked with Jim Fazio. Frenchman's was not happy with the bids, and then connected with some of our clients, and they said, 'If you're not working with Ryangolf, then who are you working with?' I got 30 calls from people I didn't know. Frenchman's owners didn't know Ryangolf. That's why we weren't asked to come to the table to bid. We eventually met with Fazio, and the superintendent, Norm Pilote, called me as well."

Garcia says Fazio stuck out in his mind as one reason he wanted to do the project, because he wanted to work with him. He also says Frenchman's Creek is a well-known, firstclass club, and the timing was right because the company just finished another project.

We had the right crew, so we started planning one month before we broke ground," he says. "Everything was set up to be there waiting when we broke ground."

Getting started

Once Fazio received the plans, he says the owners told him what they expected and didn't care what he did as long as he gave them a good golf course.

"The course was dead flat and didn't have a



lot of land," he says. "I address all the concerns of the homeowners, who wanted color and to see birds back in the ponds. I added 10 acres of lakes to the course. Frenchman's Creek became the main feature. Now it's a moving creek, and it flows all the time. We took 19 acres of exotic vegetation off the property and regraded everything. We put some rolls in the fairways and built up some greens. We brought water into play and made the course more challenging. The South Course was voted a better course, and now it's a toss up as to which is the better course."

Fazio says that of the 19 acres of vegetation taken out, less than one acre was put back, and over time, the owners will put more vegetation back.

During the reconstruction, Cohen says there were no substantial changes and there was no additional material cost to the project for the small changes that were made.

"Ryangolf stuck to the plans and specs by the architect," he says. "However, there were a lot of changes in the field, such as the size of a green and the placement of tees or bunkers, that didn't affect the outcome."

Cohen says the owners were fortunate to have Fazio there on a daily basis.

"Jim Fazio, who is a low key guy, likes to do two or three projects a year," he says. "He was here 98 percent of the time and worked directly with the contractor daily in case he wanted to make small changes, therefore, we didn't have to wait for the contractor to move forward expeditiously. Our superintendent also was involved

The course is seven miles from Fazio's home, which is one of the reasons why Fazio says he

"Most projects take nine to 10 months to build. This took four to five months. Decisions were made every day. We made sure nothing went wrong, and it got done on time." - JIM FAZIO

design case study



Architect Jim Fazio made Frenchman's Creek the main feature of the North Course

liked the project. Because he only does a few jobs a year, Fazio spends a lot of time on each project. He only missed three and half days on the Frenchman's Creek project.

"Most projects take nine to 10 months to build," he says. "This took four to five months. Decisions were made every day. We made sure nothing went wrong, and it got done on time. It saved everybody time and money. The con-

tractor was the biggest asset. Nothing was too hard for them. They had enough people and equipment to do the job. They understood the architect's wishes. They got decisions in minutes, not hours, and did a first-class job in a professional manner.'

The owners decided to use Sea Isle 1 paspalum on the fairways, roughs and tees and TifEagle Bermudagrass on the greens.

"We didn't need salt-tolerant grass, but when we renovated the South Course, we used TifSport and weren't happy with the results," Cohen says. "So we went to other courses that had used paspalum. It's a hearty grass, and you get a much better lie. I'm not sure if it will stand up to the cart traffic better than TifSport, but it allows for better playability from the fairway than TifSport, which tends to lie down."

Hurricane alley

Another significant and challenging aspect of the project was the removal, harvesting and replanting of about 200 oak trees and 650 palm trees. They were harvested on a nearby farm then placed back on the course as it was being rebuilt. Cohen says the palm trees held up through the hurricanes but the oaks didn't -40 to 50 of the oak trees went down after the first hurricane (Frances) came through and then had to be put back up. Three weeks later Jeanne came through and knocked down 60 to 70 oaks.

The project was completed right before the first hurricane came through, and it affected the grow-in of the last few holes, but not the construction.

"There's a clear difference between the holes that were done first and the ones that were done last, but that will even up this summer," Cohen says. "The hurricanes delayed the opening about two weeks later than we planned. We expected to open right after Thanksgiving originally, and we opened Dec. 11."

'We had a couple of holes we did last that



Quotes from the judges

"Frenchman's Creek was a total blowout and do over. It had a very large scope of work and also was affected by the hurricanes, and Ryangolf managed to get the project done on time and on budget. I didn't see a lot of the specific techniques other than just working harder, smarter and longer, but that's always a good thing on a renovation project."

- Jeff Brauer, golf course architect and president of GolfScapes

"Everything was new, including three waterfalls and a creek system. They were subjected to four hurricanes. They ended up with no change orders, and they were only two weeks behind schedule with all the bad weather. The attention to detail was well done and outlined by all the principles at the club. As a side note, they were pioneers. The elected to go with seashore paspalum on everything except the greens, where they went with TiffEagle Bermudagrass."

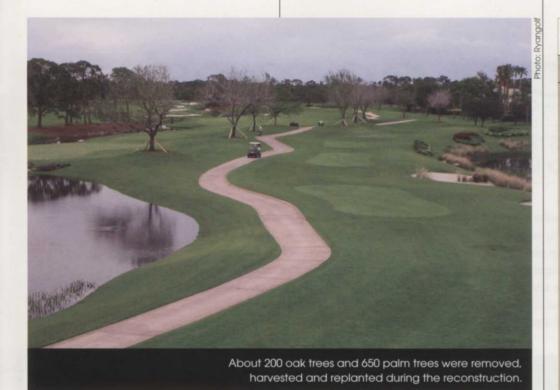
— Terry Buchen, CGCS, president of Golf Agronomy International

"The impact of the proposal from Frenchman's Creek was most noticeable for me because it was such an extensive project. I found the before-and-after pictures informative, which demonstrated the attention to detail that was used on a comprehensive project."

Henry Delozier, vice president - golf, Pulte Homes

"I was impressed with Frenchman's Creek because they had to deal with four hurricanes, and they were only two weeks delayed through all that. The package they presented was thorough, and they had great before-and-after pictures, so it was easy to see the differences."

> - Chris Wilczynski, golf course architect with Arthur Hills/Steve Forrest and Associates



got screwed up by the hurricanes, but the hurricanes didn't affect the construction of the course," Garcia says. "The first hurricane came right after we finished. Then we fixed all the washouts. The hurricanes slowed the growth of the grass down a bit because there was too much water."

Fazio says the hurricane defoliated everything and took the wind out of his sail.

"This spring, we might see more trees die because they got knocked down twice," he says.

A team effort

Even though the project was successful, Cohen says the owners were a bit unsure of the project in the beginning.

The community was leery about this renovation because they weren't happy with the last renovation," he says. "They paid an assessment for the first renovation, and they were charged an assessment for this one. But the coordination was extraordinary. Everyone was well organized. The community has been overwhelmingly sat-

"This was a big project - almost \$5 million - and was well done. The most impressive thing was they were delayed only two weeks by the four hurricanes. They received high marks from the superintendent and the architect, and not quite as strong, but strong, from the owners."

- Ray Davies, director of golf course maintenance and construction, CourseCo

"Four storms at Frenchman's Creek certainly was a hindrance to the contractor, but they still got the work done in about a four- or five-month period. They received extremely high marks from the architect, superintendent and the owner by only missing their deadline by two weeks. There were no change orders by the contractor - all change orders were derived from the owner. It was a huge project, a complete renovation, including additional water features. They also changed all of the grass varieties to paspalum and TiffEagle on the greens."

- Ken Gorzycki, director of golf course maintenance at Barton Creek Resort and senior regional superintendent for ClubCorp



AT A GLANCE

Frenchman's Creek Country Club - North Course

Location: Palm Beach Gardens, Fla.

Builder: Ryangolf

Architect: Jim Fazio

Superintendent: Norm Pilote/Wes Dillard

Owner: Frenchman's Creek

(600 homeowners)

Date construction

began: April 5, 2004

Date construction

completed: Aug. 22, 2004

Date course opened: Dec. 12, 2004

Total project cost: \$4.9 million

Greens: TifEagle Bermudagrass

Tees: Sea Isle 1 paspalum

Fairways: Sea Isle 1 paspalum

Par: 72

isfied with the course."

Garcia says spending a month planning the project before the company started was one reason why the project went smoothly.

"It was a team effort with our crew, the subcontractors and the Frenchman's group," he says. "It was so easy to do because Fazio was there every day. He was very proactive. 600 owners are difficult to satisfy because they are used to perfection. People were upfront and honest. We let the owners know what we were behind on and what we were ahead on. The only cloud over this project is Norm's death. He was a great guy and helped in any way he could. All energy was focused on the solutions. This is one of those projects where we can look back and say that we couldn't have done anything better. The fun part is we know how to do it again."

Pilote died of a heart attack one week before the North Course opened, and assistant superintendent Wes Dillard took over as superintendent.

Garcia says the quantity of projects the company does aren't important, service after the sale is important and the No. 1 marketing tool is references.

"All I have to do for references in Palm Beach county is call John Cohen and have him give us a recommendation," he says. "Our clients are the most important asset we have." GCN

For more information about Ryangolf, visit www.ryangolf.com or call 954-571-2088.

Turfgrass management

Analyzing a nemesis

IMITATING POA ANNUA'S STRENGTHS COULD BE USED AS A MANAGEMENT PRACTICE TO ENSURE PURE BENTGRASS GREENS

KEVIN J.

In the world of sports, many teams analyze the strength of the opponent and make adjustments to eliminate or minimize that strength. In turfgrass management programs, superintendents also use that philosophy. For example, we look at diseases and try to minimize ROSS, the effects by taking away a component (moisture, nitrogen, etc.) that makes a particular disease CGCS thrive. What happens when we analyze a foe whose primary strength is difficult to eliminate or minimize? In this case, maybe we should start thinking outside the box and imitate the foe.

Let's look at one of the main nemesis in turfgrass management: Poa annua. If a club's man-



agement philosophy dictates they don't want to promote Poa annua as their major species, then how can Poa's strengths be used to keep it at bay? Most superintendents, and those in the academia world, agree that Poa's amazing ability to produce seed - even at extremely low heights of cut - is what makes this plant what it is.

Imitating strengths

Bentgrass doesn't possess the ability to produce seed at the desired heights of cut used in golf course management. But what if bentgrass had the ability to seed? Would this ability make it more competitive against Poa annua? It seems logical. Then again, the seedhead formation of Poa also is a considerable drawback when it comes to consistent, uniform-quality putting surfaces. It makes sense then, not to breed bentgrass to have the ability to seed at low heights of cut.

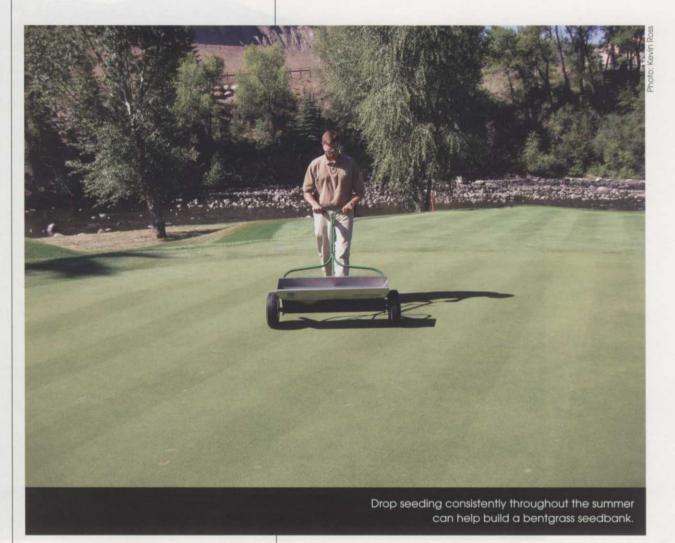
So, what if golf course managers physically imitated Poa annua's strengths by seeding greens with bentgrass more often? Let's face it, the majority of golf course management programs seed only when aerification or some other cultural practice takes place. In some areas of the country, Poa annua seems to seed continually throughout the entire growing season.

So, as a management practice, why don't superintendents imitate Poa annua and seed bentgrass more consistently throughout the season? There are some who argue it would be a waste of time and money. The primary argument is that a seedbed needs to be created for good germination to occur. There's certainly some credence to this, but Poa annua has been doing fine for some 100 plus years on golf courses with no creation of any special seedbed. Others would argue that the seed wouldn't remain viable in the soil very long.

On the contrary, according to Joseph Duich, a retired turfgrass professor from Penn State University, bentgrass easily can remain viable in the soil for as long as 10 to 15 years.

Turfgrass managers also can imitate the ability of Poa annua to build a natural seedbank in the soil throughout time by creating a seedbank for bentgrass. Without question, the ability to seed and create its own seedbank is the biggest strength Poa annua has. By imitating this strength, bentgrass can be seeded more frequently, and a seedbank can be built.

This also can be considered a more proactive approach in turfgrass management practices. If you analyze the normal thought process of seeding greens - excluding aerification



and cultural practices - it's always a situation in which there's some weakened turf because of a problem. This could be caused by disease, traffic, weather, etc. When there's a void created in the turfgrass canopy by such problems, or a ballmark for example, Poa annua always has the upper hand because of its existing seedbank. So if superintendents also developed a bentgrass seedbank that would compete against Poa annua's, then maybe the invasion would be reduced.

Implementing seeding

How can this program be initiated? First and foremost, a club's budget must be considered. Seeding more often equates directly to more money spent. Most courses that fight the Poa annua battle would certainly pay, within reason, for whatever helps. Some extra seed might be a wise investment.

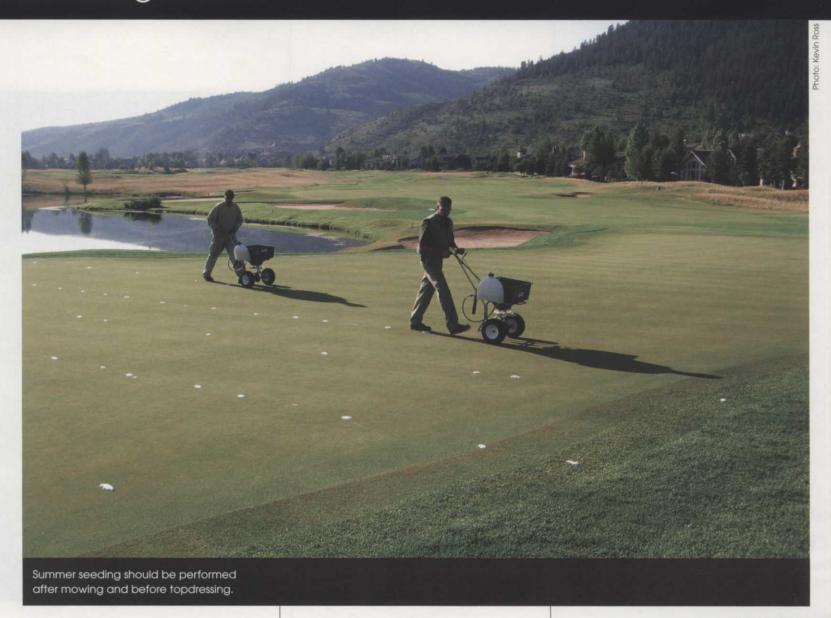
Then a couple questions need to be asked. How many times a year should a club seed? What should the seeding rate be?

These questions have no definitive answers, but there are some thoughts. Let's take topdressing for example. Many clubs are on a once-every-two-to-three-weeks program. This could be the perfect time to incorporate a seeding program. Just incorporating a seeding operation with each topdressing would be a great option. Whether it's once or twice a month, it's a great way to start incorporating this program into the management scheme.

One item of caution should be noted. Seed tracking from golfer and mechanical traffic can be an issue. Taking extra precautions during the topdressing operation can minimize this issue. Many superintendents are reporting that when the surface is dry, tracking isn't

Turfgrass managers also can imitate the ability of Poa annua to build a natural seedbank in the soil throughout time by creating a seedbank for bentgrass.

turfgrass management



a problem. A drench-type irrigation in the evening also would help drive the seed deep into the canopy and seed tracking shouldn't be an issue after the first day.

The next things to consider – how much to seed and can too much be seeded? A seeding rate of as low as 0.25#/M will equate to

Poa annua has the ability to produce seed even at extremely low heights of cut.

14 seeds per square inch based on an 8 million seed count per pound. Using a 100,000square-foot green-surface average for an 18hole golf course, 25 pounds is used per seeding. Depending on the cultivar, this equates to about \$125 to \$225 per seeding. A biweekly program for a six-month season would cost \$1,500 to \$2,700 per year, again depending upon the cultivar used.

Is there a possibility of seeding too much? No, according to the little research available. Turfgrass species seem to have an equilibrium for mature, stable shoot density. Basically, it becomes survival of the fittest.

One of the more critical times for seeding might be during late fall, as part of a dormant seeding program for winter preparation. It has been proven that late fall-seeded areas are ready to germinate in the spring, about four to six weeks ahead of any springseeded area. This happens primarily by the seed going through a priming process during this period. Then, before actual germination takes place, it goes into a frozen state throughout the winter. This is a tool to give bentgrass the jump over slower Poa annua in the spring and also a preventative measure for any winter damage that has occurred.

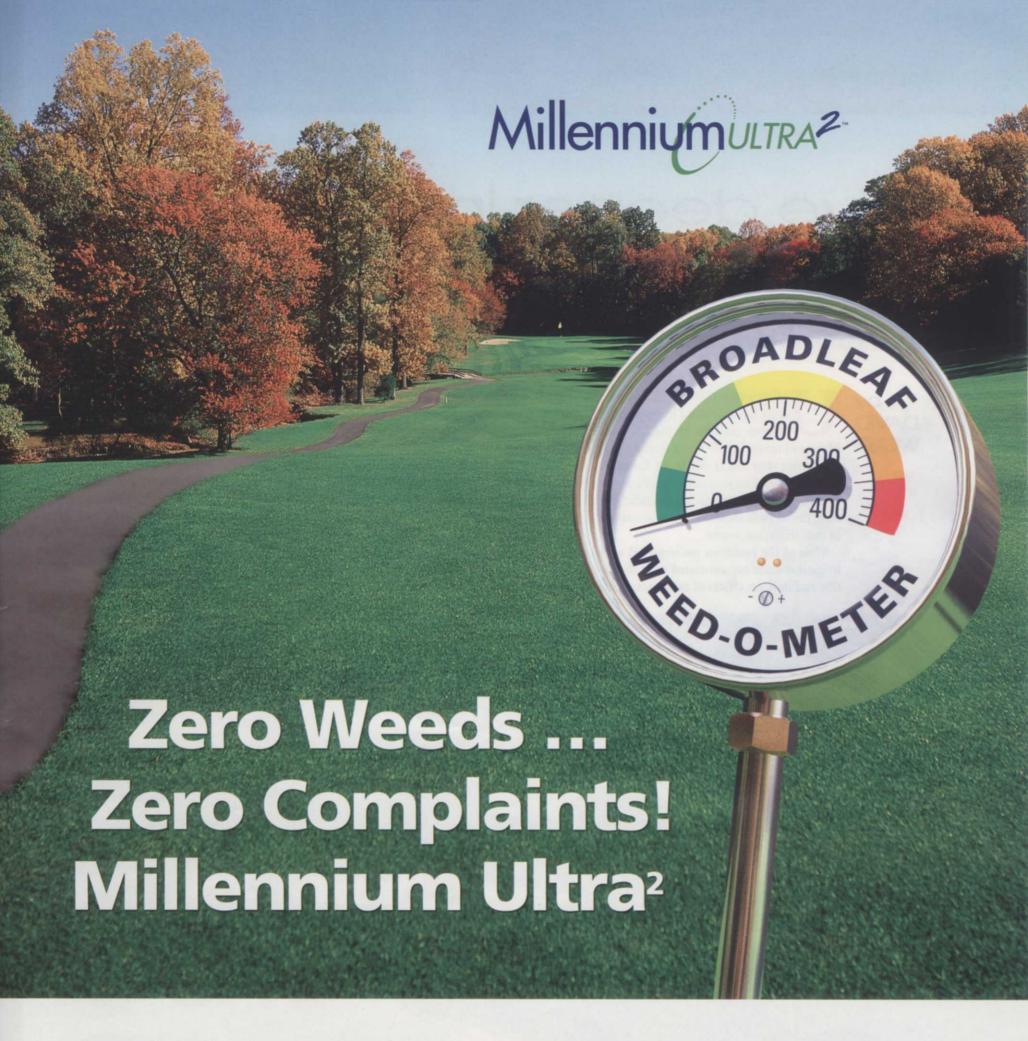
No interseeding

Imitating Poa annua shouldn't be considered an interseeding-type method. As shown recently by Karl Danneberger of The Ohio State University, the best way to get germination from an interseeding is with the creation of some sort of void with spiking, aerification, etc.

This said, it makes sense that if the seed is already present and a void occurs, successful bentgrass germination from this type of seeding program certainly can occur. It would be difficult to quantify how much seed is germinating without solid research. However, superintendents using the program with relatively new greens are reporting it might be helping with Poa annua invasion, and certainly with ballmark damage.

Will imitating the strength of our toughest foe be the trick needed to insure pure bentgrass green surfaces? Probably not, but it's another tool in the arsenal for the battle against Poa annua. GCN

Kevin J. Ross, CGCS, is director of golf course management at Country Club of the Rockies, Vail, Colo. He can be reached at kjross@vail.net.



Golfers want one thing, a tee-time on a beautiful day on a beautiful course.

We can't help with the weather, but we can help keep your course weed-free and looking great with the next generation of superior weed control – Millennium Ultra².

Specially formulated for golf courses, parks and playing fields, Millennium Ultra' is the premier herbicide for sports and recreation use. Millennium Ultra' is a premium blend of Clopyralid, Dicamba and 2,4-D that offers rapid response, awesome weed-killing power and incomparable clover control – often with just one application!

Zero weeds ... happy golfers – by any measure, Millennium Ultra² excels.



Home of Riverdale Brands Phone: 800.345.3330 www.turf.us.nufarm.com

Irrigation management

Dive deeper into water quality

ANALYSIS SHOULD TEST FOR ELEMENTS THAT IMPACT TURF HEALTH

DAVID

nfortunately, superintendents don't have a choice in the quality of water available for their courses. WOLFF More and more, they're being forced to accept water that might not be fit for other domestic uses. Fact is, if soil is irrigated with certain water throughout an extended period, the soil will assume the characteristics of that irrigation source.

Most of the problems encountered with irrigation water are associated with the direct and indirect effects of excess total salts (TDS), excesses of specific mineral ions (sodium, boron, chloride, etc.) and excesses of bicarbonate, which contribute to elevated (alkaline) pH.

As a result, it's imperative to know the condition of the soil and the mineral makeup of the irrigation source. The first step should be an irrigation suitability test. While there are more than 50 different types of water tests available from analytical labs, golf course superintendents should test for elements that affect or impact turf quality.

Steve Ninemire, president and chief agronomist for Prosper, Texas-based 9Mire Group, says the company's analysis addresses the properties that enhance or impede plant growth.

"It's important for superintendents to understand that there are a lot of water quality standards that don't apply to turfgrass, such as testing effluent at an industrial plant," he says. "Not all water is bad, and it's important that turfgrass managers understand the driving influences and delve deeper."

Old Memorial, an 18-hole private course in Tampa, Fla., uses 95 percent effluent water for irrigation.



Take the test

A good irrigation suitability test should include the following minimum test standards: pH, conductivity, calcium, magnesium, potassium, sodium, iron, alkalinity, carbonate, bicarbonate, hydroxide, chloride, sulfur, boron and total salt concentration.

For effluent water nutrients, a test should analyze for: phosphorus (P), total Kjeldahl nitrogen (TKN), ammonia-nitrogen and nitrate-nitrogen.

Helpful formulas and ratios a lab should calculate include: sodium absorption ratio (SAR), pHc, adjusted SAR and total cations and anions.

And a good soil test is equally important, Ninemire says.

"It will help determine where the levels of critical elements are, and will give an indication of the quantity of any one type of irrigation water the soil will be able to filter before significant problems occur," he says. "It is extremely important that sodium be included in the test because some labs include this in their standard and some don't. Also, sample each area of your property. Typically, greens, tees and fairways might have different soil types and different concentrations of harmful elements."

Multiple sources

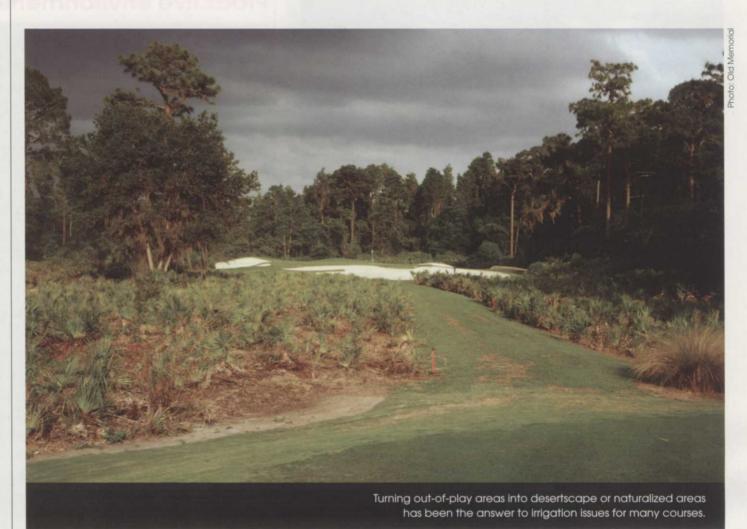
It's not uncommon for golf courses to use several water sources – wells, city, surface drainage, river, effluent and potable. It's important to sample each source individually.

"There may be three or four wells, and over time, one or more has been drilled deeper," Ninemire says. "The solution to a water problem may be as simple as turning off one well. Also, take one composite sample directly from an irrigation head after it has run at least 10 minutes to flush all the stagnant water from the line."

It's also important to sample throughout the year to check for variations. Most waters change throughout the course of the year, and some will change significantly because of seasonal demands on the water table.

"For example, later in summer or in times of drought, the reserves in an aquifer are pulled on and the negative elements become concentrated," Ninemire says. "This changes the quality of the water. It's a movable target, so the superintendent has to document the season when the analysis was conducted.

"Again, in our irrigation suitability testing, we look for things that will impede plant growth," he adds. "The effluent op-



erator may look at the test results and say the water is fine because it's clear and free of bacteria, but there are different standards for turfgrass."

An effluent source

In many areas of the country, groundwater usage is becoming more restricted. In the South and West, its availability is considered a rarity and has been replaced by effluent water. To make matters more difficult, some courses have to compete with residential subdivisions for the amount of effluent water they receive.

In Tampa, Fla., Old Memorial, an 18-hole private course, uses 95 percent effluent water for irrigation. Superintendent Trent Inman says records show the amount the course gets has steadily decreased throughout the past few years.

"When we opened in 1998, we were one of the first large businesses in the area using reclaimed water because no one else wanted it," he says. "However, as development in the area increased, all water sources became more and more in demand. The majority of subdivisions in our area are being built with effluent. The course has a well, but it's limited to emergency use.

Groundwater is a luxury, and most of it is sold to surrounding counties."

Inman samples the effluent water in the course's holding pond three or four times a

"The samples we've analyzed haven't been great, but compared to other places I know, they're pretty good," he says. "We have an acid injection system to treat the water. We want to control sodium and bicarbonate levels, and the acid product lowers the pH to give us better water going out on the golf course."

Old Memorial's peak irrigation season is from October to May. During summer, the course could get rain every day. Inman quips that sometimes the staff can't get water off the course fast enough. He tests soil regularly, but because of the effluent, he samples water quality more often.

"The quality of groundwater, for the most part, is pretty consistent, but we don't really know with effluent," he says. "Effluent companies have standards they have to meet, but they're not as concerned with pH and other things that are important to us. They're looking at something totally different, and we work with a water source that can vary a lot. That's why we have to

irrigation management



stay on top of monitoring water quality."

Water treatment

Silver Lakes in Helendale, Calif., is a 27hole golf course that's part of a large planned community. Most of the irrigation water comes from two large lakes and other bodies of water with a total surface area of 150 acres. The Silver Lakes Association is planning to add another nine holes and more homes, pushing the existing water supply to its limits.

"We've got enough water for the existing golf course, but we lose an unbelievable amount through evaporation - much more than we use," says superintendent Darin Pakkala. "To accommodate another nine holes and the new development, we've got to find another source."

San Bernardino County operates a sewage treatment plant but doesn't have enough capacity to service the entire Silver Lakes property. The association is working with the county to upgrade the plant so it can treat wastewater in a third stage of filtration called tertiary effluent.

"This is highly purified water and has no smell," Pakkala says. "We believe the effluent plant will be able to produce more than 400 acre-feet per year, which will be used for the new nine holes. We also will be running a line that will tap into the original 27-hole irrigation system. By doing this, we also will cut back on our well-water use. The association is looking into turning outof-play areas into desertscape, which will save more water."

Water usage

Inman says it's critical for superintendents

Proactive environmental stewardship

ater use is an essential part of environmental stewardship in golf course management and will become an increasingly critical component politically, socially and economically. Many believe there's a need to be proactive in effective water management to ensure the survival of the golf course industry.

David Wienecke, a USGA Green Section agronomist, put together a list of best management practices to help ensure golf course irrigation can stand the test of public and agronomic scrutiny. The list is based on classes and documentation provided at the 2004 GCSAA Show in San Diego by Dr. Robert Carrow and Clint Waltz of the University of Georgia and Dr. Ron Duncan, an independent consultant based in Texas.

- Conduct an irrigation system audit. Distribution uniformity of at least 80 percent is needed to ensure precise water application for optimal water conservation and
- Make irrigation system design changes as needed to eliminate water going off target and excess water application;
- Keep accurate water-use records. This also enables factual fine-tuning of irrigation system operation needed for good stewardship of the water resource;
- Develop a water conservation management plan that specifies prioritized management zones (e.g. greens, tees, fairways, rough and landscape). An accurate size of each management zone provides factual data needed if there are water restrictions;
- All turf irrigation isn't created equal. Research identified the need for more water on the edge of a turf area to achieve equivalent turf quality compared with turf in the middle; and
- •When determining water quality standards, the Environmental Protection Agency has ignored agronomic standards. Reclaimed or effluent irrigation water might meet or exceed federal and state clean water standards and not meet agronomic needs for turf irrigation.

to change the perception that golf courses are large water consumers. He uses a model developed by the University of Florida that considers total acres, irrigated acres and soil type to calculate how much water a course should be using.

"Of course, if someone were to look at the total output of our irrigation system, it might seem like we use a lot of water, but we rarely use that amount," he says. "It's frustrating when I'm driving home in a rainstorm and see sprinklers running at house after house. We're one source that has the potential to use a large volume of water, but it's a small amount compared to the total from all the developments and residences in the area. That's an image we need to change."

Additionally, Inman deals directly with the people making decisions about water usage.

"Our water contract expires in two years, and we'll definitely have availability challenges," he says. "The key is communication, and we're trying to develop a good relationship with local county government officials. We'd like to have guarantees on how much water we can use. I don't think people outside the golf industry understand what a big deal water is. We do weekly readings, and all water-use records have to be sent to the state monthly. I guarantee the public doesn't know this."

In the meantime, Old Memorial is exploring ways to minimize its water use. Native areas outline the course, and Inman is looking to reduce the amount of water used by the irrigation system.

"We can possibly eliminate some sprinkler heads and change where the water is going in other places," he says. "We've got about 100 heads around the perimeter of our turf and probably don't need to be using all of them. In other cases, maybe there's a head with a 360-degree pattern where 180 degrees would be sufficient in that area." GCN

David Wolff is a freelance writer based in Watertown, Wis. He can be reached at dwolff@charter.net.



In the wake of the staggering tragedy caused by the Asian earthquake and tsunami, the Salvation Army World Service Office is providing help to people rebuilding their lives and livelihoods.

Your financial contribution can make a difference in the lives of people in desperate need by supporting our efforts to provide long term restoration to this hurting part of the world.



Please mail your donation to SAWSO c/o South Asia Relief Fund, P.O. Box 269, 615 Slaters Lane, Alexandria, VA 22313

SAWSO@usn.salvationarmy.org • www.SAWSO.org • 703-684-5528

Course maintenance

Irrigation improvements

COST, MORE WATER-DISTRIBUTION CONTROL AND BETTER WATER CONSERVATION ARE AT THE ROOT OF IRRIGATION SYSTEM UPGRADES

DOUG

The need for golf course superintendents to provide the best possible playing conditions for golfers drives them to look at all aspects SAUNDERS of turf management. The enhanced conditions of newer courses have put pressure on older courses to improve their product to stay competitive, and many times, an irrigation system is part of that

> An irrigation system can be the most expensive investment on a course, but it also can have the greatest longevity, lasting an average of 15 to 20 years. The complete replacement of an irrigation system for a championship course can run from \$1 million to \$1.5 million. Even a partial upgrade can cost between \$250,000 and \$400,000, so the decision to upgrade and how to implement a design change need to be considered carefully.

'Many systems that were installed 20 years ago

were done in an era where cost restraints led to the installation of inadequate systems for today's demands," says Larry Rodgers of Larry Rodgers Design in Lakewood, Colo. "In some instances, the pipes may not be large enough to carry enough water to be truly efficient. The spacing between sprinkler heads may be too great, which adds to the time needed to apply enough water. Also, the increase in play at a course can put other demands on the superintendent. As you look to the prospect of upgrading the system, all of these factors need to be taken into consideration."

Self-analysis

The first step when upgrading an irrigation system should be to analyze the existing system honestly and look at the costs, including

An irrigation system can be the most expensive investm on a course, but it also can have the greatest longevity.

the labor and materials necessary to maintain the current system. By learning the true operation cost for an existing system, it will be easier to determine if a new system is necessary or if a partial upgrade of the infrastructure could be implemented. It's also advisable for a superintendent to document everything about the existing system so the features he likes can be saved or replicated in the new system. This self-analysis will be helpful when presenting the need for upgrading to a membership or management group.

"One of the most overlooked aspects to consider in this assessment phase is for all the decision-making entities, including the general manager, greens committee and superintendent, to identify what the expectations are for this new maintenance tool," Rodgers says. "The superintendent might be looking for more flexibility in the system, the manager might be looking for cost savings, and players want to see the course conditions be as good as the new course down the block. While all of these goals can be obtained, defining the common goals can make it easier to plan what type of upgrade will fit your particular situation."

It's also important to secure the services of an irrigation consultant who knows the golf course's needs and can help develop a plan to retrofit the course.

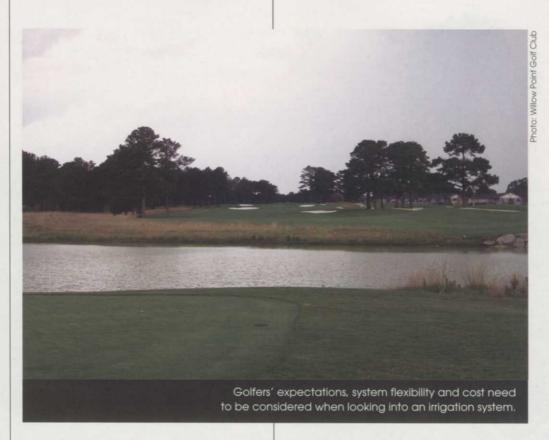
Each course will present its own unique circumstances that will determine how extensive an upgrade can be achieved. But whether it's a partial renovation that includes adding more heads to specific areas or changing the wiring patterns, or a complete replacement of an old system, the goal for most superintendents is to develop more control and flexibility of their water management program.

More control

The Willow Point Golf Club in Alexander City, Ala., a private golf club with 800 members, underwent a complete renovation, including the irrigation system, in 2002.

"Our old system was a 19-year-old, doublerow system where each controller operated three or four heads in unison," says superintendent Cole McInnis. "Over the years, I had numerous problems with it because the hydraulics weren't sufficient and the wiring sequence of the heads wasn't efficient. Ten years ago, we added a dedicated computer to the system, but a lightning strike had seriously damaged it. When we planned the course renovation, we decided to replace the system completely.'

The club added new pumps and larger pipes to deliver a more adequate flow rate to the course. The new system also provided



more heads to the course with tighter spacing so each head serviced a smaller area. The advantage of more heads in closer proximity is to help reduce the time it takes to deliver an adequate amount of water, as well as reduce power and the amount of

The placement of the new sprinkler heads was determined by topography, aerial photos and mapping of the course, which gives an accurate blueprint for the placement of irrigation lines and heads. Another improvement is the addition of multiple heads around the greens, which allows for varying water rates for greens and surrounds. The new sprinkler heads are then pinpointed through GPS mapping to develop a final record of the placement of all pipes and lines for future reference.

The extra heads around the greens are helpful because the green has a sandy, porous subsurface compared with the hard, red subsoils around the greens," McInnis says. "Each area is its own microsystem and has completely different watering needs. I now have much better control of how much water I need to keep my greens and surrounds healthy and in good condition."

The control of the new system also gives McInnis other advantages. The central computer, which comes from the irrigation manufacturer, has the entire operating software factory loaded. The industry-standard feature has eliminated some of the early computer glitches in which course owners, trying to save money, would provide the computer and then load software on their own.

"I also have complete radio control of

each head while I'm out on the course, and with the handheld PDA, I can make program changes in the field that can be downloaded into the control computer back at the maintenance building," McInnis says. These new tools have been relatively easy to learn about and use and have made controlling the system easy. We have seen a 40percent reduction of our water use, and it has been a godsend to not have to work constantly on irrigation problems."

More capabilities

Having better control of a system and all of the components can make a big difference for any superintendent. El Dorado Country Club in Indian Wells, Calif., is located in the desert region, and during the summer, the course sometimes uses one million gallons of water daily, so the ability to manage water efficiently is critical.

In 2002, the course was remodeled and more heads were added to the irrigation sys-

"To give me more ability to expand my capabilities, I requested that quick couplers be installed on every other head so I can include hand-watering as an option for any place on the course," says superintendent Craig Ellis. "This just gives me another tool to use."

While upgrading to a new system is what any superintendent would like to do, the economic reality of \$1-million expenditure might dictate another approach. In looking at a partial upgrade, the self-analysis should determine what could be accomplished through the project.



One phase at a time

Butte Creek Country Club in Chico, Calif., is a private club with an aging irrigation system. Superintendent Tim McCoy came to the club last fall after the membership researched the irrigation system considerably. McCoy's recent experience growing in new courses was helpful as the club planned how to address the upgrade issue.

The existing system is in total disarray," he says. "The heads are spaced far apart, averaging 80 to 85 feet apart, and three to five heads are tied together. While I would like to replace everything, the club decided to break down the upgrade into several phases. The first phase will focus on getting more heads around the green complexes and tees and adding computerized control, which this club has never had. This will lead to eventually replacing pumps, pipes, and more heads to get single head control of the rest of the course.'

For McCoy, the key has been the development of a strong team that included consultant Russ Mitchell of Foremost Construction and the continuing input of the membership.

"It's important for everyone involved to un-

derstand all aspects of the plan, and so far, that has been the case here," McCoy says.

McCoy plans to keep the course open during the upgrade. In doing so, the construction crew needs to be flexible with their schedules because they have to deal with the impacts of weather and the course needs to be available for weekend events.

The plan is to bring a new service line into the green complexes and add a series of new heads from 100 to 150 feet in front of the green. This will require adding a lot of pipe. The course has Bermudagrass fairways and bentgrass/poa annua-mixed greens, so water management is different for each grass type. The inadequate system led to a noticeable loss of turf in the fairways and uneven conditions around the greens.

"Adding more heads to the greens areas will allow me to develop more consistent conditions in these areas," McCoy says. "The success of this project won't be seen by the membership until late next summer, but the improvement will meet their desires. The improvements will also encourage upgrades of other portions of the system."

Conserving water

But even more important than the ability to improve course conditions is the ability to use and conserve water in a more efficient manner. Water usage has become a hot-button topic recently, and it's expected to remain one.

"One of the big changes in irrigation has been the ability to close the watering-window time down considerably through larger main lines, sprinkler heads spaced closer together, and the ability to truly control where the water is going," says Bob Bryant of Bryant, Taylor, Gordon Golf, an irrigation consulting company. "Many upgrade projects might begin as partial upgrades because club members or g.m.s might balk at a new system and think it's just a lot of bells and whistles. But it's important to factor in how a good irrigation system that's properly planned and runs efficiently can also be an important conservation tool for this precious resource." GCN

Doug Saunders is a freelance writer based in Truckee, Calif. He can be reached at dougs@sierra.net.

Unleash The Power!

ZAP Warm-Weather Weeds

Spurge, knotweed and clover are no match for the power of new Surge® Broadleaf Herbicide For Turf. Energized with sulfentrazone, Surge has the power and speed to knock out tough broadleaf weeds fast. And it even suppresses yellow nutsedge!

Visual results in 48 hours – now that has a powerful effect on call-backs.

Your customers will be pleased with the speed and performance. You'll be pleased with the economy of Surge's water-based amine formulation!

Put the power of Surge to work for your business this year!

- Energized with Sulfentrazone
- Warm Weather Weed Control
- Reduces Call-Backs
- Rain-Fast in Just 6 Hours
- Designed for Residential and Commercial Turf
- F Low Odor





An Employee-Owned Company

1-800-821-7925 surge.pbigordon.com

From the makers of TRIMEC Herbicide

© 2004.PBI/Gordon Corporation; Surge® is a registered trademark of PBI/Gordon Corporation

USE READER SERVICE #25

Course management

Top of mind

AT BLUE ASH GOLF COURSE NEAR CINCINNATI, CULTURAL PRACTICES CHANGED TO PROVIDE GOLFERS WITH A MORE PLEASANT EXPERIENCE

JOHN WALSH

₹ hroughout the country, competition among golf courses, especially public ones, is pretty stiff. The influx of courses opened during the late 1990s contributed to this. If a golfer is unhappy with the course he plays regularly, he can choose to play another nearby just like that. Golfers have the upper hand, and if superintendents don't help meet their reasonable requests or keep them top of mind, they might see fewer rounds, and in turn less revenue, at their course. Superintendents need to help keep golfers happy to prevent them from leaving their course.

Dan Walter, golf course superintendent of the Blue Ash (Ohio) Golf Course, says that throughout the past five years, times have changed with what superintendents can do to increase play or maintain it.

"It used to be when I ran into a fellow superintendent, it was, 'Hello, how is everything at the course,' and the reply used to be agronomic related," Walter says. "Now the answer is, 'Rounds are down,' or something to that effect. Almost every conversation I have starts off with the business side of the industry, not the agronomic side. What a difference five years make.'

Blue Ash Golf Course, which opened in 1979 and is owned and operated by the city of Blue Ash, generates about 38,000 rounds

We used to average 44,000 rounds, and 1998 was the last time it was that high," Walter says. "There has been a decline of 800 to 1,500 rounds a year. Now we budget for 38,000."

Despite the decline of rounds, rates have

been a steady \$40 a round throughout the week over the years.

"We haven't raised fees in five years," Walter says. "The fees are right in line with the other high-end public courses. Other courses offer discounts, but we want to stay consistent, although we do have junior and senior specials."

Every course built in Blue Ash's market during the past 10 years has been an upscale public course, stiffening competition, according to Walter. That competition has influenced a change of attitudes and cultural practices throughout the years because course management wants to retain repeat golfers.

"We make sure golfers are treated first and that we're more customer friendly," he says.

Seventy percent of Blue Ash's business is repeat play. The city is relatively small and has a

To speed up play and increase rounds, Blue Ash removed some trees and flatten the excessive undulation of some greens.

population of 12,000. But there are an additional 70,000 who work in the city because of the many executive offices and large corporations headquartered there. Walter says many business executives golf at Blue Ash because it's only two miles away from their corporate headquarters.

Out of the way

To help please the repeat golfers, Walter and his crew avoid doing cultural practices (i.e. spraying greens, tees and fairways) during the day, which can disrupt play. Instead, they do them on Monday and Tuesday mornings.

"It sounds simple, but from April 15 to October 15, we're spraying pesticides on the course," he says. "Given that we spray greens every two weeks, and the fairways and tees every three weeks with a nutritional spray in between, the sprayer is on the course every week. The repeat business on Mondays and Tuesdays doesn't want to associate their play day with a spray day. That's the reason we spray early and don't allow golfers to be impacted."

Topdressing is another disruptive practice that needs to be weaved into the schedule and must get done during the busiest part of the season.

"In the past, we used to not hesitate to topdress among play, but now we make it a priority to avoid play," Walter says. "So if the Monday we had scheduled isn't sunny and warm to allow for drying, we must wait till the next Monday when we open at 9 a.m. instead of impacting golfers on the other weekdays when we open at 7 a.m."

The course, which used to open at 7:30 a.m. on Mondays, now opens at 9 a.m. so the maintenance crew can get a jump on their work, making them less likely to interfere with golfers.

Scheduling aerification is different from scheduling topdressing. It's scheduled early and late in the year to allow for golf outings to be fit in when requested.

"In the past, we would dictate when the first and last outing would be for the year; now, if golfers want an outing in October, we will hold off," Walter says. "Agronomically, the earlier the better - typically late August or early September, but with the golf market hurting, we must accommodate golfers as much as possible.

"We start aerifying at 4 p.m. on Sunday after the last tee time, and then we finish on Monday," he adds. "We aerify twice a year, which allows the crew to work without interruption. We will let golfers know when we aerify. We let golfers choose - half the people



Blue Ash superintendent Dan Walter avoids scheduling spraying during the times most golfers are playing to help increase customer satisfaction.

will play, and others won't and will wait a week. Golfers appreciate us letting them know up front. We used to aerify Monday and Tuesday, but it was disruptive for two days, and we lost about \$12,000 in revenue.

Blue Ash used to aerify 20 acres of fairways with one machine, and it took two weeks. 'We typically did two or three a week, but now we hire a company that has three machines to do all the fairways, and it takes them one day to clean up," Walter says. "It costs us \$2,500 to bring in the company. The extra revenue brought in from the golfers is more than enough to cover the cost. We save on the machinery and pay an operator to use it. However, it's good to have your own machinery for greens because you need more control and there is less acreage."

There have been a few complaints about mowing at Blue Ash, according to Walter, so he scheduled more people to work in the morning to get most of mowing done by 11 a.m.

We purchased another mower, so instead of one guy taking all day, we have two guys that are able to stay ahead of the golfers," he says. "It's more efficient, and the golfers appreciate it."

A better experience

Extensive landscaping (i.e. annuals and perennials) is another important aspect of the course that Walter feels is important to help

retain golfers.

"I feel the golfers today (usually women) enjoy coming out and seeing the different flowers and landscaping, to compare to their homes," he says. "They will ask the horticulture staff questions and get tips on their home landscaping. I feel it gives them a pleasant experience and surrounds them with familiar sites that they're used to seeing at home.'

Golf course maintenance equates to the pace of play, which is an issue for Blue Ash because of its narrow fairways, Walter says. The staff has been trying to space out play to make it more enjoyable.

"We took out 600 trees in four years to try and help golfers make it easier to play without taking away the integrity of the design," he says. "We limbed 200 trees. That made a huge difference because it impacted the golfer.'

Additionally, four greens were rebuilt because they were too undulated and contributed to slow play, Walter says.

Walter also emphasizes that every dollar and every golfer counts at Blue Ash.

"We used to have the attitude of not caring about losing golfers, but we've lost golfers because of the economy, and now our attitude has changed." GCN

For more information about maintenance practices at Blue Ash Golf Course, call Dan Walter at 513-686-1290.

Turfgrass management

Pesticide update

ROB

esticides are an integral part of a golf course superintendent's turf management program. Application rates, tank THOMAS mixing, regulations and disease resistance are a few of the issues superintendents deal with when it comes to working with pesticides. The following is an update of what's available in the pesticide market for the golf industry.

> Wisdom Flowable and Wisdom GC Granular from Amvac Professional Products are tools that can provide broad-spectrum control of pests such as armyworms, bluegrass billbugs, chinch bugs, Japanese beetles and mole crickets. Bifenthrin, the active ingredient in both products, is a pyrethroid that delivers a rapid response to pests. Wisdom GC Granular can be applied through conventional spreaders with standardized settings. Wisdom Flowable is compatible with many agricultural chemicals and has good dispersion characteristics. For more information, visit www.amvac-chemical.com.

Shuttle from Arvesta delivers knockdown and residual control of twospotted spider mite and spruce spider mite by destroying damaging mites at every life stage, from eggs to adults. Shuttle features a unique active ingredient with no known cross-resistance, making it a choice for managing mite resistance. It's safe on predacious mites, honeybees and other beneficial species. Shuttle comes in a flowable formulation for easier handling and mixing.

Arena insecticide provides broad-spectrum control of soil-borne and surface-feeding insects under a wide range of growing conditions. It offers season-long control of white grubs, chinch bugs and webworms. Arena works in two ways to protect turf. When applied before or during the egg-laying activity of target pests, its active ingredient (clothianidin) immediately impacts the insect. Then it keeps working systemically to provide long-lasting residual control. For more information about Shuttle or Arena, visit www.arvesta.com.

Pendulum AquaCap herbicide from BASF Professional Turf uses micro-encapsulation technology and a water-based formulation for pre-emergent weed control and value. It offers reduced staining potential and has almost no odor. It's safe to use around a wide variety of nursery and landscape ornamentals.

Amdro Pro fire ant bait eliminates the queen and colony in as little as three to seven days. For more information, visit www.turffacts.com.

The dual action of Allectus GC from Bayer Environmental Science prevents the flow of impulses through an insect's individual nerve cells and stops flow between nerves. This rapid action helps control pests above and below the surface. Allectus provides 90-percent broad-spectrum insect control with minimal environmental impact. It's available in liquid and granular formulations for foliar and soil applications.

Chipco Choice insecticide has a new broadcast label for fire ants. Slit-applied Choice provides six months of mole cricket control after one application. Broadcast-applied Choice provides fire-ant control as long a one year. Both methods deliver the benefits of the active ingredient fipronil at low

TopChoice insecticide is a fire ant product based on the active ingredient fipronil. One broadcast application of the low-dose granule provides 95 percent control of fire ants for as long as one year. TopChoice also controls mole crickets, fleas, ticks and nui-

Ceasefire treats fire ants by delivering the active ingredient fipronil in a low-dose granular bait. It's designed for use in hardto-reach areas such as landscape beds, parking lot islands and areas near water. For more information, visit www.bayer.com.

Endorse turf fungicide from Cleary Chemical Corp. provides control of anthracnose, brown patch, gray snow mold and yellow patch. Endorse obstructs the production of chitin found in fungal cell walls while inhibiting spore germination and mycelium growth in the turf plant. It attacks turf disease through foliar and translaminar systemic activity and can be used in a preventative or curative management program.

With its multisite activity and broad-spec-





[THE STAMP OF APPROVAL]

For three decades, the Golf Course Builders Association of America has been providing golf development with the best-built courses in America. When you choose a GCBAA builder, you choose unmatched experience, expertise and a proven track record of industry satisfaction and approval.

Whether new construction or renovation, start your next project on the right track by selecting a member of the GCBAA. For builder members and additional information, visit www.gcbaa.org.

727 "O" Street, Lincoln, NE 68508 • (402) 476-4444 • www.gcbaa.org

See GCBAA at the "Building of the Green" at the Golf Industry Show in Orlando.



turfgrass management



trum control, Protect DF works for warm- and cool-weather diseases such as rapid blight, Bermuda decline and summer stress syndrome. It also handles diseases such as leaf spot and brown patch. For more information about Endorse and Protect DF, visit www.clearychemical.com.

Mach 2 insecticide from Dow AgroScience offers a wide application window when applied as a preventative treat-

ment prior to egg hatch through the second instar. It doesn't require immediate irrigation after application. Its granular and onfertilizer formulations are labeled for use on golf courses, as are its liquid formulations. It controls grubs at the labeled rate of two pounds active ingredient per acre.

Confront is a non-phenoxy, post-emergence herbicide with low odor that controls as many as 35 species of broadleaf weeds. It provides broad-spectrum weed control with one application, saving the product and labor costs of repeat treatments. It's labeled for use on most established cool- and warm-season turfgrasses, including bahiagrass, bentgrass, Bermudagrass, Kentucky bluegrass, Kentucky centipedegrass, creeping red fescue, chewing fescue, fescue, ryegrass and zoysiagrass.

Eagle 20EW specialty fungicide provides control of dollar spot and brown patch and is labeled for use on major turf varieties and landscape ornamentals. Its liquid formulation prevents and treats dollar spot, anthracnose, summer patch, brown patch, powdery mildew, rust and scab. Intended for use on fairways, roughs, tees, greens and other landscape ornamentals. Its best control of labeled diseases is when it's applied on a seven- to 10-day application schedule. For more information about the products, visit www.dowagro.com.

Kincaid offers Terraneb SP flowable and Terraneb SP (WP) turf and ornamental fungicides. Terraneb SP is designed to control gray snow mold, pythium, sclerotium and brown patch.

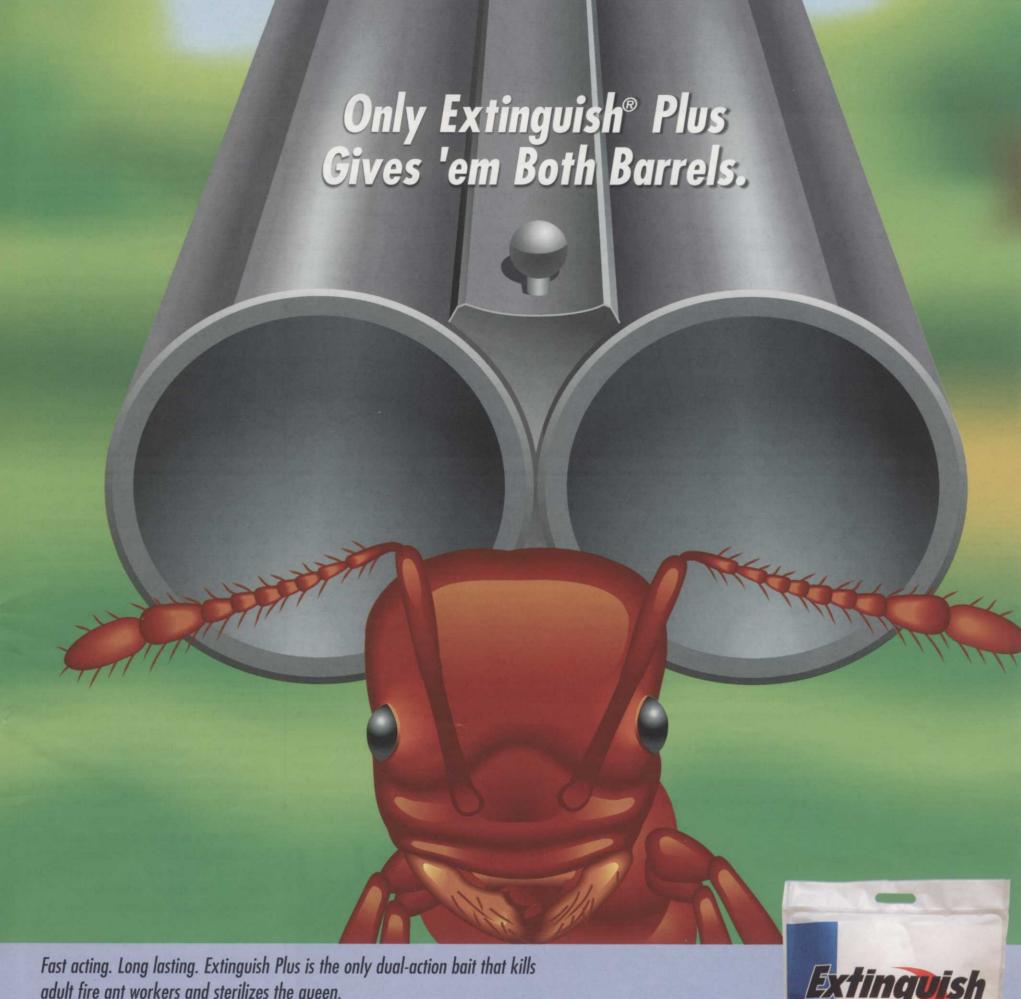
A line of insecticides in micro-injection treatments by Mauget is an environmentally friendly way to apply pesticides. The patented closed system means the chemical is completely contained within the tree, eliminating fears of drift. Only pests feeding on the tree are directly affected. This allows one to treat trees in diverse weather conditions such as wind or rain or in locations near pools, busy streets or schoolyards. A few of the products are Imcide, which contains imidacloprid; Abacide, which contains abamectin; Inject-a-Cide, which contains Metasystox-R; and Inject-a-Cide "B," which contains Bidrin. For more information, visit www.mauget.com.

Certainty Turf herbicide from Monsanto selectively controls weeds in golf courses, commercial and residential turf. It's been registered by the U.S. Environmental Protection Agency. State approvals for Certainty are pending. The herbicide provides control of purple and yellow nutsedge, as well as control of green kyllinga. It can be used in most warm-season turfgrasses, and unlike many other herbicides, it's labeled for post-directed sprays around woody ornamentals. It also solves nutsedge and other weed problems in golf course fairways and roughs. For more information, visit www.monsanto.com.

Magellan is a systemic fungicide from Nufarm Turf and Specialty that's used against pythium and yellow tuft diseases. It's labeled for use on golf courses, lawns, municipal turf areas and sod farms. The clear liquid, with a neutral pH formulation, can be combined with other fungicides such as chlorothalonil for broad-spectrum programs. There's no known resistance to the active ingredient. It provides as many as 21 days of pythium protection at 8.20 pints per acre. For more information, visit www.turf.us.nufarm.com.

Bionx is an EPA-registered fungicide and insecticide from Parkway Research and functions best when used as a component of a disease- and pest-control plan. As a fungicide, Bionx wets the protective membrane of the fungal mycelia, sporangia and spores, breaking them down and exposing them to the drying effect of the atmosphere. Drying of the fungal mycelia and the surrounding leaf tissue will prevent further infection. Bionx has stand-alone activity on turf fun-





adult fire ant workers and sterilizes the queen.

Blow away fire ants before they take another bite out of your assets. These little buggers account for nearly \$6 billion* of damage annually in the United States. Extinguish Plus gives you the double barrel approach to fire ant control with an adulticide to knock 'em down and an insect growth regulator (IGR) for long lasting results.

Unsuspecting workers take the bait back to the mound as food, eat it and die. They also spread it to the queeneffectively eliminating colony growth and relocation. Extinguish Plus is fire ant ammo approved for indoor and outdoor use where fire ants are a problem.



Aim for superior results, reduced costs and dead fire ants. For more information, contact your local distributor, call 1-800-248-7763 or visit www.wellmarkinternational.com.

@2004 Wellmark International Extinguish Plus is a registered trademark of Wellmark International. Always read and follow label directions



turfgrass management

gal diseases such as anthracnose, dollar spot and fairy ring. It's approved for control of downey mildew and powdery mildew on many outdoor plants and has activity on insects such as whiteflies, aphids, mealy bugs and leafhoppers, as well as various type of mites. For more information, visit www.parkwayresearch.com.

Azatrol EC from PBI-Gordon controls a broad spectrum of insects with its active ingredient, the azadirachtin molecule, which makes it almost impossible for insect resistance to develop. Low odor, good environmental characteristics and low mammalian toxicity combine with the control of more than 43 pests including armyworms, cutworms, gypsy moth larvae, striped beetles and whiteflies. For more information, visit www.pbigordon.com.

Pegasus and Pegasus DF from Phoenix Environmental Care are formulations of chlorothalonil and are labeled for a broad spectrum of fungal diseases in turf and ornamentals. Both products offer control of dollar spot, brown patch, leaf spot and stem rust. Pegasus has a flowable formulation that provides foliage coverage and tenacity under adverse conditions. Pegasus DF is a dry flowable with dispersion and suspension characteristics. For more information, visit www.phoenixenvcare.com.

SysStar from Regal Chemical Co. is a systemic combination fungicide for prevention and control of many diseases including fairy ring, anthracnose, brown patch, patch diseases and dollar spot.

Regal DeltaGard with fertilizer is a pyrethoid insecticide for controlling worms, fire ants, mole crickets, mites and other surface-feeding insects. It's available as a spray, granular and in combination with Regal fertilizer.

RegalStar II is a pre-emergent herbicide for turfgrass with season-long pre-emergent control of crowfoot, goosegrass, crabgrass and most other annual weeds from single application. For more information, visit www.regalchem.com.

Junction, a combination of two chemistries combined to create a broad-spectrum fungicide/bactericide, is a high-quality, dry, flowable formulation from SePro Turf and Ornamental that provides solution to disease control in a wide array of turf diseases. It's formulated to control algae, rhizoctonia brown patch and dollar spot.

Pentathlon is a broad-spectrum fungicide for effective control of fungal diseases on turfgrasses. It controls brown patch, dollar spot, melting out and leaf spot. For more information, visit www.sepro.com.

Best herbicide combinations from Simplot Turf and Horticulture offer fertilization and weed control in one pass. Best 12-8-16 Mini with 0.4 percent Barricade is a selective preemergent herbicide, which will control crabgrass, common annual grasses and selected broadleaf weeds in established turf. Barricade provides season-long control of crabgrass with one application.

Best 12-8-16 with 0.20 percent Dimension, a mini-pellet N-P-K fertilizer/herbicide combination, is offered in three different formulations to best meet the needs of different soil. Dimension prevents crabgrass, goosegrass, annual bluegrass, spurge, purslane, oxalis and other annual grasses and broadleaf weeds found in turf and landscape ornamentals. Dimension also controls crabgrass postemergence up to the four-leaf stage. For more information, visit www.simplot.com.

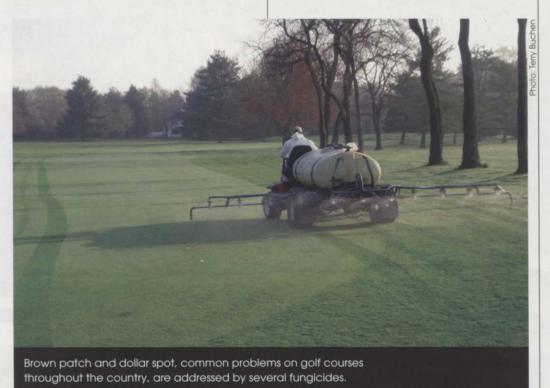
Echo Ultimate is a fungicide from Sipcam Agro USA for the turf and ornamental fungicide market. It's the newest in the Echo brand series of chlorothalonil products. This 82.5percent, spray-dried, water-dispersible granule product readily suspends in water, even under difficult conditions. It also resuspends in water easily after moderate settling.

Tenacity 1.3ME turf and ornamental fungicide is a new broad-spectrum, systemic fungicide containing long-residual propiconazole. It controls more than 15 turfgrass diseases including dollar spot, brown patch and anthracnose. Tenacity 1.3ME is a microemulsion concentrate liquid formulation labeled for a wide range of ornamental disease problems. It can be tank mixed with Echo brand chlorothalonil fungicides. For more information, visit www.sipcamagrousa.com.

The smaller, microemulsion-sized particles of Heritage TL from Syngenta Professional Products provide quick foliar intake and root uptake, resulting in faster protection against disease. The liquid formulation of Heritage fungicide offers long-lasting, broad-spectrum control and a negligible odor. Results of university studies show that Heritage TL delivers a potential increase in efficacy of as much as 15 percent against selected diseases like anthracnose. It also is effective against root-borne diseases such as summer patch and take-all patch due to its ability to be taken up by the roots and translocated up the inside of the plant. For more information, visit www.syngentaprofessionalproducts.com.

Orthene Turf, Tree & Ornamental Spray 97 from Valent U.S.A. has a patented 97 percent pellet formulation and zipper-lock resealable plastic bag that means no dust, lower odor and more accurate measuring. It offers control of mole crickets, fire ants, chinch bugs and worms with no special equipment required.

Orthene Turf, Tree & Ornamental Spray delivers economical, broad-spectrum control of mole crickets, fire ants, chinch bugs, worms and other turf pests without special equipment. Water soluble packets make handling and measuring easy. Both products allow golfers to resume play as soon as the spray dries. For more information, visit www.valent.com. GCN

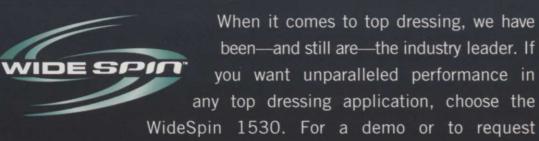


After 40 Years of Experience, Turfco® is the #1 Brand of Top Dressers and Material Handlers.



THE WIDESPIN™ 1530 IS A GOOD EXAMPLE OF THE REASON WHY:

- Guaranteed 3-year warranty. Unmatched in the industry!
- Patented 3-position switch. Guarantees even application every time.
- Patented WideSpin technology. Top dressing that ranges from 15' heavy to 30' light—no different attachments required.
- Adjustable angle of spinners from 0-15°. Allows for broadcast applications or to drive the sand into the turf.
- Galvanized hopper. No rust or flaking paint means no-stick action.
- A manufacturer with 40 years of turf experience. Our knowledge brings you cutting-edge equipment.



product information, call 1-800-679-8201 or visit turfco.com.







THE LEADER. SINCE 1961.

1655 101st Avenue NE • Minneapolis, MN 55449-4420 U.S.A (763) 785-1000 • Fax (763) 785-0556 • www.turfco.com

equipment ideas



Terry Buchen, CGCS, MG, is president of Golf Agronomy International. He's a 35-year member of the GCSAA and can be reached at terrybuchen@earthlink.net.

Globetrotting consulting agronomist Terry Buchen visits many golf courses annually with his digital camera in-hand. He will share helpful ideas relating to maintenance equipment from the golf course superintendents he visits - as well as a few ideas of his own - with timely photos and captions that explore the changing world of golf course management.

travels TERRY with

3-inch-diameter portable trash pump (right) is used often during and after heavy rainfalls throughout the growing season in the upper Midwest. To make it easier to transport around a course, the shop manager fabricated and built a pump trailer with efficiency in mind.

One-inch square tubing and 1-inch angle iron were welded together and used for the pump trailer, which was designed a little larger than required so a larger pump could be used. The pump is mounted on the trailer framework using rubber-mounted automotive shook bushings to reduce vibration caused by the engine. The tongue is made from 1-inch-square tubing that's about 36inches long. A clevis pin is used to attach a smaller turf vehicle's trailer hitch. The tongue can be lengthened when using medium and larger turf vehicles. Six-inch-diameter steel wheels with "nonhighway-service" lawn-and-garden tires and ³/₄-inch-diameter bearing hub assemblies mounted on 3/4-inch-diameter cold-rolled steel axles were acquired from a distributor.

The platform mounted on top of the framework is distressed steel. A 20-foot-long suction hose and a 50-foot-long discharge hose - all with quick-connects - are rolled up and placed on the back of the platform for easy transport. The front of the platform has a 16-gallon fishing-boat fuel tank with a replaceable fuel filter and a shut-off valve mounted to it. The tank allows the trash pump to operate about 20 continuous hours compared with the fuel tank that came as standard equipment with the pump that would have to be refueled every 1.5 hours. This allows the pump



to operate overnight without having to be refueled. The fuel gauge that came with the larger fuel tank is inoperable and a replacement isn't available because it's not manufactured anymore, so consideration is being made to add a gas cap with a built-in fuel

Greg Ellis, certified golf course superintendent, and Scott Brock, shop manager, at the Berrien Hills Country Club in St. Joseph, Mich., worked together on this novel idea.



2- or 3-inch-diameter diaphragm pump is used extensively for pump ing water out of bunkers quickly and

The black framework (left) came with the diaphragm pump when it was purchased and mounted on the trailer, which was fabricated using 1.5-inch angle iron about 1/16-inch thick welded together. A 5-foot-long piece of 1.5inch-square tubing was used for the tongue, which extends to the back of the trailer. The front portion is 42-inches long to the end of the hitch. The tongue-mounted hitch was made out of 1.5-inch flat stock steel welded together that's 3/16-inch thick. It has a permanently mounted 3/8-inch-diameter clevis pin and a 1/2-inch-diameter "T" handle with a 1/8-inchdiameter roll pin that holds the spring in place so the clevis pin can't be removed or

A jack stand was built using 2-inch-by-2-inch square steel stock 1/8-inch thick. A 1.5-inch square stock piece of steel 1/8-inch thick slides up and down with the built-in handle, which has holes drilled into it for the up, transport, down and stationary positions. All that's needed is to pull the spring-loaded pin with the builtin handle that will find the correct hole by sliding the jack stand up or down.

Six-inch-diameter steel wheels with turf tires and 3/4-inch-diameter bearing hub assemblies were mounted to a 3/4-inch-diameter cold-rolled steel axle that has holes drilled for cotter pins to hold the wheels in place. The 2-inch-diameter diaphragm pump uses a 20-foot-long suction hose and 15- to 50-footlong discharge hoses with quick-connects. The 3-inch-diameter pumps use a 15-foot-long suction hose and 15- to 50-foot-long discharge hoses with quick-connects. All hoses are transported in the bed of the transport turf vehicle.

John Gosselin, assistant general manager; Tristan Engle, golf course superintendent; and Jerry Thompson, site mechanic, at The DuPont Country Club in Wilmington, Del., thought of the pump trailer ideas. GCN

ODUCT INFORMATION

www.golfcoursenews.com. I would like to receive (continue to receive) Golf Course News free of charge (Free to qualified contractors. U.S. only) 11 12 13 15 ☐ Yes □ No 22 23 24 25 26 27 28 29 30 31 32 33 34 35 Signature 50 51 52 53 54 Date Name 92 100 Title 109 110 111 112 113 114 Company_ 123 124 125 126 127 128 129 130 131 132 133 134 140 Address 142 143 146 148 149 150 151 152 153 154 155 156 159 State Zip City 161 162 163 164 165 166 167 168 149 170 171 172 173 174 175 176 179 180 Phone 181 182 183 184 185 186 187 188 189 191 192 193 194 E-mail Address 222 223 224 225 226 227 228 229 GIE Media will only use your e-mail address to contact you with relevent industry 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 or subscription information. 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 If you do not want to receive e-mail from trusted 3rd parties, please check here. 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 What is the best way to contact you for future renewals? **MARCH 2005**

-	7	PH		
1	T			
CC	DURS	EN	EW	S

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

Yes No

Fax

E-mail

Signature_ Date Name Title Company Address City State _ Phone

GIE Media Inc will only use your email address to contact you with relevant industry or subscription information.

If you do not want to receive email from trusted 3rd parties, please check here

- What is your primary business at this location? (check one)
- ☐ 21-Public Golf Course
- 22-Private Golf Course
- 23-Semi Private Golf Course 24-Municipal/City/State Golf Course
- 25-Hotel/Resort
- 26-Par3/Executive Golf Course
- 27-Practice Facility
- 29-Other Golf Course
- 30-Golf Course Management Company
- 31-Golf Course Architect
- 32-Golf Course Developer 33-Golf Course Builder
- 39-Supplier/Sales
- 99- Others (please describe)
- What best describes your title?
- A-Golf Course Superintendent
- B-Green Chairman
- C-Director of Golf/Head Pro
- D-Club President
- E-General Manager
- F-Golf Course Owner
- G-Builder/Developer
- H-Architect/Engineer
- I-Research Professional
- K-Assistant Superintendent
- L-Golf Course Management Company Executive
- ☐ Z-Others (please describe)

Please allow 4-6 weeks for delivery of first issue. Incomplete forms will not be processed. Publisher reserves the right to reject all nonqualified subscription requests.

- 3. Number of Holes: (check one)
- A-9 Holes

Check off the reader service numbers that you're

interested in and mail in this card. Or visit

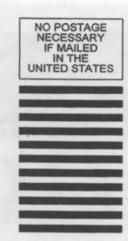
- D B-18 Holes
- ☐ C-27 Holes
- D-36 Holes
- ☐ E-Other
- 4. Purchase Involvement: (check all that
- ☐ 1-Recommend equipment for purchase
- ☐ 2-Specify equipment for purchase
- ☐ 3-Approve equipment for purchase
- 5. Total Annual Maintenance Budget: (check one)
- ☐ 1-Less than \$50,000
- 2-\$50.000-\$99.999
- 3-\$100 000-\$249 999
- 4-\$250,000-\$499,999
- J 5-\$500,000-\$749,999
- G-\$750.000-\$1.000.000
- ☐ 7-\$1,000,000+

What is the best way to contact you for future renewals?

email telephone

To request your Free subscription to Golf Course News please fill out this form completely and fax back to: 216-961-0364 or 216-961-0594

or mail to: Golf Course News PO Box 5817 Cleveland, OH 44101-0817.



BUSINESS REPLY MAIL

FIRST-CLASS MAIL

PERMIT NO. 1322

CLEVELAND, OH

POSTAGE WILL BE PAID BY ADDRESSEE

GIE MEDIA PO BOX 5817 CLEVELAND OH 44101-9765





Postage Required Post Office will not deliver without proper postage.

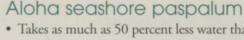




Hobo water level logger

- · Pressure-based water level recording device
- Records water level and temperature
- · Provides 0.1 percent full-scale accuracy with a 30-footmeasurement range
- · Stand-alone unit simplifies deployment

Circle 200 on reader service form



- · Takes as much as 50 percent less water than Bermudagrass
- · Can be irrigated with recycled and highly salty water
- · Tee-to-green usage
- · Fairly shade and cold tolerant
- Takes as much as 75 percent less nitrogen for fertilization than Bermudagrass
- · Resistant to green bug aphid Environmental Turf & University of Florida Circle 201 on reader service form





I-Trim triplex rotary mower

- Powered by a Briggs & Stratton 34-hp, 954 DT diesel fuel, turbocharged three-cylinder engine
- Engine is mounted on rear for stability and traction on slopes and hills
 - 10-gallon fuel tank provides four-hour run time at full power
 - Single foot-pedal control for forward/reverse travel
 - 70-inch width of cut
 - Height of cut ranges from 1 to 4 inches in 1/4-inch increments
 - Multi-use decks: mulching or rear discharge

National Mower

Circle 202 on reader service form

Pump station

- · Completely integrated with irrigation system
- Compares actual flow at the pump station to the expected flow
- Constant monitoring and automatic adjustment helps saves water and money
- Reduces wear and tear on irrigation systems Rain Bird Golf

Circle 203 on reader service form





Drain-Rite in-line drains and catch basins

- · Made from heavy duty, abrasion- and corrosion-resistant SDR35 sewer pipe to provide years of reliable service life
- · Designed to fit the company's gasketed pipe
- · Available with an assortment of grates plus other custom and standard fittings

Hancor

Circle 204 on reader service form



Nature Pure water cooler purification system

- · Provides purified, not just filtered, water
- Retrofits to 5- and 10-gallon Igloo water coolers in minutes without any special tools
- · Independently certified to meet EPA microbiological purification standards
- · Protects against waterborne bacteria and viruses
- · Removes chlorine, herbicides, pesticides and unpleasant tastes and odors

Standard Golf

Circle 205 on reader service form



2500E hybrid triplex greens mower

- · Electric reel motor reduces hydraulic leak points
- Produces lower sound levels
- · Features increased fuel efficiency
- · Operates on gas or diesel-powered engine
- · Choice of four-cycle gas or three-cycle diesel engine - both 18 hp
- Three 22-inch cutting units are available in seven- or 11-blade reels
- Height of cut ranges from 5/64 inch to 1 1/4 inches John Deere

Circle 206 on reader service form



The

from Otterbine

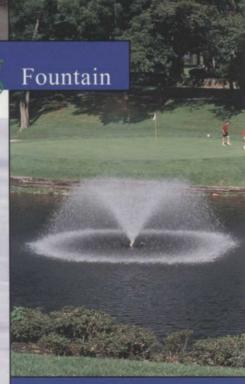
AT OTTERBINE, we know that water quality is equally as important as aesthetics. That is why our Aerating Fountains are tested at the University of Minnesota and have been proven to create excellent circulation and oxygen transfer.

Otterbine aeration systems effectively induce oxygen into the water column promoting natural aerobic digestion of excessive waste, run-off and algae that can consume your water features.

Effective circulation is key in reducing algae and the beauty of an Otterbine spray pattern speaks for itself!

OTTERBINE AERATORS:

- · Virtually Eliminate Algae and Odors
- · Are Ideal for Irrigation Ponds
- . Stand up to Brackish and Effluent Conditions
- . Offer the Strongest Warranty in the





800-AER8TER 610-965-6018 www.otterbine.com

Futurra F4 netless erosion-control blanket

- · Eliminates nets and threads to remove environmental and maintenance hazards and improves site aesthetics
- · Stimulates germination and growth quickly
- · Provides erosion control by bonding to the soil surface to prevent washouts and seed migration for as long as one
- · Lightweight and requires few staples Profile Products

Circle 207 on reader service form



Titan tines

- · Available in quad, hollow, side-eject or
- · Designed with long-lasting carbide tips
- · Thin-wall design allows for maximum core pulling
- · Optimized core removes thatch for maximum topdressing
- · Can speed up playability

Circle 208 on reader service form





BioPro Multi-Purpose Plus fertilizer

- · Increases root mass, saves water and improves nutrient uptake
- Provides convenient way to combine a number of products in one jug
- · Combination liquid for turf and ornamental maintenance
- 4-0-2 analysis product contains CytoGro biostimulant, H3O soil moisture management liquid, a micronutrient package and a naturalbased surfactant
- · Effective at low volumes to help the active ingredients reach their target destination

Spindler Enterprises

Circle 209 on reader service form

Single-rider golf car

- · Ergonomically designed controls
- · Swivel seat locks in any position and makes it easy to enter and leave the car
- · Elevating seat puts golfer in position to play a shot
- · Strong hill-climbing ability makes every course accessible
- · Seven-inch clearance allows course access
- Easy on turf with low impact on greens
- Top speed of 14 mph same as standard golf car
- Regenerative braking system

SoloRider

Circle 210 on reader service form

TVM 3077 overseeder

- Verticutter covers a 77-inch swath with three independent verticut heads
- Banana-shaped blades are spaced 1 1/4 inches apart
- Seed hopper capacity of 9.4 cubic feet accepts all seed varieties
- · Seed scatter box ensures seed traveling through the tubes is evenly distributed into the slits cut by the blades
- Roller gently presses the seed into contact with the soil
- Constant velocity joint allows the operator to make tight turns with the units out of the ground without the need to switch off the PTO Locke Turf

Circle 211 on reader service form

Detachable pull cart

- Marries pull cart with motorized golf cart
- Can speed play and maximize the number of rounds per day
- Quickly lifts and locks on and off golf carts
- Lets golfers keep a full bag of clubs at their sides even when riding carts are restricted to the cart path

Circle 212 on reader service form

Surveyor central control system

- · Flow balances large systems (as much as 999 controllers, more than 100,000 stations) to station level
- · Two modes of automatic irrigation: traditional sequential or by plant management and location groups
- · Radio and/or hardwire communications with the company's VSX controllers, including decoder controllers
- Task Scheduler automates common tasks and serves as personal calendar - can track and schedule years ahead
- Accepts scans, aerial photos and autoCAD imports

Hunter Industries

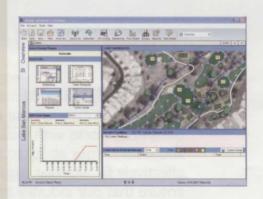
Circle 216 on reader service form



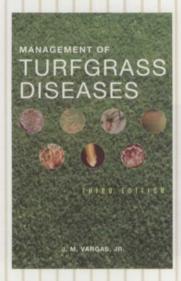








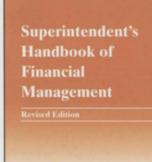
THE PUBLISHERS OF GOLF COURSE NEWS MAGAZINE PRESENT RESOURCES FOR YOUR LIBRARY



Management of Turfgrass Disease, 3rd Edition

\$110 J. M. Vargas, Jr. ISBN: 0-471-47411-8, Hardcover, 336 pages, November 2004

This newly revised and updated Third Edition of the successful Management of Turfgrass Diseases provides professionals the most current practical information for maintaining the best playable turfgrass on their courses. Management of Turfgrass Diseases, offers golf course superintendents, lawn care operators, and landscapers a comprehensive, decision-making tool.



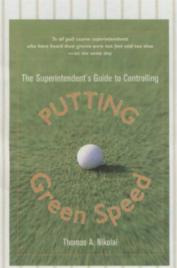
Raymond S. Schmidgall

Superintendent's Handbook of Financial Management, Revised Edition

\$45

Raymond S. Schmidgall ISBN: 0-471-46319-1, Hardcover, 176 pages, October 2003

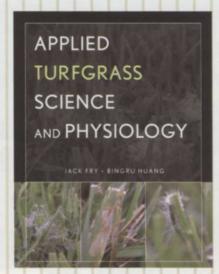
The key to any successful business is the effective management of revenue, costs and of course profitability. This book provides golf course superintendents with the necessary tools to manage their daily financial operations by explaining basic accounting principles such as pricing, budgeting, cost control, payroll and cash flow. With chapters on financial statements, golf course operation schedules, breakeven analysis and operating budgets this is an invaluable tool for all owners, operators and managers of golf courses.



The Superintendent's Guide to Controlling Putting Green Speed

S60 Thomas Nikolai ISBN: 0-471-47272-7, Hardcover, 160 pages, October 2004

It is critical for golf course superintendents to know the factors that impact green speed. This book covers every aspect of green speed maintenance including playability, environmental considerations, mowing and pest management. It also provides practical decision-making advice relative to financial and budgeting issues.

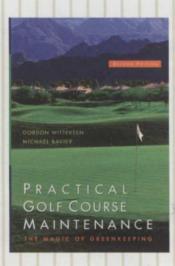


Applied Turfgrass Science and Physiology

\$80

Jack Fry, Bingru Huang ISBN: 0-471-47270-0, Hardcover, 320 pages, July 2004

A thorough, expert guide to advanced turfgrass management. Applied Turfgrass Science and Physiology cuts right to the authoritative information and know-how that will keep any turf area in optimal condition. Applied Turfgrass Science and Physiology illustrates topics with research results from peer-reviewed scientific journals to provide insight into how principles and techniques work in real-world practice.

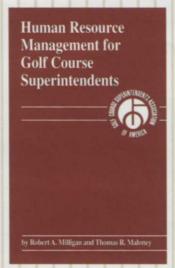


Practical Golf Course Maintenance: The Magic of Greenkeeping

\$65

Gordon Witteveen, Michael Bavier ISBN: 1-57504-047-6, Hardcover, 280 pages, July 2002

Practical Golf Course Maintenance has hundreds of helpful tips you can use every day! Presented in a step-by-step format, it includes advice on maintaining consistent bunkers, sand topdressing and aerifying, using chemicals and fertilizers safely and effectively, irrigation principles and techniques, mowing techniques for greens, fairways and tees, and much more.



Human Resource Management for Golf Course Superintendents

\$40

Robert A. Milligan, Thomas R. Maloney ISBN: 1-57504-038-7, Hardcover, 192 pages, July 2002

Every aspect of golf course management is covered. Learn how to improve your planning abilities, build leadership and communication skills, maximize employee performance, select and train new employees, and conduct employee performance evaluations. Using the principle and principles in this book will help you effectively manage any golf facility.

ORDER Call 800.456.0707 or TODAY! Visit www.golfcoursenews.com/store

products — new

SGCZ2500 reciprocator

- · Heavy-duty edger, trimmer, pruner and brushcutter
- Gear case's back-and-forth scissors action lets the reciprocator cut without throwing sand and debris
- The 25.4 cc two-cycle strato-charged engine doesn't need a catalytic converter or valve maintenance
- · Fewer moving parts than four-cycle engines
- · Backed with two-year commercial warranty RedMax

Circle 214 on reader service form

Drainage system

- Virtually invisible
- · Ideal for new construction and renovation of existing courses
- Cost-effective alternative to sand capping fairways
- · For courses using reclaimed water
- · Provides permanent aeration system that improves infiltration rates and distribution uniformity of irrigation systems
- 1.5-inches wide
- · Minimizes runoff by diverting excess water to 2-inch piped subdrains QwikDrain Systems

Circle 215 on reader service form







For more information contact your local

E-Z-GO Distributor or Exide at 1-800-START-IT

FOR SALE







Stroke & Distance

We Take The Guess Work Out Of Golf

GPS Work • Laser Measuring Distance Tags • Sprinkler Head Lids • Signs • Yardage Markers Yardage Books



To Order Call: (800) 523-7853 Mike Donovan www.strokeanddistance.com Charlotte NC 28105

HELP WANTED

United Golf, LLC

Is currently interviewing qualified construction Superintendents, Assistants, Project Managers, Shapers, Operators, Irrigation Superintendents and laborers for immediate hire. Please send resume to dalef@unitedgolfllc.com or fax to 918/250-7049, attention Dale. Resume should include desired salary range, project list and Architect's contact information.

Looking for a new Opportunity?



Currently interviewing for full-time positions. Resume can be e-mailed to: midamericagolf@sbcglobal.net or contact Rodney Cole at 816.524.0010.

SEEKS EMPLOYMENT

Golf Course/General Contractor looking for a Project Manager/Superintendent Irrigation, experienced. Live on the Big Island of Hawaii (Kona Side). Please send resume to: Lava Contracting PO Box 4652 Kailua Kona, HI 96745 Fax or Email to: 808/325-6991, Email: niverson@hawaii.rr.com.

Project Manager/Shaper needed for high-end renov./ new build. Experience necessary, travel required. Email resume to BigJohn@McDonaldGolfInc.com or call 410/799-7740.

Seeks Employment

Project Manager/Superintendent of golf course construction seeks position with owners, developers & contractors. Experienced in clubhouse building & property infrastructure. BS in Agronomy, Turf Management & Irrigation. Will travel worldwide 406-844-2361

fax resumes to 631-956-9123.



LandTek Golf is a 'Builder Member' of the GCBAA, based in L. I., N.Y. We are seeking self-motivated project mngrs/site supts to oversee daily construction activities as well as quality control of golf course construction/renovation projects throughout the northeast region (NY,NJ,CT,PA). In addition to interacting with owners & architects, individuals must possess strong communication skills, good organization, and the ability to solve problems & be able to manage & motivate people. Individuals must be willing to relocate /travel. Interested parties LANDTEK should e-mail jlong@landtekgroup.com or



ad index

	PAGE	
Barenbrug USA	27	16
www.barenbrug.com		
Bear Irrigation	3	11
www.bear-irrigation.com		
Blue Yellow	20	14
www.gp.com		
Bobcat	7	13
www.bobcat.com		
Cleary Chemical	5	12
www.clearychemical.com		
Exide Technologies	68	22
www.exide.com		
Golf Course Builders Association of America	55	19
www.gcbaa.org		
National Mower	71	23
www.nationalmower.com		
NuFarm	43	17
www.riverdalecc.com		
Otterbine	64	20
www.otterbine.com		
PBI Gordon	51	25
www.pbigordon.com		
Project Evergreen	47	18
www.projectevergreen.com		
RISE	65	21
www.pestfacts.org		
Roots	21	15
www.rootsinc.com		
Standard Golf	2	10
www.standardgolf.com		
Syngenta	72	24
www.syngentaprofessionalproducts.com		
	59	27
www.turfco.com		
Wellmark	57	26
www.wellmarkinternational.com		

RESERVE YOUR CLASSIFIED AD SPACE TODAY!

ADVERTISEMENT SIZE: 2" high x 3" wide. RATES: B/W: \$230.00. Color: \$330.00. Text only: \$2.00 per word with a \$60.00 minimum.

TO PLACE YOUR AD By Phone: 216-961-4130

By Mail: Complete form and mail with payment to: Golf Course News, Attn: Jennifer Halas, 4012 Bridge Ave., Cleveland, OH 44113. We accept jpeg, eps and tif files.

By Fax: Complete form and fax with credit card information to 216/961-0364 (24 hours).

By E-mail: Send ad with credit card information to

All ads must be prepaid. All rates are per insertion. We accept Visa, Master Card, American Express and Discover.

Tour Name	
Company Name	
Address	
City/State/Zip	
Phone	
Fax	
E-mail	
Ad Text	
Signature	



Pat Jones is president of Flagstick LLC, a consulting firm that provides sales and marketing intelligence to green-industry businesses. He can be reached at psjhawk@cox.net or 440-478-4763.

Beer and scribbles

've sort of lost count, but I think this was my 18th Golf Course Superintendents Association of America show ... er, I mean, Golf Industry Show ... and once again, I returned from the big hoo-haw in Orlando with a pocket full of completely unreadable notes scribbled on cocktail napkins, matchbooks, my left forearm, the hood of my rental car, etc.

Upon further review, many of these jottings are harder to figure out than the Da Vinci Code. I'm looking at my notes right now, and I'm sure it was critically important when I wrote, "Bllagh! Don't forget that Bllagh is planning to acquire Gsichop! Big news!" This almost certainly made a lot of sense at 3 a.m. when the bartender at the Peabody Hotel was threatening to call the cops unless we stopped messing with the ducks.

So, once again, I'd just like to state for the record that (say it with me) beer and journalism just don't mix.

However, after many years of frustration caused by attempting to balance the intake of cereal malt beverages with different note-taking technologies (mini-tape recorder, PDA, etc.), this time I got smart and took a Golf Course News intern along. Her job was to shadow me every step of the way and assist me in my heroic news-gathering efforts by capturing every conversation, detailing every meeting and making sure we had the best possible coverage of the event. So, I can simply ask her to hand over all of her terrific, carefully recorded notes and crank out this GIS follow-up column, right?

Wrong. She ran screaming from the show after about three hours. You guys really are animals!

But, thanks to my connections with the CIA, I was able to "borrow" one of their supercomputers to decipher my beer-impaired notes from Orlando. Thus, once again, I'm proud to present my cogent (not) and insightful (hah!) observations from the big, big show.

The combination platter

The "surf and turf" concept of combining the GCSAA and National Golf Course Owners Association shows seemed to be pretty well received and caused few problems. Most attendees and exhibitors said the

show was basically the same as it always had been. Oil and water mixed nicely, and the lion and lamb laid down together in peace.

Perhaps this was because the owners largely bagged the show in favor of golf, poolside lounging or other fun activities. My impression is that they simply didn't appear for the show. I love the NGCOA guys, but I searched long and hard for owners to interview on the trade show floor, and it was like looking for a badly sliced ball in the deep woods.

Say what you will about the "team-decision-making" concept being floated by the various associations, but the team has to show up. For the many exhibitors who spent a lot of time and money trying to figure out how to handle the "new" show, this was a big disappointment.

Assistants stay home

I've been on record warning that some primary decision-makers (superintendents, owners, general managers) will get left out of the big mixing bowl that is the new GIS. In short, some courses will not send all three key personnel to the same show. That apparently didn't happen this year, but the complete impact won't be seen until the Club Managers Association of

America joins the show in 2007

But, what I heard from several superintendents was that they were forced to make an unexpected sacrifice: Their assis-

tants weren't able to come to the show this year. In the new world of economic pressure and a combined show, something had to give. And, what gave was the chance for assistant superintendents to attend an educational event that's probably more important to them than it is for their bosses.

These days, assistant superintendents handle more responsibility and more management duties than ever before. GIS management needs to think carefully about how they can create opportunities and incentives to keep our next generation of superintendents coming to the big show.

Temporary insanity

Few attendees may realize it, but the vast

majority of people working the show wearing those "GIS Staff" badges are temporaries hired from around the Orlando area. That explains why the woman in charge of the largest booth at the show (think orange) was firmly told by people working at the registration area she'd have to pay for a new badge after she'd forgotten hers one day. Oops. Through gritted teeth, she politely asked them to check with GCSAA show staff, and she was eventually cleared to get a new badge.

World's biggest centerpiece

OK, the "Building of the Green" smack in the middle of the show floor was really cool, but most attendees missed the actual construction, which was the neatest part. The time-lapse video shown around the site was slick, but watching the dump trucks bring in soil, sand, etc., was even slicker. It literally created a centerpiece for the whole show. I'll never forget all the "workers" - most of whom were presidents or honchos for the Golf Course Builders Association of America member companies who did the majority of the work - carefully creating the green complex. And, I certainly won't forget Tom Marzolf, one of Tom Fazio's

> main guys and the incoming president of the American Society of Golf Course Architects, out there handshaping the site with a shovel. Did

I mention he was wearing dress clothes and a necktie at the time? It was fantastic to see all the chiefs of some of our industry's most notable companies out there getting dirty.

Can you top this?

THE BOTTOM LINE WAS

THAT THE FIRST OF THE

NEW "ALPHABET SOUP"

GIS SHOWS WENT OFF

WITHOUT A HITCH.

The bottom line was that the first of the new "alphabet soup" GIS shows went off without a hitch. Orlando is a tremendous site, the GCSAA staff did its usual fabulous job, and the combined show was a hit. The only downside is that the New Orleans venue probably doesn't allow for some of the same cool things (building the green, solution centers, etc.) that Orlando offered. That's the bad news. The good news is: Bourbon Street beckons. See you there. GCN



Own the King of the Hills for \$21,500*

The I-Trim triplex rotary mower is specifically engineered to cut hills and bumps around your greens, tees and bunker surrounds. Its performance in uneven contours is unsurpassed, and its price is almost unbelievable.

Before you spend a dime on another mower, come look at National Mower's new I-Trim. It's the perfect blend of performance and cost effectiveness, and it will be the perfect addition to your equipment inventory.

To find the National Mower distributor nearest you, contact us toll free at (888) 907-3463, ex. 105.

* \$21,500 is a special introductory offer, and does not include any applicable freight expenses.

NATIONAL M O W E R

The World's Best Specialty Mowers

National Mower Company
700 Raymond Avenue • Saint Paul, MN 55114
Tel. (888) 907-3463, ex. 105 • Fax (651) 646-2887
web: www.nationalmower.com • email: sales @ nationalmower.com



Primo MAXX™ creates course conditions that can bring golfers out in droves and enhance game performance. Primo MAXX, the premier PGR in the industry, helps elevate turf to a new level of playability. For more information on Primo MAXX, call your Syngenta representative at 1.800.395.8873.



www.syngentaprofessionalproducts.com