

August 2006

www.golfcoursenews.com

GOOLF

COURSE NEWS

Serving the Business of Golf Course Management

STRONG RELATIONSHIPS

Superintendents work closely with owners to improve their businesses

INSIDE Proactive renovations • Insecticide/herbicide programs
Maintenance consulting • Nine-hole course performance

WHEN SUPERINTENDENTS DO THE RESEARCH,

WE COME OUT ON TOP

Quality ratings (scale 1-9, 9 = best), color ratings (scale 1-9, 9 = dark green), and leaf texture ratings (scale 1-9, 9 = very fine) for 18 cultivars of bentgrass maintained as an On-Site putting green at 13 sites from 1998 to 2001.

Overall National On-Site NTEP Ratings

| Entry | Quality | Genetic Color | Leaf Texture |
|------------------|---------|---------------|--------------|
| Penn A-4 | 7.3 | 6.8 | 7.9 |
| Penn A-1 | 7.0 | 6.6 | 7.5 |
| Penn G-1 | 6.9 | 6.7 | 7.4 |
| Century | 6.8 | 5.8 | 7.7 |
| Penn G-6 | 6.7 | 6.6 | 7.2 |
| L-93 | 6.7 | 6.9 | 6.9 |
| Grand Prix | 6.7 | 6.0 | 7.3 |
| Imperial | 6.7 | 6.1 | 7.3 |
| Penncross | 5.3 | 5.5 | 5.4 |
| LSD value* | 0.1 | 0.2 | 0.2 |

*Fairways: Penneagle II • Greens: Penn A-4 • Tees: PennLinks II / Seaside II
The Club at Pronghorn • Bend, Oregon • John Anderson, Director of Golf Courses*

Five years of university on-site trials* at top golf courses coast to coast proved it. When maintained under real world conditions and judged by leading superintendents, no other bentgrasses rated higher than the Penn bents from Tee-2-Green. To learn more, call your Tee-2-Green distributor. See how the Penn bents can put you on top with your toughest judges, the players on your golf course.

*www.tee-2-green.com/img/resource/unbiasedcultivar.pdf



We've Got History

Go to: www.golfcoursenews.com/readerservice - select #10
PO BOX 250 Hubbard, OR 97032 USA • 800-547-0255 • FAX: 503-651-2351 • bentinfo@tee-2-green.com



32

Career development: feature

STRONG RELATIONSHIPS

32 FORGING A SOLID BOND

Golf course superintendents and owners develop close relationships for smoother-run operations.

Maintenance consulting: Q&A feature

24 ANYTHING BUT AVERAGE

Not in the business of saving money, Bland Cooper consults with superintendents to help improve the golf courses they manage.

Design case study: feature

28 A WIN FOR EVERYONE

A Florida golf course will coexist with wetlands, wildlife and residents.



28

Turfgrass management: feature

36 OUT, DAMNED PESTS

Numerous weeds and insects present more of a problem for superintendents in the South than in the North.

Course operations: feature

39 STILL A CHALLENGE

Just like the larger ones, nine-hole facilities struggle to maintain business and increase the number of rounds played.

Course management: feature

42 RETHINKING GREENS TO STAY IN THE BLACK

Proactive course renovations and rerouting provide better experiences for golfers and aim to boost profits.

Cover photo: Roger Mastroianni



36

EDITORIAL MISSION STATEMENT:

Golf Course News reports on and analyzes the business of maintaining golf courses, as well as the broader business of golf course management. This includes three main areas: agronomy, business management and career development as it relates to golf course superintendents and those managers responsible for maintaining a golf course as an important asset. *Golf Course News* shows superintendents what's possible, helps them understand why it's important and tells them how to take the next step.

Before.



After.



After after.

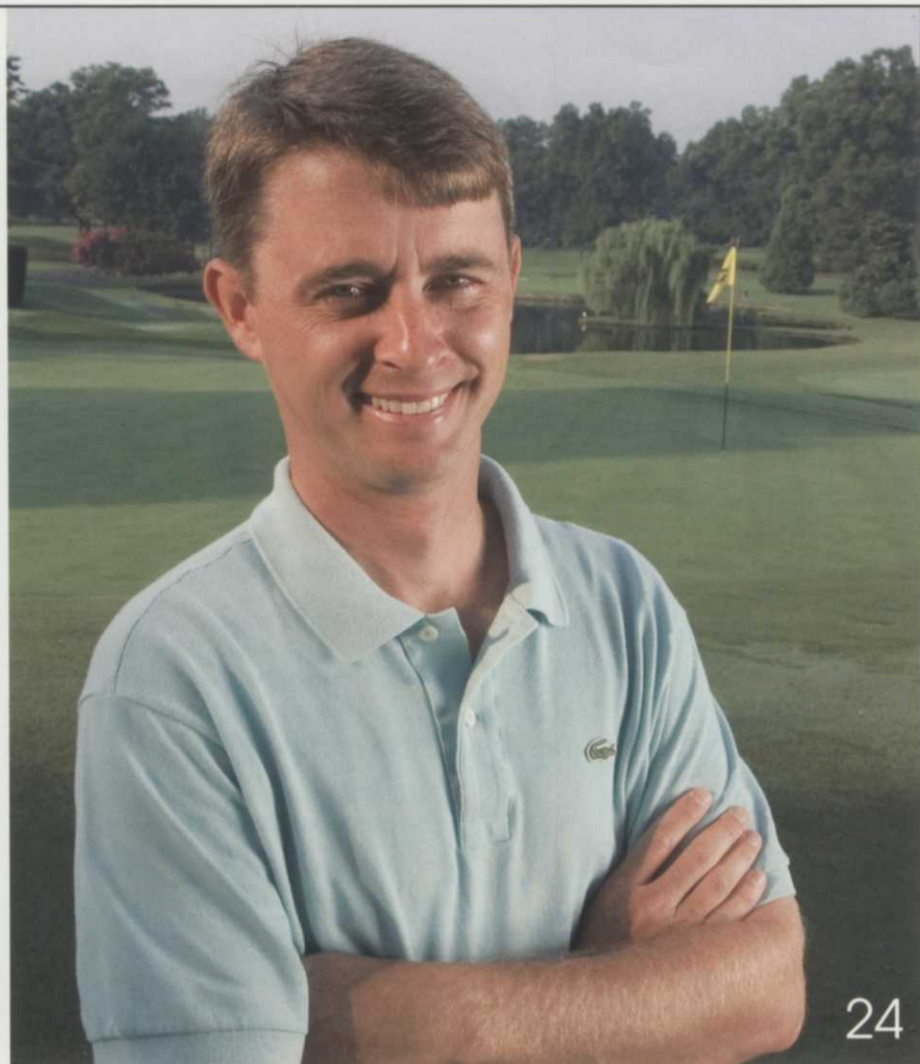


Tartan.
Beyond
fungicide.

New Tartan™ makes turf stronger under stress now, and later, and later. See it yourself: Tartan fights dollar spot, brown patch and a broad spectrum of diseases with multiple modes of action and a 21-day residual. Even better, it's got StressGard, a key ingredient in Signature™, for turf stress management. And of course Tartan is Backed by Bayer™, so you've got hundreds of test acres and dozens of scientists on your side. Need data? Get it at bayerprocentral.com. Need a fungicide that's more than a fungicide? Here it is.



Bayer Environmental Science



Departments:

- 6 **EDITORIAL**
The next big thing
- 8 **LETTERS TO THE EDITOR**
- 10 **NEWS ANALYSIS**
Assistant superintendent involvement and seashore paspalum
- 23 **AT THE TURN**
- 45 **RESEARCH**
Phosphorus in greens and hydraulic conductivity in root zones
- 46 **TRAVELS WITH TERRY**
Equipment ideas
- 47 **NEW PRODUCTS**
- 49 **ADVERTISING INDEX / CLASSIFIEDS**

Columnists:

- 16 **MARKETING YOUR COURSE**
Jack Brennan: Player development
- 17 **DESIGN CONCEPTS**
Jeffrey D. Brauer: Practical tee design
- 20 **ADVANCING THE GAME**
Jim McLoughlin: Architects' reverse roles
- 22 **HUMAN RESOURCES**
Robert A. Milligan, Ph.D.: Feedback and focus
- 50 **PARTING SHOTS**
Pat Jones: I doubt it

Visit us online



ONLINE-ONLY ARTICLES:

BEYOND THEIR YEARS

Members of the golf course maintenance crew at Athens Country Club in Georgia share why so many of them have spent so many years working there.

HAVING A FIELD DAY

A summary of findings, including those about dollar spot and moss control, from The Ohio State University's turfgrass research field day.

GOLF COURSE NEWS (ISSN 1054-0644) is published in January, February, March, April, May, July, August, September, October and November. Copyright 2006 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.





John Walsh
Editor

The next big thing

Only a handful of golf course superintendents in the United States currently are managing seashore paspalum, but that will change dramatically during the next 10 years.

Most of the courses with paspalum are in Florida – about 15 or so – and several are in Naples. There are a few in South Carolina and a few in California and Arizona. Paspalum testing has been done as far north as Virginia Beach.

Salt injury to Bermudagrass is the primary factor driving paspalum to the forefront of the turfgrass arena. Currently, there are about 10 varieties, including one that's seeded, available in the market. More are in development.

After attending a meeting about seashore paspalum sponsored by Bayer Environmental Science and Environmental Turf, it's clear golfers and superintendents are fans of the grass. Golfers like it because of its dark-green color, playability and striping. Superintendents like it because of its deep root system, density, color retention and aggressiveness. Other attributes include: low mowing height tolerance, minimal morning dew, brackish water tolerance, plant growth regulator response and water-logging tolerance.

But, because there isn't a perfect grass, paspalum also has limitations. Those include: Few pesticides are labeled for it; it has minimal tree-shade tolerance; it's difficult to establish with saline water; it has slower green speeds; and its cold hardiness is similar to Bermudagrass.

Despite all that's known about the grass, there's a lot more to learn. Researchers and superintendents are doing just that, having fun discovering aspects of the grass' behavior that no one knows about yet.

During the next 10 years, we'll start to see paspalum move inland, away from shore, because it can tolerate effluent water better than other turfgrasses. However, it needs a lot of fresh water to establish; but after that, it can be maintained with water that's highly saline.

There's a debate among some superintendents whether it's worth it to switch from a Champion or TifEagle green to a paspalum one. Proponents of paspalum say putting green speed can equal that of a TifEagle or Champion green if the right variety is used. It just takes more work – brushing, grooming, double cutting and rolling.

Another debate is whether to have

paspalum wall-to-wall on a course or just on certain areas. The consensus that's developed: Avoid Bermudagrass greens with paspalum fairways and approaches because the paspalum is so aggressive it will contaminate the Bermudagrass greens easily.

Yet another debatable advantage is whether less water is used maintaining paspalum compared to Bermudagrass. In some instances, almost half the water is needed to maintain paspalum than Bermudagrass, but that's not the case in every situation. Nonetheless, it's enticing to maintain a turfgrass that requires less water.

There's much to think about. But consider this: Of all the superintendents Todd Lowe – a Green Section agronomist with the U.S. Golf Association who's based in Florida – has spoken with those who manage paspalum, not one said he would return to managing Bermudagrass. Pretty strong statement, huh?

Mostly high-end golf courses feature the grass because of its initial cost and the expense needed to maintain it at the level demanded by country clubbers. The key to the growth and popularity of seashore paspalum is how many mid- to low-budget courses will be able to plant and maintain the grass. Surely there will be a wider price range as more varieties enter the market.

Whether seashore paspalum becomes more popular than Bermudagrass won't be known for many years, but given the increasingly poor water courses are given to work with, it will surely give Bermudagrass a challenge for the most popular warm-season turfgrass on golf courses.

Owners, green chairmen and golf club boards drive many of the changes on the course. When they play on paspalum, they're probably going to want to switch. Whether you think the club at which you work will switch to paspalum or not, it's in your best interest to learn more about the grass because you'll be more prepared if the change comes. Talk to other superintendents who are managing the grass. Talk to researchers. Conduct some research on your own.

You might have paspalum under your feet sooner than you think. Then you can tell your peers up North how much fun they're missing. GCN

John Walsh

GOLF COURSE NEWS

Serving the Business of Golf Course Management

Vol. 19 No. 7

Editorial Offices:

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

John Walsh
Editor
jwalsh@gie.net

Heather Wood
Web editor
hwood@gie.net

CONTRIBUTING WRITERS

Terry Buchen, CGCS, MG
terrybuchen@earthlink.net

Pat Jones
psjhawk@cox.net

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
BallenIsles Country Club

Tim Hiers, CGCS
The Old Collier Golf Club

Laurence Hirsh
Golf Property Analysts

Ted Horton, CGCS
Ted Horton Consulting

Michael Hurdzan, Ph.D.
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

Golf Course News is published 10 times per year by GIE Media, Inc., which also publishes: *Lawn & Landscape*, *Commercial Dealer*, *Interior Landscape Business*, *Snow Magazine*, *Pest Control Technology* and *Recycling Today* magazines. GIE Media is a leader in custom publishing, book publishing, database marketing, conferences and special events.

We would like to hear from you. Please post any comments you have about this column on our message board, which is at www.golfcoursenews.com/messageboard.



Don't let your cooler be a water hazard.

Ice Cover does not float—clipped to the pump housing for easier filling.

Two Check Valves inside the cartridge eliminate dripping—regardless of handle position.

Reinforced Handle Design is virtually unbreakable—tested for over 300,000 cycles to withstand over 450 pounds of force.

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

The only water hazards your players should encounter are the ones that are supposed to be there. Standard Golf's Water Purification System purifies water right at the point of use, eliminating opportunities for microbiological

contamination. And an improved pump and handle mean a stronger, failure-resistant system. To learn more, contact your Standard Golf Distributor or call 1-866-743-9773 to talk to a factory representative.

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

**STANDARD
GOLF** COMPANY

We've Got It All.

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.

Personal Web sites

Jim McLoughlin's writing presents unique perspectives and unconventional thinking. Based on these observations, I decided to attend his seminar at the Golf Industry Show in Atlanta this winter. I wasn't disappointed. His seminar was powerful and the impetus for changing the way I approach job searches. It was the best four hours I've invested in a GC-SAA educational opportunity. I walked out of the room that day wishing I had taken his seminar years ago.

I completely buy into the concept of a personal Web site. I've conversed with a friend who has an IT background and designs and maintains Web sites on the side. We've talked conceptually of a home page with six subpages that feature a detailed resume; photos and descriptions of projects completed; tournaments hosted; my philosophy about golf course management; historical budget performance; and bios of key staff, former interns and assistants (where they're working now). I've been quoted a figure of \$760 to set up this type of site, including the writing of code to prevent my site from being indexed by club members or others using a search engine. Is this a reasonable fee, and are you aware of superintendent Web sites that I could obtain some content ideas from?

Mark Gagne
Golf course superintendent
Walpole (Mass.) Country Club

McLoughlin's response:

Thank you for your kind words. The proposed fee of \$760 is a gift – fair for what you will be getting. I like the suggested layout of your Web site and might add one more: Ken Benoit has added a unique link to his Web site as a marketing tool to attract better crew members.

Adjusting tees

Jeff Brauer's article ["Is your course too long," May, page 18] is music to our ears. My wife, Jann Leeming, and I bought a golf course on the Maine/New Hampshire border out of bankruptcy in 1996. It was in such terrible shape we almost completely rebuilt it during the time we owned it. It was a labor of love. We sold the course last year.

During the rebuilding process, we came to many of the conclusions Brauer did in his article. As a result, we rebuilt

just about all our tees, which were placed at 4,169; 4,935; 5,904 and 6,277 yards from the green. They were placed for players who drive the ball less than 150 yards, 150 to 175 yards, 175 to 200 yards and farther than 200 yards. We also paid a lot of attention to the angles at which the tees were placed. If we had enough land, we would have had a set of tees between 6,500 and 6,600 yards from the green. Last year, we placed temporary tees 2,000 yards from the green for juniors and beginners. We based our thoughts on:

1. Bill Amick's study, which Alice Dye recommended;
2. Our own observations and measurements;
3. Placing temporary tees first and seeing if they worked; and
4. The length of the tees related to one another, not just their yardages individually.

Our philosophy is:

1. Tees should be placed so players with different abilities playing the correct set of tees would have about the same shots toward the greens and be able to get there in regulation.

2. Players would be able to use all their clubs in a round.

The results, among other things, were:

- Rounds were 15 to 20 minutes shorter, even on our busiest days;
- Senior men moved forward one set of tees and loved to be able to have fun and make some pars again;
- Family play increased;
- Junior play increased from 1.5 percent to 7.5 percent in four years;
- Mixed events became more popular because shorter hitters could participate instead of being dragged along; and
- Golf For Women magazine named us No. 37 in the country and No. 1 in New England for women based on design fairness primarily.

Course set up has become a passion for us. We'd love to reach a wider audience primarily consisting of golf course owners, designers, superintendents and others who have an effect on how people think about making the game more enjoyable for more players. Brauer's article is a tremendous step in that direction. We hope it has a profound effect.

Arthur Little
Former co-owner
Province Lake Golf
Parsonsfield, Maine

GOLF COURSE NEWS

Serving the Business of Golf Course Management

SALES OFFICES

GIE Media, Inc.
6138 Riverview Road
Peninsula, OH 44264
Phone: (800) 456-0707
Fax: (330) 657-2828

Kevin Gilbride

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

Scott McCafferty

Account manager, West Coast
Phone: (310) 546-9611
smccafferty@giemedia.com

Russell Warner

Account manager
Phone: (330) 657-2854
rwarner@giemedia.com

Bonnie Vellikonya

Classified sales
Phone: (330) 657-2472
bvelikonya@giemedia.com

Marie Spencer

Marketing manager
Phone: (330) 657-2859
mspencer@giemedia.com

Debbie Kean

Manager, books
Phone: (216) 961-4130
dkean@giemedia.com

Maria Miller

Conferences manager
Phone: (216) 961-4130
mmiller@giemedia.com

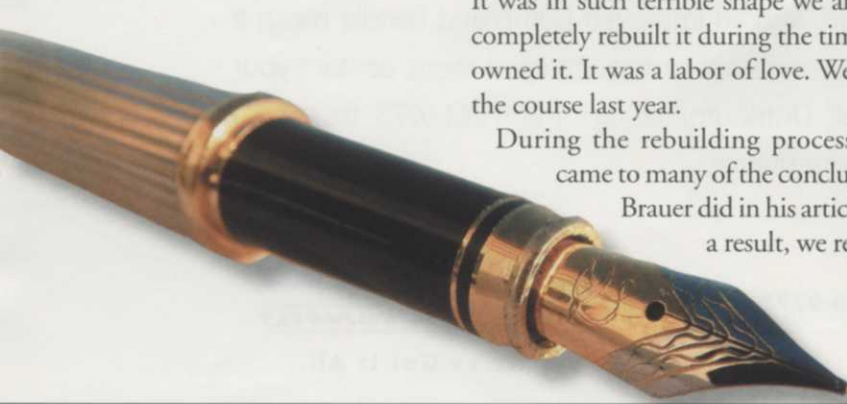
GRAPHICS / PRODUCTION

Andrea Vagas, Art director
Mark Rook, Creative director
Helen Duerr, Production director
Lori Skala, Production coordinator

CORPORATE STAFF

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

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



YUP, IT'S THAT GOOD!



New 3336 PLUS™ with ClearTec Activation Technology provides up to 50% more disease control. Period!

Sometimes a product just seems too good to be true. But with Cleary's new 3336 PLUS™, the numbers speak for themselves. Power-packed with ClearTec Activation Technology™, this revolutionary, broad-spectrum disease control solution works up to 50% longer on tough fairway diseases. Re-engineered from 3336® (the fungicide superintendents have trusted for over 30 years), new 3336 PLUS is a unique formulation breakthrough. 3336 PLUS makes more effective use of the active ingredient thiophanate-methyl, resulting in longer lasting disease control when compared with products containing the same active ingredient. But don't take our word for it. Discover for yourself all the amazing facts on new 3336 PLUS with ClearTec Activation Technology by calling **1-800-524-1662**, then press 6 or visit **www.clearychemical.com**.



Count on Cleary

CELEBRATING 70 YEARS OF INNOVATIVE TECHNOLOGY | UNPARALLELED CUSTOMER SERVICE

Read and follow all label directions. The Cleary logo, 3336 and 3336 Plus are trademarks of Cleary Chemical Corporation. ©2006 Cleary Chemical Corporation.

Go to: www.golfcoursenews.com/readerservice - select #12

Assistant superintendents create more opportunities for themselves

by John Walsh

Visit the Golf Course News Web site, www.golfcoursenews.com, for daily news updates about golf course developments and renovations, people, suppliers, associations and industry events.



Three years ago, the Midwest Association of Golf Course Superintendents made a pioneering move to help assistant golf course superintendents. And it might be catching on elsewhere.

That move was the formation of the Class C Advisory Committee, solely comprised of assistant superintendents. The purpose of the committee, which has eight members, is to help assistants further their professional development through education and networking and aid their ascension to the superintendent level.

"We wanted to understand assistants' plights and concerns," says Gary Hearn, golf course superintendent of Salt Creek Golf Club in Wood Dale, Ill., and president of the Midwest Association. "We wanted to bring them on the board so they could see how things operate, and so when they become superintendents they will want to join the board because of the exposure they received when they were assistants. Some assistants think there's a wall there at the board level and things are going on behind closed doors, but there really isn't.

"We felt we would have better communication with them," he adds. "We're big on committees because everybody gets involved then, and they bring concerns to the board so they can be addressed."

There are 35 to 40 assistants that regularly attend the Class C Advisory Committee meetings, but Hearn and the rest of the board are hoping for more attendance. He says the board is e-mailing as many as it can to make sure everyone is contacted. There are between 650 and 700 members of the Midwest Association, and a little more than 100 of them are assistants, according to John Ekstrom, assistant golf course superintendent at Hinsdale Golf Club in Clarendon Hills, Ill.

In November 2005, Hearn appointed Ekstrom head of the committee. Ekstrom is serving a two-year term and replaced Chad Kempf, former assistant



Ekstrom



Assistant golf course superintendents are creating more opportunities for themselves by serving on their local chapter associations' boards, albeit as nonvoting members.

superintendent at Hinsdale. Kempf now is an account manager and turf expert for EPIC Creative Communications in Wisconsin.

The committee hosts workshops that feature guest speakers, informal shop talks and roundtables in which assistants discuss their careers and the golf business. The committee also contributes to On Course, the association's magazine, and helps with scholarships. The committee also has started a quarterly newsletter.

"We're trying to boost camaraderie," Ekstrom says. "We just had an informal dinner meeting. It's mid-summer, and we're looking at the home stretch for the year. We want to exchange ideas and have more educational opportunities. We wouldn't have had the exposure to certain speakers without this committee."

Ekstrom says the association has received positive feedback from assistants.

"Being an assistant, we're not on the level of superintendents, but there could be more effort trying to organize assistants more," he says. "Most superintendents that I know and talk to are

very supportive of their assistants. They know the assistants are the future of the industry and are all for promoting the assistants to the best they can be."

Going forward, the Midwest Association's board will accept recommendations and ultimately select future chairmen of the Class C committee.

"I want jobs to come first and this to come second, third or fourth," Hearn says. "I want to make sure they have the time. We do a good screening of who's out there, and we have a good feel of who wants it and who can handle it."

Connection with other associations would be great, Ekstrom says. Assistants in other regions, after seeing this committee, might start with a group with their associations.

And that could be the Iowa Golf Course Superintendents Association, which has 532 active members, 94 of whom are assistant superintendents. Dan Schuknecht, assistant golf course superintendent at Talons of Tuscany in Ankeny, Iowa, wants to form a committee in the Iowa GCSA that is comprised solely of assistants.

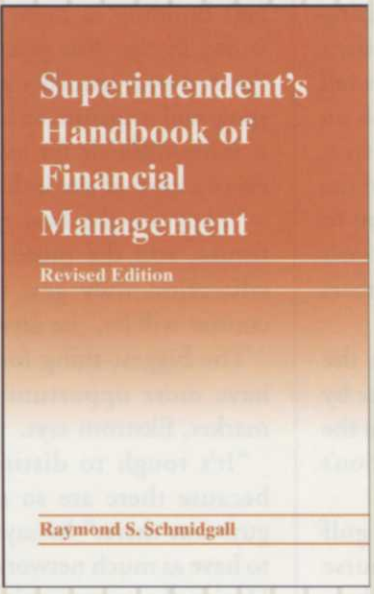
Get With The Program

Turfgrass solutions powered by Pure-Seed Testing, Inc.

800-247-6910 • www.turf-seed.com
 email: info@turf-seed.com • fax: 503-792-3637

Go to: www.golfcoursenews.com/readerservice - select #13

BUY BOTH FOR A SPECIAL SAVINGS ◀ ◀ ◀ ◀



Superintendent's Handbook of Financial Management, Revised Edition

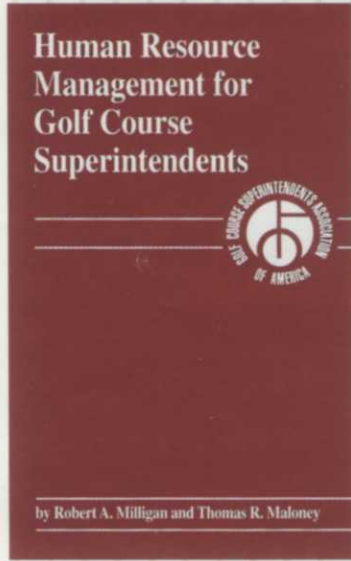
~~\$45~~ \$40
 Raymond S. Schmidgall
 ISBN: 0-471-46319-1, Hardcover,
 176 pages, October 2003

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.

Human Resource Management for Golf Course Superintendents

~~\$35~~ \$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 TODAY!

Call **800.456.0707** or Visit **www.golfcoursenews.com/store**

PLEASE FILL OUT ORDER FORM COMPLETELY

Name _____ Title _____
 Company _____
 Address _____
 City _____ State _____ Zip Code _____
 Phone _____ Fax _____
 E-mail Address _____

PAYMENT INFORMATION

Checks: Make payable to GIE Media (drawn on a U.S. Bank, in U.S. dollars)
 I authorize GIE Media to charge my:
 VISA MasterCard American Express Discover
 Card Number _____ Expiration Date _____
 Signature _____

Please Note: All products **will not** be shipped until payment information is received. All faxed and phone purchases **MUST** include credit card information. Check must be drawn in U.S. dollars and drawn from a U.S. Bank. There will be a \$25 fee for returned checks.

ON THE WEB: Purchase online at www.golfcoursenews.com/store
BY PHONE: Call 800/456-0707 and ask for a store representative
BY MAIL: Complete form and mail with payment to:
 GIE Media, ATTN: Bookstore, 4012 Bridge Ave, Cleveland, OH 44113
BY FAX: Complete form and fax, with credit card information, to 216/961-0364

| DESCRIPTION | QTY. | PRICE |
|---|------|-------|
| Superintendent's Handbook of Financial Management | | 40.00 |
| Human Resouce Management for Golf Course Superintendents | | 35.00 |
| COMBO - Both Books (counts as one item) | | 70.00 |
| MERCHANDISE TOTAL | | |
| Ohio residents add 8% sales tax | | |
| SHIPPING & HANDLING - subject to change Inside the United States - first item \$6.00; additional items \$2.00 each International - first item \$11.00; additional items \$4.00 each | | |
| TOTAL AMOUNT DUE | | |



FACE IT.
HEADS CRACKING
UNDER PRESSURE
DO NOTHING FOR
YOUR COURSE, OR
YOUR REPUTATION.



Install Confidence.
 Install Rain Bird®
 EAGLE® 351B
 Rotors.



Find out how
 this golf-quality
 short throw rotor
 solves irrigation
 challenges.

Visit www.rainbird.com/eagle351b.



Go to: www.golfcoursenews.com/readerservice - select #14

Schuknecht serves on an assistant superintendent task force for the Golf Course Superintendent Association of America, and from serving on that task force, he came up with the idea to get assistants more involved at the chapter level. He drafted a proposal that included an assistant serving on the board, but without voting privileges. The chapter accepted his proposal, and he became a board member who will serve two years.

"It's a great opportunity for assistants to get exposure to the board and to see what the board members go through," he says. "It's also a great networking opportunity and gives assistants a chance to see what issues the board deals with outside of their jobs. I've been exposed to conversation about sponsors, advertising, issues with vendors, planning a trade show and getting more people involved with the association."

Other chapters that have assistants serving on the board include:

- Metropolitan GCSA
- Quad State Turfgrass Association
- Western New York GCSA
- Mississippi Valley GCSA
- Northern Ohio GCSA
- Southern California GCSA
- Florida West Coast GCSA

- GCSA of New Jersey
- Connecticut GCSA
- Heart of America GCSA.

Serving on the board is a great opportunity for assistants to learn about what goes on behind the scenes at the chapter level, Schuknecht says. He encourages more assistant involvement, such as writing articles for the association newsletter and organizing the inaugural assistant superintendent golf tournament. He says that this fall there will be discussion to establish an assistant superintendent committee. He hasn't spoken to the president of the Iowa GCSA about it but has spoken to Jeff Wendell, CGCS, the association's executive director, who thinks members will support the idea.

Schuknecht helped to quicken the process of organizing the committee by getting a template from Kempf about the procedures of the Midwest Association's Class C Advisory Committee.

At an upcoming Iowa GCSA golf tournament for assistant golf course superintendents, Schuknecht says there will be more discussion about forming a Class C-type committee.

"If formed, I hope the committee will help us with our objectives – to get more assistants to become involved with the

golf tournament, write more articles for the newsletter and allow us to complete the tasks that superintendents and the association do for us now ourselves, such as all the details of putting together a tournament."

Hearn says there's a concern among assistants about moving up to superintendent positions because the industry isn't building as many golf courses as it did in the '90s and the industry is flooded with specialty positions such as spray and irrigation technicians, making it more difficult for assistants to learn every aspect of the industry.

"They are the best resource for the future, and the more experience and education they get, the better golf courses will be," he says.

The biggest thing for assistants is to have more opportunities in a tough market, Ekstrom says.

"It's tough to distinguish yourself because there are so many qualified guys out there," he says. "It can't hurt to have as much networking as possible. Having that opportunity can only make assistants better.

"However, without the support of superintendents, none of this would happen," he adds. "We're all very appreciative of the superintendents."

Changing course

Most of the Olivas Golf Course in Southern California is being regrassed with seashore paspalum, which is rare in the region. by Heather Wood

This is one of the warmest, most sultry summers Matt Mulvany remembers in Ventura, Calif., and for that, he feels blessed.

Mulvany, golf course superintendent at Olivas Golf Course, is regrassing most of the course, sprigging all fairways, rough and tees with seashore paspalum.

"We have reclaimed water high in salt, and we wanted something that was durable," he says. "About 85,000 rounds have been played here per year in the past. We wanted something that could stand up to that traffic and deal with salt as well."

Mulvany looked into other paspalum varieties but decided to plant Sea Isle 1.

"The paspalum has a finer leaf texture than kikuyugrass or some of the Bermuda varieties," he says. "It's an impressive-looking grass."

Mulvany, who has been a superintendent since 1991, has grow-in experience. He took a position at Buenaventura Golf Course, also in Ventura, in 2000

and oversaw the construction, complete renovation and grow-in of the course, which reopened in March 2005.

In 2001, he took the superintendent's position at Olivas as well, running both properties at the same time, which amounted to 36 holes. As the construction on Olivas approached at the end

of 2005, he decided to manage Olivas only so he could focus all his efforts on the construction and grow-in. Ed Easley, construction manager at Eagl Golf, is managing the project. Eagl Golf, which also employs Mulvany, operates the course.

"It's a collective effort between Ed, my-



Management chose to plant the Sea Isle 1 variety on the tees, fairways and rough. Photo: Olivas Golf Course

self, Nick Dunn, director of agronomy for Eagl, and Greg Gilner (golf operations manager for the city of Ventura),” Mulvany says.

“The golf course has, to some degree, a links-style design, and we wanted a turf that would follow that theme,” he adds. “Paspalum is a turf that’s lean and mean and doesn’t need as much maintenance and pesticides as other turf. It’s a pretty environmentally friendly turf, and that kind of goes along with the golf course.”

There are 35 acres of native area on the course, including sensitive areas that meander through the golf course, Mulvany says.

The crew has been working on the task of grassing 90 acres for about two months. By the first week of this month, there was one hole left to sprig. All the fairways, roughs and tees were prepped, rocked and picked. Then the sprigging machine dropped sprigs at a rate of 260

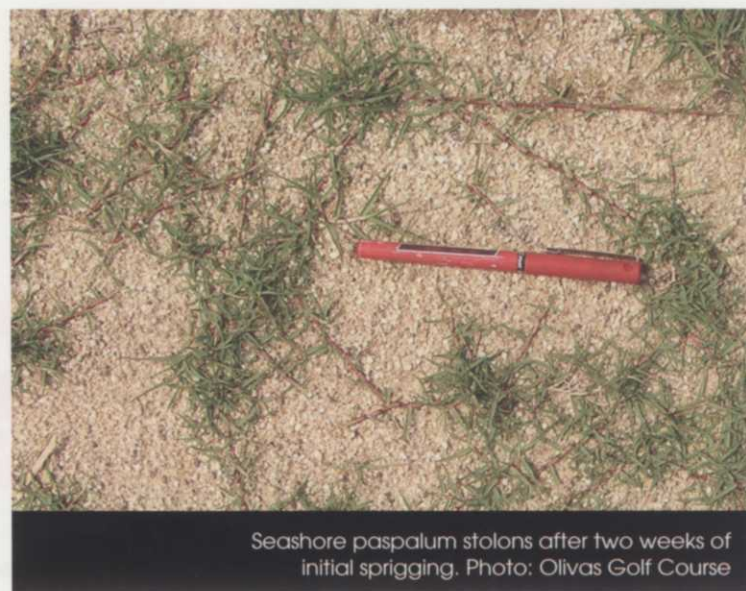
bushels per acre. The tractor-drawn culti-packer unit was then run over the sprigged areas to push the sprigs into the soil. The newly sprigged areas then were watered as soon as possible. Sprigs were planted by hand in the small spaces where the machine didn’t fit to ensure accuracy, Mulvany says.

All of the fairways, roughs and tees are being sprigged except for about two to five acres of sod around the greens, which remained bentgrass, to blend the greens into the green surrounds. Bunker slopes were sodded as well.

The humidity, which is uncharacteristic of Ventura’s climate, has helped the stolons grow.

“It’s amazing that the paspalum sprigs hold pretty well – there is no erosion,” Mulvany says. “Sprigging the slopes gets difficult. You’ve got to be careful.”

Mulvany noticed many of the seed-head sprouts above the 1.5-inch mowing height, which leads to interesting



Seashore paspalum stolons after two weeks of initial sprigging. Photo: Olivas Golf Course

contours around the greens.

“It’s not that we don’t like it, we’re just kind of surprised,” he says. “We weren’t expecting it. It’s just that turf at this time of year really shoots up.”

Mulvany expects to use about two

“TURN BACK THE HANDS OF TIME”

Are your bunkers suffering from the adverse effects of time? Are rocks, silts, and clays beginning to build up causing your bunkers to look, function, and play like concrete?



Courses all over the world rely on the Sand Storm by ZScreen LLC for all their bunker maintenance needs. The Sand Storm cleans and “recycles” your sand right in the bunker, saving you time and money. Say good-bye to the short term repair method of “removing and replacing” your bunker sand, and say hello to a more cost effective, long-term solution.



ZScreen
PATENT PENDING
SAND STORM

ph: 623-581-0307

www.zscreen.com

info@zscreen.com

pounds of nitrogen per 1,000 square feet annually to fertilize the course.

Mulvany says Olivas is one of a few courses in the region to use paspalum to this extent. The grass is used mostly

in Florida, but not much in California. One course that grows it is nearby Fairbanks Ranch Country Club in Rancho Santa Fe. The club has had the grass on its fairways, roughs and tees since 1985.

But only during the past five or seven years has Mulvany seen a considerable amount written about paspalum.

So far, the results have exceeded Mulvany's expectations, which makes him wonder why he doesn't see the grass used more prevalently in the region.

"You'd think more people by now would have used it," he says. "I'm not sure why, but I bet it would open people's eyes seeing this course."

Mulvany is waiting to see how the warm-season grass will do during the winter months. The question is how much of it will go dormant.

"Maybe that's one of the reasons why more golf courses don't use paspalum - people don't want the brown, splotchy look along coast," he says.

Olivas has been closed during the re-grassing. Currently, four or five holes are at a playable height, but Mulvany says it will take several months before the entire course is ready to reopen.

"It won't be the same golf course that we closed," he says.

Mulvany anticipates that the number of rounds played will increase when the course reopens because curious golfers will want to play the course and check out the paspalum.

"That happens with a lot of new courses," he says. "We'll probably see 350 golfers a week for the first few months." GCN

Are you still seeding your tees and fairways with Pennncross?



LS-44 is a better alternative.

Check the NTEP trials

Here are some examples below... for complete trial data go to www.ntep.org

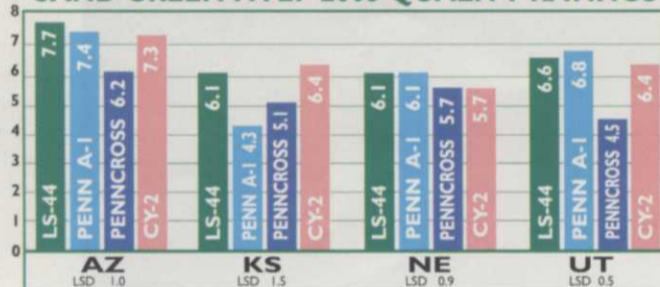
FAIRWAY QUALITY NTEP 2005



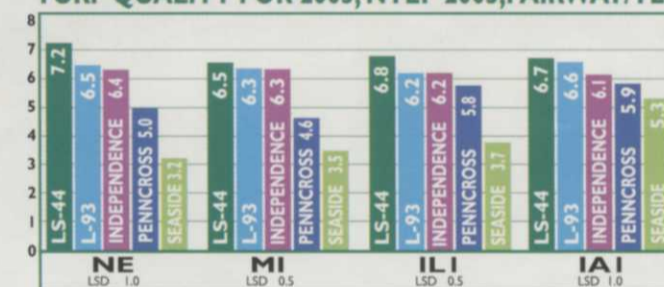
FREQUENCY OF TOP PERFORMANCE ACROSS ALL LOCATIONS



SAND GREEN NTEP 2005 QUALITY RATINGS



TURF QUALITY FOR 2005, NTEP 2003, FAIRWAY/TEE



LS-44 has out performed many of the new varieties and has been significantly better than Pennncross in the NTEP trials.

- ✓ Get better brown patch and dollar spot resistance.
- ✓ Use LS-44 when you overseed this fall.



32041 Cartney Drive / Harrisburg, OR 97446
Phone: 541-995-6836 / Fax: 541-995-6906
linksseed.com

Other New Turfgrass Varieties Available from Links Seed:
Terradyne Perennial Ryegrass
Turnberry Tall Fescue
Golden Nugget Kentucky Bluegrass

LS-44 a better choice for your course!



New paspalum stolons.
Photo: Olivas Golf Course



Who's telling your story?

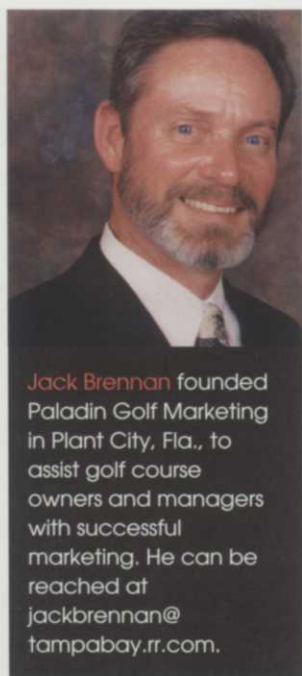
Your work results in more available oxygen and fewer allergens, noise reduction and lower cooling bills, thicker turf that filters pollutants and landscapes that increase property values. There are endless environmental, economic and lifestyle benefits that green spaces provide—yet consumers don't know about them. They don't understand the true value of your products and services.

Join us in telling the whole story of what you do. Project EverGreen is an organization dedicated to educating the public about the value of green spaces and encouraging responsible practices.



— PROJECT —
EverGreen
Because Green Matters™

To make a contribution or find out more, call 877-758-4835 or visit www.projectevergreen.com.



Jack Brennan founded Paladin Golf Marketing in Plant City, Fla., to assist golf course owners and managers with successful marketing. He can be reached at jackbrennan@tampabay.rr.com.

Player development

I e-mailed a player development marketing suggestion to clients, former clients and industry insiders. The first response I received made me rethink what priorities should be placed on player development from a golf course marketing standpoint and my marketing position on the topic.

My marketing position is simple: Create a section for every client marketing plan that includes player development and provides the detail for beginning a program from scratch and continuing it. As I rethink my position, it's not my marketing section that's flawed, it's the time it takes to implement a successful player development program and the costs associated with it. Nowadays, everyone wants beginners to play but doesn't want to provide the time, instruction and personal encouragement. Beginner instruction is done on a timeline. Real player development has taken a back seat to other marketing initiatives that provide immediate revenue to the cash register.

The e-mail response seemed like a riddle: "We need a thousand more courses or get rid of 3,000. This business can't go on like this! Michael Kahn." I called Mike Kahn, principal of GolfMAK, and asked him what he meant. His response was sure:

"If I suggested there was room for a thousand more golf courses in the United States, you'd think I was nuts given the economic state of the industry. This business has gone so highbrow it has forgotten an entire segment of society: the group of Americans age 25 to 75 who haven't yet played golf. Most will never take up the game because there's really no place for them to start. Golf needs hundreds more low-cost, player-friendly courses if the industry wants a healthy economic future. This is where municipally owned golf facilities can make a contribution to citizens and the game.

"We need a thousand new player-friendly golf courses in the United States to save many of the other 15,000-plus golf facilities from going broke. We need threshold recreation courses people can learn to play and enjoy. The types of courses we need are the ones that caused the golf-participation boom in the '50s, '60s and '70s. These are golf courses people can afford to play. Golf courses they can walk. We need push-up greens, push-up tee boxes and centerline irrigation systems. No course needs to be longer than 6,300 yards. We need greens

with speeds of eight feet, fairways that roll and shallow bunkers. We need courses where people who can't, and never will, break 90 can play and enjoy. These golf courses will feed and rescue the industry.

"There are millions of Americans who don't play golf, and never have played, but would try the game if it was easier to get involved. There are millions of families that could afford to take an interest in golf, but have no way to get started. Golf associations such as the National Golf Foundation, U.S. Golf Association and Professional Golfers Association of America don't pay the sufficient attention to the millions of Americans in the 25- to 75-year age bracket who have yet to try the game. However, these potential golf participants need a starter golf course, much like an old starter set of golf clubs. Some U.S. markets still have them but most don't.

"I started in golf when a walking round was about \$1.25 in the 1950s. A membership to the course was about \$65 a year. The course was a dusty, 5,400 yard, par-70 that was packed every day. The tee sheet was set at five minutes. We had more than 100 sets of rentals clubs that often went out twice a day. I was the starter in the morning. I cleaned the 100 sets every evening. That era is long gone, and we need it back.

"Most professionals really don't want to teach beginners because they hate teaching them. Every golf school ad says, 'Improve your game.' I don't see many that say, 'Come and learn to play golf.' What's this got to do with adding another thousand golf courses? It's where a properly planned and implemented, municipal, recreational golf course program can serve the community and the golf course industry. These golf courses can be created on redundant land and should be designed to walk or ride, and have a construction budget that computes to low green and membership fees. These facilities need a decent practice range, plus a continual and ongoing program to teach and encourage people to enjoy playing golf. It must be a walking golf course with rental sets, rental pull carts and forward tees for women and junior golfers. If space allows, a nine-hole par-3 golf course opens the door for older men and women and handicapped people to enjoy golf.

"The recreational golf course I recommend needs only a small clubhouse with a pro shop and a simple grillroom no more

than 3,000 square feet. It's important to plan the clubhouse to be functional and easy to operate and manage. The entire project shouldn't cost the community a dime because it can be financed by bonding issues and leased back to a golf course operator for more than debt coverage.

"I've discussed this type of municipal golf course plan to several architects, golf construction companies and financial sources. There are thousands of acres available for this kind of project. If well planned, recreational golf courses might be built for less than \$2 million. The finished product would include infrastructures and a clubhouse and be fully equipped to operate.

"The current high-priced set of golf courses won't bring in enough new golf players to replace natural attrition. We need new adult golfers. In my experience, every new middle-age golfer will cause other nongolfers to take up the game. They'll encourage family members, co-workers and friends to take up golf.

"I brought thousands of new golfers into the game from 1963 to 1988 while operating an annual learn-to-play-golf program. The single qualifier to be eligible to join our golf school: Students must never have played golf. We supplied all the clubs, balls, tees, teaching, etc., and saw they played the course. On many occasions, I watched mom, dad or an employee from a local business take up golf in our classes. Next thing you know, they're bringing out more people to learn. Many of those new golfers graduated to the higher priced country clubs or played the higher-priced public golf courses.

"All that happened regularly back in the '50s through the '80s. It's not happening now, and it's not going to happen as long as the industry keeps building courses that are out of reach financially.

"Golf will get back to positive economic health in one of two ways: abandon 3,000 golf courses or build the game with affordable, player-friendly golf courses. That's where municipally owned golf courses can serve the community and the golf industry."

Thanks Mike. Maybe we all should rethink our industry's past successes and means to those successes. They could be the key to our future as a successful, thriving industry again. GCN

Practical tee design

Many courses are remodeling tees to improve them to the best condition possible, but they need to be practical and functional.

In the early days of golf, golfers simply teed up on greens. Golfers soon realized a separate tee, distant from the previous green, improved safety, speed of play and provided a level starting point. However, tee boxes in the early days were small and had little artistry or sophistication. They eventually became larger to reduce wear and elongated to provide shorter playing options. Multiple tee complexes evolved and put each player on a smaller tee with an old-time feeling. Tees also became style elements, varying from elevated to sunken surrounding earth forms, and were often integrated with surrounding landscape to assume artistic forms equal to greens and bunkers.

Currently, functional and easy-to-maintain tees are fashionable. Our clients ask for detailed tee designs to make tee maintenance easier. They want adequate size, but because every square foot of tee costs money to construct and maintain, we're rethinking the "bigger is better" mentality because smaller tees save mowing time.

How big?

Based on experience, we favor the higher end of the recommended standard of 150 to 200 square feet per 1,000 rounds for tee surfaces. In most cases, 4,000-square-foot tees for private clubs with limited play (20,000 rounds), and 6,000- to 8,000-square-foot tees on public courses with more play (40,000 rounds) work well. Facilities might need to accommodate the busiest month of play at one square foot of space for every 1,000 rounds. For example, if a Minnesota course generates 30,000 rounds annually, 7,500 of which are in its busiest month, it might need

7,500-square-foot tees rather than the suggested 4,500- to 6,000-square-foot tees.

We also adjust individual tees based on construction method, arrangement (multiple tees require more space than runway tees because there's unusable space at the ends of each tee) and microclimate. Starting holes, par 3s, short par 4s with a lot of iron use and holes with forced carries are increased to 250 square feet per 1,000 rounds.

Recently, I detailed how a trend toward longer courses was driven by a miniscule number of players and how that inadvertently might make courses too long (July issue, page 18). While improving tee conditions, take the opportunity to find additional back-tee length where possible and adjust middle- and front-tee length to adapt the course better to the majority of members. Generally, these yardages should be about 7,400 or longer; 6,700; 6,100; 5,500 and 4,500 yards.

However, achieving those lengths is just a partial answer to tee design. To minimize tee space, distribute tee size correctly among multiple tees to match play. Visit www.growingthegame.org to view research about course length preferences by Frank Thomas – former USGA technology guru who's currently an independent consultant. I've interpolated Thomas' data and others' to comprise the chart below.

Using the chart, a course that generates 20,000 rounds might end up with rectangular tees of the following dimensions:

Black tees: 15 feet by 15 to 20 feet. Championship tees generally generate light play and can be as small as you can mow, especially on a course that's 7,100 yards or longer.

Blue tees: 30 feet by 30 feet, with occasional use of the front for white tee markers.

White tees: 30 feet by 85 feet, 35 feet by

75 feet, 40 feet by 65 feet or 45 feet by 60 feet. The extra width helps with heavier play. Generally, for play and maintenance, extra length is more beneficial than extra width, allowing tee settings to match pin settings to keep length consistent daily.

Green tees: 30 feet by 30 to 40 feet, with occasional use of the back for white tee markers to reduce white tee size.

Red tees: 20 feet by 20 feet. We hesitate to undersize red tees because many women are sensitive to the size of tees and the number of women golfers is increasing. Experience shows forward tees don't need to be larger on par-3 holes because they don't cause as much damage.

Efficiencies

Rectangular and simple curvilinear tees can minimize tee size because they maximize useable area. Rectangular tees are useable side to side. The front and back areas of round tees are too narrow for tee markers, and round tees add 5 percent to the space needed. Free-form tees are attractive, but add even more space. The old runway tees reduce starts and stops and mowing time, but are less attractive to golfers.

Some dimensions are more maintenance efficient than others. Fifteen feet is the minimum tee-marker spacing, so one can achieve two tee settings side to side with 30-foot tees. Tee markers must move a yard daily for 30 days to recover. Using the minimum tee-marker space on weekdays (about 20 days) and full width on weekends (about 10 days) lets a 30-foot-wide tee be only 22 yards from front to back, whereas a 25-foot-wide tee must be 51 to 96 feet long – an increase of 12 percent to 15 percent in tee construction and maintenance costs.

Designing tee widths to match tee mowers (about 5-foot wide with overlap) minimizes mowing passes. If a 15-foot-wide championship tee can be mowed in three passes, why provide 17 feet? Because tees are often cross mowed, tee lengths in the next largest five-foot multiples than required might decrease mowing passes. Using an even number of passes might bring one back out in the same place he started, saving travel time.

Using the precise measurements outlined above might save construction and maintenance costs when rebuilding tees.

GCN



Jeffrey D. Brauer is a 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 Architects, can be reached at jeff@jeffreymbrauer.com.

Course length preferences

| Approximate course length | Play (in %) | Annual average rounds at a course | | |
|---------------------------|-------------|-----------------------------------|--------|--------|
| | | 20,000 | 30,000 | 40,000 |
| 7,100+ | 3.5% | 700 | 1,050 | 1,400 |
| 6,600 | 16% | 3,200 | 4,800 | 6,400 |
| 6,100 | 57.5% | 11,500 | 17,250 | 23,000 |
| 5,600 | 19% | 3,800 | 5,700 | 7,600 |
| 4,900 | 4% | 800 | 1,200 | 1,600 |

GET WITH THE PROGRAM



BROWN PATCH RESISTANCE PROGRAM



GRAY LEAF SPOT RESISTANCE PROGRAM



HEAT & DROUGHT TOLERANCE PROGRAM



SALT TOLERANCE PROGRAM

What is The Program?

The Program makes it easier for you to identify Scotts Turf-Seed varieties that are bred to solve turfgrass problems, reduce the use of inputs, and save you money. "The idea," says Crystal Rose-Fricker, president of Pure-Seed Testing, Inc., "is to highlight some of the specific special traits these varieties have, such as salt tolerance, Brown Patch resistance, shade tolerance, and heat & drought tolerance."

What do the icons mean?

The icons help you identify, at a glance, varieties of species—from bluegrasses and ryegrasses to fescues, bentgrasses, and others—that are resistant to problems like heat and drought, salt, Gray Leaf Spot, Brown Patch, and more.

How are these special seed varieties developed?

Our research affiliate, Pure-Seed Testing, Inc., has been successfully breeding improved grasses for over thirty years. They enjoy the unique advantage of operating two separate breeding research facilities—one in Oregon and the other in North Carolina—which allows them to develop varieties that are suited to a wide range of climates and growing conditions. Through their efforts, Scotts Turf-Seed provides customers with better grasses, which resist diseases and are more tolerant to extreme conditions.

Research and development of improved varieties is no small task, as it can easily take up to ten years to identify and develop grasses with desirable traits. It's a meticulous process that entails collecting, crossbreeding, and testing thousands of hybrids to discover the best parental plants with which to cross with current top-performing varieties.

To improve and enhance special traits, Pure-Seed Testing, Inc. selects certain grasses and then repeatedly applies extreme pressures such as heat, humidity, disease, and salt to breeder plants. Those plants that survive the harshest conditions are

then selected for continued development. Through this process, Pure-Seed Testing, Inc. continues to cultivate many new problem-solving grasses, which not only provide superior performance but also offer the added value of benefiting the environment, because ultimately fewer inputs are needed to maintain healthy grass.

How does The Program save me money?

When you get with The Program, you quickly find the Scotts Turf-Seed varieties that help you maintain quality turf and let you save water, irrigate with effluent water, or apply fewer chemicals and fertilizers, all of which contribute to your bottom line.

What programs are available?

Currently there are five program solutions in place, with more to follow. The varieties listed below are part of the 2006 / 2007 program; furthermore, since many varieties have multiple desirable traits, they can fall into more than one program.

Our Brown Patch Resistance program includes Tall Fescue varieties like Apache III, Endeavor, Innovator, Olympic Gold, Silverado II, and Southern Gold, just to name some of the grasses that help you take control of your Brown Patch disease management program and reduce your fungicide applications.

Our Gray Leaf Spot program varieties—Citation Fore, Gray Star, Gray Hawk Blend, Refine, Manhattan 5 GLR, and Silver Dollar Perennial Ryegrasses as well as Tar Heel II, Coronado Gold, Matador GT, and Silverado II Tall Fescues—help you save money with fewer fungicide applications, and they reduce the need to overseed damaged areas.

The Heat & Drought Tolerance program includes many Hard Fescue varieties like Silverado II, Silverstar, Tar Heel II, and Wolf Pack, to name a few. Plus there are heat- and drought-tolerant Kentucky Bluegrasses such as Midnight and Midnight II, drought-tolerant blues like Unique and Brilliant, and heat-tolerant bluegrasses



**SHADE TOLERANCE
PROGRAM**

like Midnight Star and Longhorn Texas Bluegrass. There is also Sea Spray Seashore Paspalum, and seeded Bermudagrasses like Savannah, Sun Bird, and Transcontinental. All of these grasses are bred to withstand the heat and drought of summer, to help reduce stress, water use, and labor costs.

The Salt Tolerance program includes Tall Fescues like Tar Heel II and Pure Gold; Perennial Ryegrasses such as Brightstar SLT, Salinas, Citation Fore, Catalina II, and Saltese Blend; Kentucky Bluegrasses like Moonlight and Northstar; and Creeping Bentgrasses like Seaside II and Sea Spray Seashore Paspalum. All of these varieties are well suited for use near seashores and in desert climates, so they can help you maintain beautiful green turf even in high saline soils and where effluent water is used.

In our Shade Tolerant program, Tall Fescue species include Apache III, Coronado, Coronado Gold, Endeavor, and many more. There are also Fine Fescue varieties like Aurora Gold Hard Fescue, Aurora II Hard Fescue, Florentine Strong Creeping Red Fescue, Little Bighorn Blue Hard Fescue, plus many more. And there are other varieties like Shade Champ Tufted Hairgrass, Shade Star Crested Dogtail, and Winterlinks, Winterplay, and Winterstar Poa Trivialis. All of these Shade Tolerant program varieties provide a strong and healthy stand of turf in tough-to-maintain shaded areas.

So get with The Program to quickly find the Scotts Turf-Seed varieties that help you save water, apply fewer chemicals and fertilizers, or irrigate with effluent water, and you will not only grow healthy turf, but you will be contributing to the health of your bottom line as well.

For more information on The Program and all Scotts Turf-Seed products, see your nearest Scotts Turf-Seed distributor.

Scotts Turf-Seed: Powered by
Pure-Seed Testing, Inc.



TURF-SEED

Architects' reverse roles



Jim McLoughlin is the 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 or 760-804-7339. His previous columns can be found on www.golfcoursenews.com.

Look anywhere in the free world, and you'll find within a client-service provider relationship that the party that pays fees and costs generally controls the agenda and makes final planning decisions.

Interestingly, this scenario often doesn't exist within the golf course architect-golf course developer relationship – where the golf course developer pays the standard design fee and construction costs but frequently surrenders control of planning decisions to the architect. Because this scenario tends to compromise one of the developer's key objectives – a comfortable playability factor – developers often are left with courses that are difficult to play and attract too few golfers.

The core problem is that many golf course architects tend to overreach and are somewhat blind to the degree of difficulty they design into their golf courses. Generally, architects believe they're complying with developers' wishes about comfortable playability when they provide five to six sets of tees for each hole. The assumption here is that because distance is presumed to be the primary culprit that increases most golfers' scores – the multiple tee sets on each hole mean everyone can play these courses comfortably.

This is a false premise. While multiple tee sets enhance playability, they aren't the primary determining factor of a player's score, which unquestionably is the scope and intensity of green defenses throughout the course.

Too many architects defend their greens as if each was Fort Knox with conditions that require high, soft-landing shots to hold the greens: overbunkering, deep bunkering, narrow green depths, tight water hazards and overcontouring of fast green surfaces. Because the vast majority of players can approach greens with only low trajectory shots, they're consistently being faced with having to get "up and down" at almost every green. While scores and handicaps increase accordingly, the enjoyment factor quickly dissipates with all the scrambling to hole out.

Inexperienced developers (about 70 percent of the golf course developer pool) generally are defenseless when it comes to protecting their courses against a high degree of design difficulty primarily be-

cause they can't read the architect's highly technical topographical construction plans before committing to final course development. Consequently, developers aren't able to prejudge the playability level of their golf courses before construction, and therefore, must trust the architect to deliver a fair golf course. Unfortunately, this trust is often misplaced because many architects believe they know what's best for their client developers and also what's necessary designwise to be top 25/100 course ranking eligible, i.e., increase course challenge, which translates into greater playing difficulty.

At first look, it would be easy to blame the golf course architect for this scenario. However, this wouldn't be an accurate assessment of the situation because (1) the architect community shouldn't be held accountable for inexperienced developers who can't understand/interpret golf course design planning, and (2) once developers default in this regard, the architects are left with no other choice but to fill the void and assume duties at both ends of the architect-developer spectrum. Thus, we see a role reversal with architects assuming the client role of calling the shots.

Some might argue that because the architect and developer are on the same team with a common agenda, it shouldn't matter when developers lack experience because the architect will cover for the developer. This is a problem because it's a myth that architects and developers always share a common agenda. The critical difference is that architects generally design their golf courses with course ranking potential and the additional business this brings forefront in their minds; while developers have balanced challenge and the playing enjoyment of their clientele forefront in their minds. While both parties are well intentioned, there couldn't be a greater strategic planning dichotomy – one where the golf course architect will consistently prevail.

Another part of the problem is that it isn't easy for an architect to design a golf course that offers both a fair challenge to the better players and everyone else. While it's relatively easy to design an overtly easy or difficult course, finding the delicate balance point between these two extremes within one course

design is one of the more difficult challenges in golf. The architect community will tell you itself that an architect only begins to achieve this level of expertise after completing about a dozen or so golf course designs. This clearly suggests developers curtail the often-used practice of selecting less experienced architects to save modest sums of design fees. This is a counterproductive measure that lends credence to the penny-wise pound-foolish cliché because this approach consistently will yield high-economic-risk golf courses that minimize enjoying this earth's most enjoyable game.

Corrective measures

1. The initial remedial thought that comes to mind is to suggest developers hire golf consultants to help address the problems they have interpreting construction plans. The concern, however, is there are too few experienced consultants available to get the job done and too many inexperienced consultants willing to take the money to try.

An innovative counterapproach would be to have developers hire a second golf course architect/draftsman to counsel them through the design planning of the primary architect – among other things.

2. Thankfully, today's software programs allow architects to prepare exact, 3-D, computer-generated hole-by-hole animations from construction plans *before* committing to developing the golf course. This is similar to hole animations network telecasts produce from video tapes *after* course construction is complete.

Each of these two corrective approaches will afford golf course development teams the guaranteed opportunity to judge the playability levels of their golf courses *before* committing to construction. Furthermore, implementation of these two measures will allow developers to reacquire quality control of their golf course development projects, and because of this, to generate unprecedented constructive dialogue with the architects that will lead to better golf course design.

No investor should allow a developer to commit to golf course construction without implementing these two quality assuring initiatives first. Money talks, or money walks. GCN

We would like to hear from you. Please post any comments you have about this column on our message board, which is at www.golfcoursenews.com/messageboard.



The 2007 Builder Excellence Awards

In Conjunction with the Golf Course Builders Association of America



**2007 GOLF COURSE NEWS
CREATIVE AWARD WINNER**

*Laughlin Ranch Golf Club
Bullhead City, Ariz.*

The 2007 Builder Excellence Awards are presented to companies who continuously improve the profession of golf course construction in agreement with the GCBA mission statement. The prestigious awards increase awareness of the contributions made by builders to the industry and the benefits of excellent course design and construction to the game.

Awards Recognize A Variety of Achievements:

- Creative Award for **best new construction**
- Heritage Award for **best reconstruction**
- Legacy Award for **best renovation**
- Affinity Award for **best environmentally designed course**

These prominent awards will be presented during a banquet at the 2007 Golf Industry Show in Anaheim, California. Award winners will also receive recognition with a profile in the pages of *Golf Course News* and a press release announcing their achievement sent to all major associations and local media.

To learn more or to apply, call John Walsh, editor of *Golf Course News*, at 1-800-456-0707 or visit www.golfcoursenews.com to download an application and the rules.

Feedback and focus



Robert A. Milligan, Ph.D., is professor emeritus from Cornell University and senior consultant with Madison, Wis.-based Dairy Strategies. He can be reached at 651-647-0495 or rmilligan@trsmith.com.

Logic says by this time of year maintaining golf courses should be a breeze. Routines should be well established, and everyone should be in a groove. My experience, however, is that the opposite often is true.

Why? Weather is a factor but not the only one. Your seasonal workers, and perhaps your full-time workers (including yourself), are beginning to think about the next step in their lives – back to school, to their regular routine, to cooler weather, the next season at the course – and the current job is becoming boring and old.

Although frustrating, this decrease of focus and performance is natural. So what does a golf course superintendent do? The responses I observe fall into two categories:

1. Accept a decline of effort and performance justifying the season is almost over.

2. Reprimand employees for their poor attitude and performance.

Neither works because neither represents the appropriate feedback response. The first violates the point good performance should always be treated differently than poor performance.

A reprimand should be reserved for situations in which poor performance is caused by the employee's lack of motivation, energy, concentration, focus, etc. On the surface, that's the case here, but employees aren't losing focus intentionally – their attention is being diverted from the present to the future. In response, you need to take steps to increase employee focus.

1. Copious amounts of positive feedback. During a recent GCSAA Web cast, I asked superintendents how many times they provided positive feedback during the past 24 hours. The most common response was once or twice. Few said five or more. Positive feedback costs nothing and usually enhances the attitude and energy level of the giver and receiver. I recently met with a golf course maintenance employee who said he was so excited by receiving compliments from the assistant superintendent, a golfer and the pro on the same day he woke the next morning before his alarm sounded and arrived at work early.

Increase the quantity of excellent positive feedback to re-enforce and maintain excellent job performance. Also, enhance the effectiveness of your positive feedback by

improving its quality. Feedback must be:

- **Specific.** Instead of saying, "You're doing a great job," say, "I just came from the 7th green, and it looks great. The green is perfectly mowed, and the bunkers look fantastic." The actions or outcomes that are the basis for positive feedback must be clear.

- **Timely.** Provide the feedback now.

- **Genuine.** Be sincere. Providing feedback can't be or appear to be a chore. It's your job as a superintendent, and you must be excellent at your job just as your expect excellence from your employees.

Be especially conscientious about conveying all positive feedback you receive to your staff. Think how you feel when you receive positive feedback from golfers, pro shop personnel and service reps. Not conveying those compliments to your staff is a huge missed opportunity.

Providing copious amounts of positive feedback isn't easy. You've been trained and are an expert at detecting and solving problems on your course. In a supervisory role, you have to look for more than problems. You have to catch your employees doing something right.

Provide the appropriate positive feedback when your employees succeed. If you do so for the next 21 days, increased feedback should become a habit.

2. Increased nonmonetary compensation. Many of you can't increase wages or benefits for your employees, so think about compensation as a total rewards system rather than dollars per hour. In a total rewards system, compensation is monetary and nonmonetary. By increasing positive feedback, you have increased the nonmonetary rewards, but you can do more.

Think about compensation as meeting employee needs and wants. What do your employees – probably mostly young, mostly seasonal – need or want on a hot August day? I recently met with each maintenance employee at a golf course. More than half recalled a day three weeks earlier when the superintendent treated them all to an ice cream cone at the clubhouse. Little things are more important than they seem. They carry a large message: You're valued; you're important. Here are some compensation ideas:

- Make certain, especially on hot days, everyone has a lot of cool water or other liquids.

- Provide adequate breaks. Research shows more work is finished during a given time when adequate breaks are provided. We all need to relax and regenerate.

- Listen to your employees for ideas that will hit home with them.

- Provide special rewards, which are best provided for a specific accomplishment, such as a great looking course during the hottest weather in three years, a compliment from the best golfer in the region or a specific goal exceeded.

3. Actions that help employees retain job focus. As the season progresses, it's easy to let everyone fall into a routine that leads to boredom and reduces job focus. To combat entropy:

- Keep everyone learning by maintaining and increasing training for new tasks and redirection to exceed expectations on current tasks.

- I'm amazed at how many seasonal employees return to golf courses year after year. This might be the time to provide new opportunities to seasonal employees to see how hard you wish to recruit or promote them for next season.

- Provide opportunities to rotate tasks, especially ones enjoyed, to provide variety.

4. Lead by example. One of my favorite leadership books ("The Leadership Moment" by Michael Useem) highlights examples to develop leadership principles. From the unrelenting determination and optimism of Apollo 13 flight director Eugene Kranz, the author deduces: "Expecting high performance is prerequisite to its achievement among those who work with you. Your high standards and optimistic anticipations will not quarantine a favorable outcome, but their absence will assuredly create the opposite." Use this principle to lead your course by example:

- Set the tone. Don't let yourself start thinking "It's hot! It's humid! It's getting boring! The season will soon be over!"

- The hotter it is, the more you would like to be in your office or other cool places. However, the hotter it is, the more you need to be out working with your team.

These thoughts will inevitably seep into the consciousness of everyone (including yourself) as the season (or the really hot weather in the South) winds down. However, you can prevent those feelings from permeating your staff. GCN

by the NUMBERS*

130 The number of U.S. markets in which the median green fee at 18-hole regulation courses is less than \$40

65 million

The number of rounds, which is 13 percent of the U.S. total, generated annually in Michigan, Illinois and Ohio

255 The number of new golf facilities under construction as of July 18

119 The number of golf course additions that are under construction as of July 18

14

The percentage of all golf facilities in the United States that are located in Michigan, Illinois and Ohio

93

The number of golf course additions that have been completed this year as of July 18

62

The number of new golf facilities that have been completed this year as of July 18

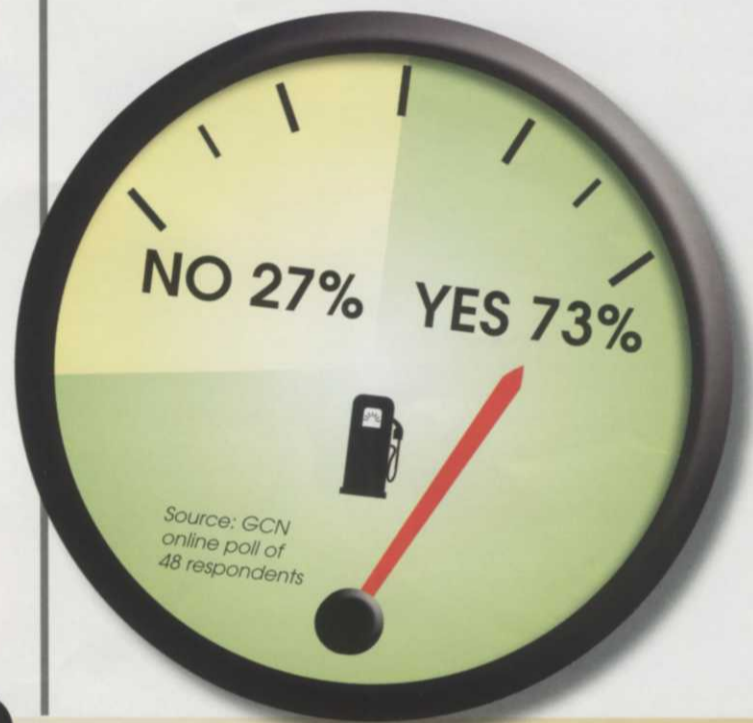
4.5

The percentage increase of rounds at U.S. facilities through May year over year

*All numbers from the National Golf Foundation



HAVE INCREASED FUEL PRICES AFFECTED OTHER AREAS OF YOUR MAINTENANCE BUDGET?



Trick shot artist, instructor celebrates golf show anniversary

Fort Myers, Fla. - Trick shot artist and golf instructor Mike Calbot celebrates 25 years as "The Golf Doctor" in Southwest Florida. Calbot has been the local voice of golf, and his TV program has run on WINK every week since 1981. He's the author of a golf instructional video and dozens of articles about golf. Calbot has been a swing analyst and golf instructor to more than 6,000 people since 1988. He has been instrumental in developing junior golf in Southwest Florida, helping establish local programs for children to learn the game. For more information about Calbot, visit www.webgolfdirector.com.

QUOTABLE

"It has all the earmarks to serve as a poster child for ecological progressiveness." - golf course architect **Steve Smyers** about The Golf Club at BridgeWater, which is scheduled to open in October in Lakeland, Fla.

"We selected Champion, which we have on two of the other three courses here, because it's given us the most consistently good putting surfaces for the longest time." - **Ken Gorzycki**, director of golf course maintenance at Barton Creek Resort & Spa in Austin, Texas

"If asked to do something, don't say you can't do something because it's too hard. Most things can be done if you take the time and come up with a plan. Sometimes guys don't go through with it." - **Marshall Fearing**, director of grounds at Castle Pines Golf Club in Colorado

"I don't hire skills. I hire personality and develop someone's skills." - **Rock Lucas**, owner of Charwood Country Club in West Columbia, N.C.

Maintenance consulting



GCN INTERVIEWS
BLAND COOPER,
DIRECTOR OF
AGRONOMY FOR
VALLEYCREST
GOLF COURSE
MAINTENANCE

Photo by Scott Stiles

Anything but average

NOT IN THE BUSINESS OF SAVING MONEY, BLAND COOPER CONSULTS WITH SUPERINTENDENTS TO HELP IMPROVE THE GOLF COURSES THEY MANAGE

by
PAT
JONES

There is little about Bland Cooper's career that fits his rather unique first name. He's been a superintendent, owner, general manager, turf consultant and is now director of agronomy for Calabasa, Calif.-based ValleyCrest Golf Course Maintenance.

When he was younger, Cooper seemed destined to follow in the legal footsteps of his dad, a circuit court judge, but he also inherited the family green thumb (his great grandmother was a master gardener) and started working at courses early on. Thus, the road to law school took a sharp turn as he ended up at Horry-Georgetown Technical College's turf program in South Carolina and, from there, jumped immediately into a wide-ranging career in golf course management.

His passion for the business is evident as he describes his career; the current state of the industry; and the good, bad and ugly of consulting and management companies.

Q Where the heck did you get a name like "Bland"?

It was my mother's maiden name. The Coopers are big on family names.

Q How'd you get into this crazy business?

I never was passionate about anything else. My father was an attorney, so I always thought that's what I should be. In college, I changed majors several times and took a law class one semester and realized I didn't care for it much. I had started playing golf when I was younger and fell in love with it. I had a friend who worked at a local course and got a job there working carts. At 14, I started triplexing greens. By 16, I was sharpening reels and doing much more on the course than anyone that age would be allowed to do today. I'm most comfortable when I'm given a wide berth, and I definitely was given a wide berth. No matter what I did, I always

came back to golf.

After my junior year of college, I decided to go down to Horry-Georgetown. My dad was supportive, but my mom wasn't too sure. I went down there thinking, 'This will probably be a semester off from school.' But I loved it and had a lot of wonderful instructors who challenged me. After my first year at H-G, the thought of being a lawyer never crossed my mind again.

Q You started out as a regular superintendent. What did you learn from that?

You learn about earning the trust of others and executing your program. I enjoyed every minute of it, but I wanted to get into ownership. So I started the Sulstone Group with Sam Shumate.

Q What's changed for a typical Southern superintendent during your career?

Twenty years ago, if you were able to grow bentgrass in the South, you were considered a hero. Now, it's almost a given. It's amazing.

Q You're still young, but you've done a lot. What would you tell a young person who wants to get into the business now?

The one thing I'd stress to a young guy who is coming out of turf school right now is courses often hire from among well-known clubs and superintendents. That's the route I would have gone if I had to do it again. That's crucial to the development of your career. It's tough to move up the ladder in this industry unless you've done that.

Q What's the biggest mistake superintendents make?

Too many superintendents fail to continue to learn new things every day. This industry's not getting any dumber ... it's just getting

smarter. You have to continue to learn just to stay up to speed.

I know a superintendent who makes his former assistants call him every month with something new they've learned. That's great.

Q You did double-duty as a course owner and agronomist for a while. What was that like?

It was a great learning experience. I understand the financial side of the business much better than I used to, and I have a better appreciation for marketing and revenue development. But my heart was always on the agronomic side.

Sam and I sold off the Sulstone properties to a developer in Charlotte and some other people. It was a very amicable separation. We both just wanted to go different ways.

Q Tell us about ValleyCrest.

I'm the director of agronomy, and I report to Terry McGuire and work with our regional superintendents. I still have a couple of consulting clients, but I'm focused on helping our superintendents and assessing new potential properties.

I'm doing a lot of the same things as a superintendent only on different properties. I spend half my time on existing properties and the other half assessing potential new clients. When you're providing fixed-cost maintenance, you need to uncover every single stone to make sure the return on investment is there. We're at 43 18-hole equivalents now, and we're hoping to be at 50 soon. Half our portfolio is in California and Florida, but we're growing throughout the country.

Q Why is ValleyCrest different?

The difference is that we're specialized. We've made a dedicated and concerted

effort to do this effectively and profitably. We've also hired good quality people. ValleyCrest is the largest landscape contractor in the country, and it was started by Burton Sperber out of the back of his truck more than 50 years ago. That culture permeates everything we do on the golf side as well. We're growing in the right way ... a healthy way.

ValleyCrest isn't into golf course ownership. We're a maintenance contracting company, so we look at courses differently. We take a hard look at a course to establish a fixed price.

We're also able to provide much more support to our superintendents because of consultants like Ted Horton, Mike Huck and myself. We have many resources that our superintendents can use.

Q What are you looking for when you assess a course?

We assess a course for two or three days. Agronomically speaking, we want to align ourselves with the proper product. We want to make sure we reach a partnership with a client that wants to improve his facility, not just someone that wants to reach status quo. We're not in the business of saving money.

Q What kind of problems do you encounter during assessments?

Courses that are 15 years old or older often have antiquated pump stations and bunkers that need to be replaced. We also see a lot of greens that haven't been well-managed. It's common to find pH issues or soil chemistry problems. We take 700 to 1,000 pictures, profile the soil of every green and tee and measure organic matter. You're always going to find problems with the property and, more times than not, it's not the fault of the superintendent.

Q Do you like it?

I get personal satisfaction out of it. I get to work companywide with our 12 regional superintendents and move around based on need.

Q Why do management companies have a negative reputation?

Management companies that own their own courses have to find ways to make the bottom line work to pay off their debt. In many markets today, debt coverage ratios are upside down, and that makes it impossible to service large debts and provide the resources to properly maintain the property. That's business suicide. You're going to fail. Also,

most executives of management companies understand the revenue side of the business well but don't understand the expense side, like golf course maintenance.

I've never found a correlation between spending and success. They always rely on the superintendent to squeeze an extra dollar out of the operation. They blame the effect, not the cause.

Q Some management companies try to solicit new business by going over the head of the superintendent. Do you guys do that?

ValleyCrest tried that once many years ago, as did many other companies. I remember getting one of those at the time and getting extremely angry. That was a long time ago. Today, it's different. There's been much fence-mending during the past 10 years.

Our current philosophy now – based on input from Ted Horton and others – is to take business that comes in over the transom—people who contact us – or through a superintendent we know and trust. We never go onto a property without contacting a superintendent first. We want him to be the first person who knows. We're a company of superintendents.

Q What do you mean by that?

We aren't for everybody. We've looked at a facility and said, 'You know what, we can help you but only marginally.' We can't fix everybody or meet everybody's needs. We never, ever reduce a superintendent's resources when we go in. We can't compensate for lack of resources.

We also have efficiencies because of our size. Toro has been a wonderful partner for us. And we're self-insured on workers' compensation. Our superintendents do 95 percent of their purchasing on their MasterCard. No purchase orders ... it's clean and fast. It's bad business to have your highest-paid employee shuffling papers all day long.

Finally, when you reach a certain size – I think we're the seventh largest multicourse operator – there's a lot of ability to move internally and a lot of opportunity for training and learning. We hope that internally generates many great people. We can almost guarantee them opportunities. That's versus a stand-alone club where the opportunities might be limited. It's not for everybody. There are certain personalities that don't work well within the structure. There's a certain amount of oversight that some people aren't comfortable with. We don't take away the individuality.

Q The business seems to be going toward a more team-oriented approach, but I'm sure you still run across facilities that work in 'silos' where managers don't talk much with each other.

The only industry I know that works successfully in silos is the insurance business. They don't want information shared between departments.

As everybody's tightened their belts in the golf industry during the past few years, it's become critical for everyone to share information across departments. The g.m. drives that. Superintendents need to be aggressive finding out what's going on throughout the whole facility. There are still too few superintendents and golf pros who will go out after work and have a beer and talk. Lack of communication is a recipe for disaster.

Q You've done a lot of consulting, and that can be another dirty word among superintendents. How do you respond?

Memberships don't bring in a consultant when everything is working perfectly. The superintendent in that situation needs to meet with them right away, understand the reasons and get a handle on it. For every (consulting) horror story, there are a hundred success stories. But, unfortunately, bad things happen, so superintendents have every reason to flinch. But, perception isn't always reality.

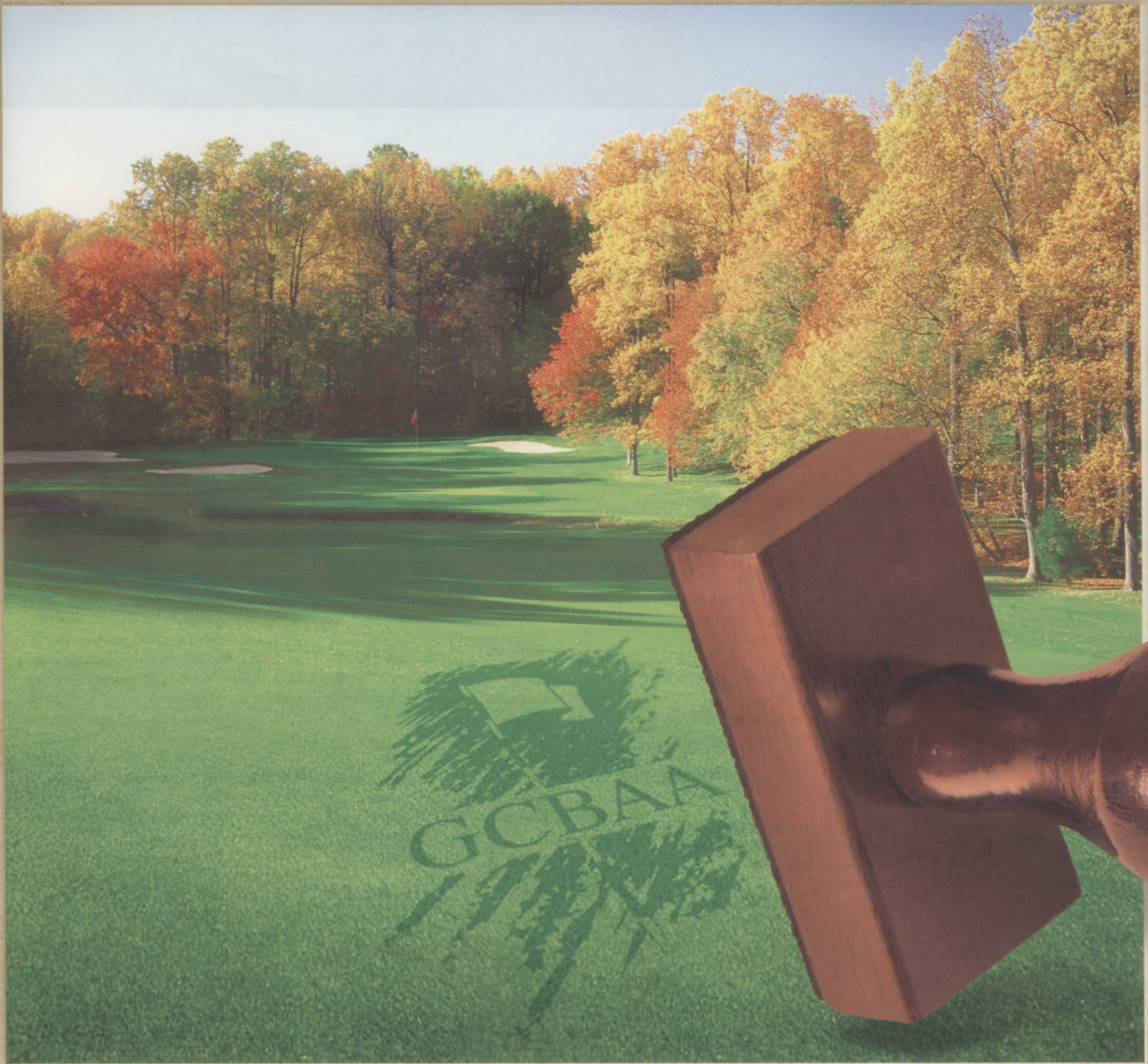
In some cases, the members already have made up their mind, and the consultant is just a means to an end. I consulted for a club last year where one of my best friends was the superintendent. I worked hard to get them to understand, but they still terminated him. The decision was already made.

A consultant should never go into a club where he knows the superintendent is going to get fired. It needs to be transparent. I'd never go into a club without feeling comfortable the superintendent wanted me there.

Q What's next for you?

I want to keep doing exactly what I'm doing now. I have the opportunity to do just what I love to do: spend all of my time supporting superintendents and see new courses. It gives you the chance to go around and learn more and more. That rejuvenates me. Until I get burned out, it's perfect.

My father told me if you enjoy it and you're passionate about it, try to be the best you can be. It sounds like a line from one of those corny motivational posters, but it works for me. GCN



[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

Go to: www.golfcoursenews.com/readerservice - select #19



A win for everyone

FLORIDA GOLF COURSE WILL COEXIST WITH WETLANDS, WILDLIFE AND RESIDENTS

by
MARK
LESLIE

Photos by Steve
Smyers Golf
Course Architects

Call it a quintuple win. For the golf industry in general. For wading birds and water life. For the project developers and future golfers. For the Southwest Florida Water Management District. And for golf course architect Steve Smyers.

"The project and its effects on the local environment have worked out fantastically," says Smyers, referring to The Golf Club at BridgeWater, which is now under construction and features a core golf course being built as the centerpiece of a new 757-acre residential community.

The property, which is in Lakeland, is a reclaimed phosphate mine and has 259 acres

of manmade lakes and wetlands.

"It has all the earmarks to serve as a poster child for ecological progressiveness," says Smyers, a member of the executive committee of the U.S. Golf Association, which has been an industry leader in environmental awareness.

Time will tell whether BridgeWater will be a model for golf course construction in wetland areas.

"This is something I'll be tracking for a while," says Jeff Whealton, a senior environmental scientist with the Southwest Florida Water Management District. "I hope it will be the standard.

"We haven't had the best experiences with golf courses," Whealton adds. "Some are maintained more than if they were in a subdivision setting without golf courses. Besides direct impacts, there also are possible secondary impacts from golf courses that are a concern in the review of these projects. Secondary impacts are caused by such things as fertilizers, pesticides and herbicides running off of the course into the wetlands."

In BridgeWater's case, Smyers, golf course developer Dirty Five and housing developer LandMar Development aren't replacing distressed wetlands with improved wetlands – a task that wins laudatory support from most corners. They must perform under higher expectations.

The BridgeWater site contains a classic definition of a perfect ephemeral wetland, one that dries up during dry season and comes back full force in the rainy season, according to Whealton. The first time Whealton visited BridgeWater, wetlands were dry – brown, crispy vegetation that looked dead.

"If that were your snapshot in time, you would think, 'This is pitiful; how do you

get mitigation for this?' he says. "But I went back after the rainy season, and we were wading in knee-deep water with dragon flies everywhere and little frogs chirping. It was a 180-degree turnaround. It went from a moonscape to a wetland wonderland."

Some of the most important wetlands in the country are less than half-acre patches that, in Florida, are typically exempt from mitigation criteria. Frogs and tadpoles and other amphibians and invertebrates gather in these little pools, and when they dry out, they become pockets of water where the wildlife is concentrated.

Two or three wading-bird rookeries are located in the immediate area. These wetlands are like a wading-bird's buffet – a major food source, according to Whealton.

"It's very important these little wetlands be available for the wading birds," he says.

And that's precisely what the SWFWMD wants replicated by the Smyers team and Biological Research Associates of Tampa, the environmental consultant working on the project.

"The bottom line of our environmental resource permits is that the conditions in post-development have to be the same in predevelopment," Whealton says. "There has to be functional replacement."

The watchwords for wetlands mitigation are always create, enhance, restore and preserve or a combination of the four.


Smyers' design partner Patrick Andrews says that at BridgeWater they're wiping the slate clean, i.e., regrading the entire 200 acres of the golf course, except for the existing 20 acres of trees and lakes.

Smyers and the development companies reached an agreement with SWFWMD officials that all the mitigation required for the entire BridgeWater community would

AT A GLANCE

The Golf Club at BridgeWater in Lakeland, Fla.

| | |
|-----------------------------|---------------------------------|
| Cost: | \$6 million |
| Construction began: | Spring 2005 |
| Target date for opening: | October 2006 |
| Course length: | 7,254 yards |
| Par: | 71 |
| Golf course acreage: | 200 |
| Lake and wetland acreage: | 259 |
| Grass on greens: | Tifdwarf Bermudagrass |
| Grass on tees: | Aussie Green Bermudagrass |
| Grass on fairways: | Aussie Green Bermudagrass |
| Architect: | Steve Smyers |
| Developer: | Dirty Five |
| Builder: | John G. Walton Construction Co. |
| Golf course superintendent: | Sean Klotzbach |



The BridgeWater site contains a classic definition of a perfect ephemeral wetland, one that dries up during the dry season and comes back in the rainy season.

be incorporated on the golf course.

"In this case, we're serving a practical need for the community because without the mitigation of these wetlands, Southwest Florida Water Management District wasn't going to permit the community," Andrews says. "So, the community gets the practical benefit of getting all their mitigation taken care of so they're not worried about weaving homes around wetlands. They get an efficiency in how they can build out their community. Plus, we get a core golf course in relationship to a strong environmental context, which makes the best golf holes and provides a great experience for the golfer."

The creation

Smyers says the development team will improve the ephemeral wetlands, creating 32 contiguous – rather than spotty and unconnected – acres that will be controlled to remain shallow year-round rather than just during the rainy season.

"It will be stunning to look at – a marvelous addition to the golf course," he says.

The water fluctuates strongly in Florida between the dry and wet seasons, but Whealton says planners knew the final out-flow elevation from the property and could plan backwards from that spot, stacking all the water back up inside the project.

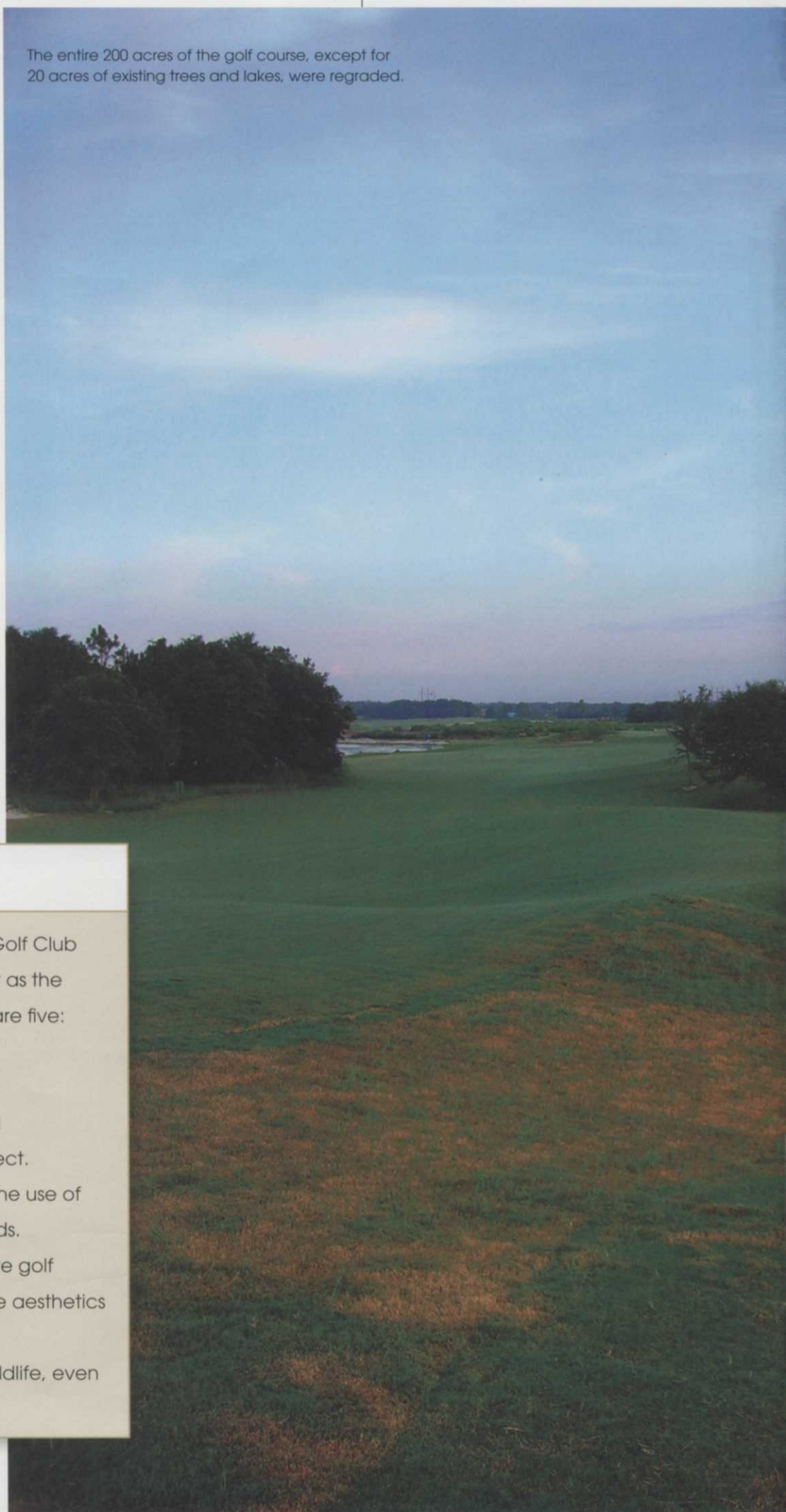
Having Mobile, Ala.-based golf course builder John G. Walton Construction Co.

The entire 200 acres of the golf course, except for 20 acres of existing trees and lakes, were regraded.

Everyone wins

There are many positive aspects of the development of The Golf Club at BridgeWater, which contains a core golf course being built as the centerpiece of a new 757-acre residential community. Here are five:

- The area's wading birds get an all-you-can-eat buffet.
- The Southwest Florida Water Management District gets its replacement ephemeral wetlands, fulfilling its mission and illustrating another solution for a major development project.
- Developers LandMar and Dirty Five are able to optimize the use of their 1,500 acres and preserve precious lakes and wetlands.
- Golf course architect Steve Smyers is able to design a core golf course uninhibited by housing and take advantage of the aesthetics of viable, high-class wetlands.
- Golf wins by proving it can cohabitate with all types of wildlife, even those that eat one another.





completely regrade the land allowed Smyers and Andrews to control the water so there won't be too much or too little water at any time.

"You have to control the grading so that in the wet season the plants won't be inundated with too much water, and in the dry season, there's not so much water that the wading birds can't forage for fish," Andrews says.

Walton is grading three zones: a deep zone, an intermediate zone and an upland native-grass zone, all of which will interact with the golf course.

"We're creating everything from upland habitat and live oaks to the buffer zones with native grasses bordering wetland areas," Andrews says.

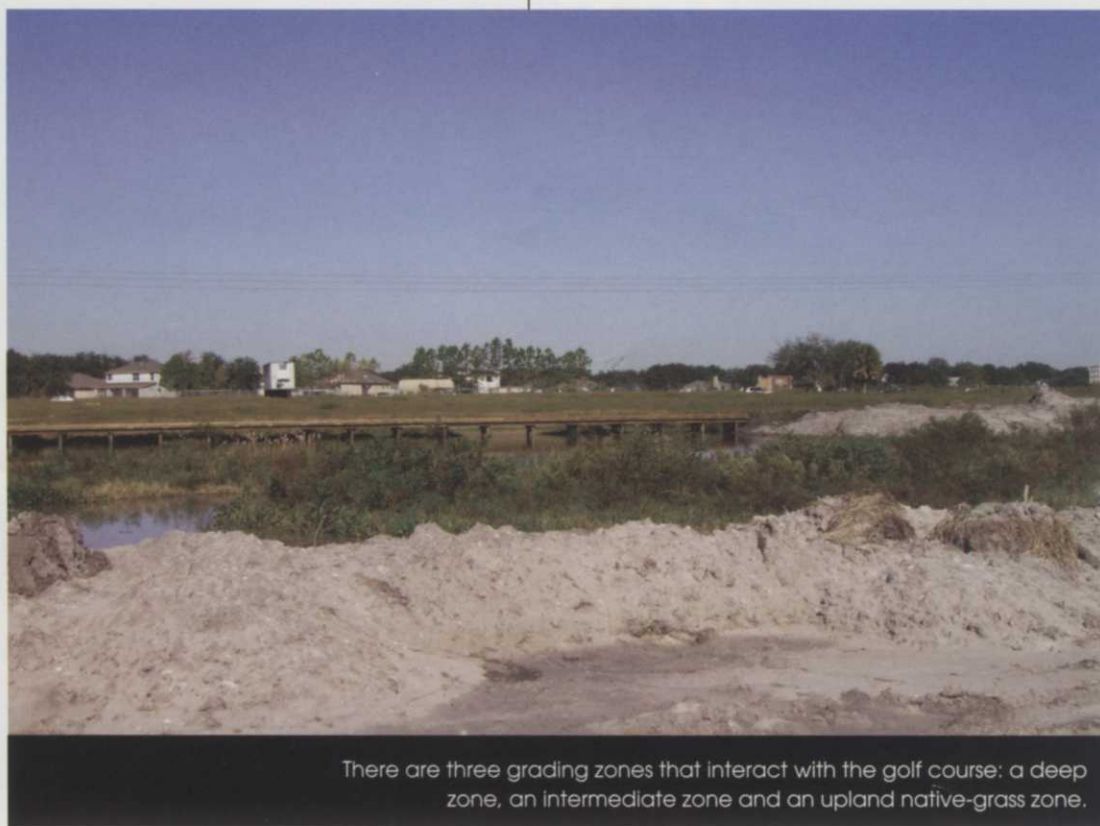
In effect, they're creating a 165-acre wildlife corridor that will include 79 acres of recreated wetlands and 64 acres of upland native plantings in trees and grasses. Upland materials range from a variety of native trees to grasses and shrubs, such as slash pine, sabal palm, cord grass and paspalum.

There also will be parks interspersed throughout the property and common areas around lakes and wetlands that are important amenities to people who will be living there, according to Lakeland planning manager Bruce Kistler. The new BridgeWater wetlands also will serve to handle runoff from the nearby interstate and an abutting office park. GCN

Mark Leslie is a freelancer writer in Monmouth, Maine. He can be reached gripfast@adelphia.net.



The development team created 32 contiguous acres that will be controlled to remain shallow year-round.



There are three grading zones that interact with the golf course: a deep zone, an intermediate zone and an upland native-grass zone.

Forging a solid bond

SUPERINTENDENTS AND OWNERS DEVELOP CLOSE RELATIONSHIPS FOR SMOOTHER-RUN OPERATIONS

by
**JOHN
WALSH**

It's very common for people to develop close relationships with others to grow personally and professionally. But what might be less common are golf course superintendents who have close, working relationships with the owners of the courses they maintain. These types of relationships are cherished by superintendents and most likely won't be developed again during their careers.

One of a kind

More than a year and a half ago, Curtis James left his job as golf course superintendent of the East Course at Merion Golf Club in Ardmore, Pa., to work for Jim

Scott, owner and developer of Olde Stone Golf Club in Bowling Green, Ky.

"It's been a dream of Mr. Scott's to build a golf course and community because he wanted to give back to the city of Bowling Green," James says.

James first met the 67-year-old Scott through the Arthur Hills design team, who designed the Olde Stone course. James describes Scott, who owns a construction and distribution business, as a loyal Southern gentleman who works every day and drives beat-up, old pickup truck.

"The first time I met Mr. Scott, we hit it off," James says. "He saw in me what he was like – young, aggressive and likes to work.

I taught him how to build a golf course, and he taught me about building roads and moving dirt. He'll put forth the resources if you work and prove you're worthy. He's given me full range and doesn't micromanage me. I'm not reporting to a board – I report to him only. Sometimes people think working for one owner is a nightmare, but as long as you do what you were hired to do, you'll have a great working relationship."

Golf course superintendents always will have unexpected circumstances arise when growing-in a new course, James explains, and Scott understands that because he bids jobs and has maintained budgets his entire career.



An example of the unexpected occurred when James started on the job and realized the irrigation system was set up for warm-season grass. Two heads at every station – one to water the rough and one to water the fairway – were needed to water the bluegrass and bentgrass, and it was going to cost an additional half-million dollars, James says. Scott approved the irrigation change.

“If you can show the reasoning behind your theories, you can get through to owners,” James says. “Mr. Scott is all about having the best course.”

Professionally, James says his relationship with Scott has improved his communication skills. Personally, they’re friends.

“We play golf together,” he says. “I have no family down here, and he kind of adopted me. I have gained a lot of respect for him. He can be doing anything he wants, and he’s out here spraying weeds. He wants me to be happy and has taught me good values that I didn’t have before I started working for him. This is probably only time in my career I will have a relationship like this.”

Two peas in a pod

Much like James, Chris Taylor, director of golf/operations at Charwood Country Club in West Columbia, N.C., has a similar relationship with his boss/course owner. Taylor has worked at the semiprivate, 27-hole facility for 11 years. During that time, Taylor became a golf pro while working as a superintendent.

Right before working at Charwood, Taylor left a job as golf course superintendent to work for a fertilizer company, but he didn’t like it. Taylor heard about an opportunity at Charwood through the grapevine, so he called Rock Lucas, who, at the time, was the facility’s owner, superintendent, golf pro and manager.

“Rock had been running the course and was the superintendent and golf pro as well, so we hit it off,” Taylor says.

“When Chris came into the picture, I wasn’t looking for anybody,” says Lucas, owner and managing partner of Charwood. “I had a good assistant in the shop. But a sales rep told me there was a good guy that I should talk to to help me out because he

thought I was stretched too thin. I heard so many good things about him – his character, personality, professionalism, manners and work ethic. So Chris and I had lunch. He’s a genuine person, and I could tell that from the moment I met him. I don’t hire skills, I hire personality and develop someone’s skills. I didn’t really give him a job – he just worked out. It evolved, and he went from a guy with no title to director of golf. He runs the business.”

Taylor says Lucas was looking for someone to share the load of running the operations and eventually run the entire business. He says his dual certification of Class A golf course superintendent and golf pro helped him get the job.

“Rock is the type of fellow who came in with me early and worked on cart paths, trees, and building greens and tees,” he says. “We bonded. He’s a very good businessman and likes working with numbers. I was more oriented toward working with a crew. We became friends. Rock wanted to groom me to the point I’m at today. I basically manage the place. Rock is still



Photos by Roger Mastroianni



The close relationship between Jack Vickers, green chairman and part owner of Castle Pines Golf Club, and Marshall Fearing, director of grounds, makes Fearing's job easier because Fearing knows exactly what Vickers wants. Photo: Castle Pines Golf Club

involved. We talk regularly, but not as often as it used to be. We talk about problems as well as successes."

The relationship between the two, who are close in age, grew but changed.

"We're still close, but we don't work side by side anymore," Lucas says. "I got into real estate development and spend most of my time doing that. I can do that because of Chris and his staff. I'm still there every day, but I'm working with real estate. I still meet with Chris to see where we're going. I have talked to people whose golf course suffered because they were gone. The ship was still sailing, so to say, but it was off course. Our course is still on course because of Chris."

"Chris is a good people person," he adds. "He does an excellent job working with customers while growing grass. He's excellent at dealing with staff and golfers, and that allows me to not be needed around all the time. Chris also knows his limitations and contacts me before things get out of hand."

Lucas says the two are friends and used to do a lot together outside of work but as their families have grown older, they're at different stages in parenthood.

Taylor says the relationship he has with Lucas has helped him immensely.

"Rock is active in the owners association, and I've followed along on his coattails and met a lot of people," he says. "Educationally we've done a lot together. We've gone to seminars, PGA continuing education programs, superintendent meetings, USGA Green Section meetings. We've always tried to improve and learn new things not because we have to but because we want to."

Communication between Taylor and Lucas is open and frequent.

"We talk about everything," Taylor says. "If he or I wanted to do something, we'll bounce it off each other. We'll always crunch the numbers and hash the idea out together. We make every decision together. We have made bad decisions, but the major decisions have been good. We're very proactive and staying ahead of the curve to stay in the black every month."

With such a strong relationship, one wonders if that rubs off on others.

"People in our area question Rock about how we operate," Taylor says. "We are very visible. People see us together. I'm sure people have admired our relationship, and hopefully we've helped people."

A sound understanding

Out in Colorado, another close working relationship has developed between

a superintendent and the man in charge. Marshall Fearing came to Castle Pines Golf Club in 1986 after being offered an assistant golf course superintendent position and, in 1987, became superintendent. Currently, he's director of grounds at the private 18-hole club.

Castle Pines was started in 1979 by 13 people, one of whom is Jack Vickers, who is the one and only grounds chairman and the dictator of course conditions at the club, which opened in 1981.

Fearing's relationship with Vickers started shortly after he started. After the director of agronomy left in 1990, Vickers and Fearing developed a closer relationship.

"Mr. Vickers is demanding but has a good understanding of golf," Fearing says. "He's been around golf his entire life. He understands going from A to B and knows the challenges we have to go through to get where he wants us to be."

An example of this understanding is trying to have *Poa annua*-free greens and tees and the challenges related to that goal.

The relationship between Fearing and Vickers makes Fearing's job easier because he knows what Vickers wants.

"I know his pet peeves and what drive him nuts," Fearing says. "It's clear to us what he wants. He's a reasonable person. He realizes the limitations of what we can and can't do. I'm lucky and fortunate that I decided to

come and work at Castle Pines. People in key positions have been here 20 years, and that speaks well of Mr. Vickers."

Vickers is a good listener and analytical person, according to Fearing.

"Being a member of a number of clubs through the country, including Augusta National, he sees things he likes and can bring back some of those ideas to discuss with us," Fearing says. "He has friends in the golfing community and sees the good and bad. In his mind, if you're going to have a golf club, one guy is in charge, and that's that. I listen to other members, but at the end of the day, what's going to be accomplished will come from him."

Better relationships

Lucas, who is a member of the National Golf Course Owners Association and past president of the South Carolina PGA, says the industry is experiencing changes among owners and superintendents. Various owner and superintendent associations are working together, such as inviting each other to conferences for discussions among groups.

"When golf started to decline, owners started to scrutinize the golf course operations more and saw the need for a better relationship with superintendents," he says.

The main thing Fearing recommends to other superintendents who want a better



Charwood Country Club is run well because of its owner and director of golf/operations. Photo: Charwood Country Club

relationship with owners is to be straightforward with them.

"There are limitations on what you can and can't do," he says. "If asked to do something, don't say you can't do it because it's too hard. Most things can be done if you take the time and come up with a plan. Sometimes guys don't go through with it."

Fearing doesn't see why superintendents and owners couldn't work more closely together.

"A degree in agronomy isn't needed — owners should have a basic knowledge of what we do and what we deal with," he says. "Mr. Vickers has that." GCN



Jack Vickers, green chairman and part owner of Castle Pines Golf Club, knows the challenges Marshall Fearing, director of grounds, and his crew go through to get course conditions to where Vickers wants them. Photo: Castle Pines Golf Club

Out, damned pests

NUMEROUS WEEDS AND INSECTS PRESENT MORE OF A PROBLEM FOR SUPERINTENDENTS IN THE SOUTH THAN IN THE NORTH

by JOHN TORSIELLO

Any golf course superintendent worth his salt realizes a golf course is a miniature ecosystem that presents unique maintenance challenges. Perhaps in no other area of course management is this more evident than with herbicide and insecticide programs. While some superintendents might only have to worry about a few dandelions and some crabgrass, others must constantly arm themselves against an array of weeds and pests, ranging from mole crickets and fire ants to thistle and goosegrass.

The cost to wage these battles ranges significantly according to which part of the country a course is located. In the North, herbicide and insecticide programs might amount to only 10 percent of a facility's overall maintenance budget, while in some areas of the South, herbicide and insecticide programs might even be more than 50 percent of the budget. Pests and weeds vary from region to region and from golf course to golf course.

"You're dealing with microclimates and unique ecosystems that demand different management programs," says Todd Lowe, a Green Section agronomist with the U.S. Golf Association who's based in Florida. "We have golf courses in Florida that were built on old tomato fields or citrus groves that have wall-to-wall nematodes. On other courses, the problem might be on one green and a tee box."

Being completely aware of a course's ecosystem and having detailed knowledge of soil types, average weather conditions, and pests and weeds common to the area allow superintendents to prevent and manage quickly potentially damaging pests and weeds. But the best defense is always a healthy turf.

"When I came here six years ago, our herbicide program was way up on the list

At Eagle Rock Golf Club in Billings, Mont., golf course superintendent Lee Bestrom doesn't need to apply insecticides but sprays for weeds as needed.
Photo: Eagle Rock Golf Club

of priorities," says Joe Tennyson, golf course superintendent at The Sagamore Golf Club in Bolton Landing, N.Y. "We had an extremely tough problem with weeds. We attacked it by spraying the entire course and got a handle on it. Then the challenge was keeping the turf healthy because the best defense against weeds is a tight turf canopy."

Scott Neumann, golf course superintendent at Fairview Farm Golf Course in Harwinton, Conn., concurs, saying the best way to keep a golf course disease and pest free is growing good grass.

"That means an aggressive fertilizer and fungicide program and attacking problems immediately when they appear," he says. "We call it integrated pest management. Superintendents should always conduct soil tests to determine the condition of their turf. It's like a person – you get sick and have to have some type of treatment. It's the same way with grass."

Fewer intruders

In the Northern regions of the country, growing healthy turf, spraying on an as-needed basis and remaining vigilant to control potential weed and pest problems usually suffices.

"Fortunately, in this area, we have very few insect problems," says Dave Brandenburg, golf course superintendent at Rolling Meadows Golf Club in Theresa, Wis. "We will spray for cutworms on the greens every third or fourth year and spray for grubs in the fairways occasionally. And we will put an application of herbicide down for weeds on the majority of the golf courses each spring. We'll have a little thistle in the rough areas that we spray for as needed."

Rolling Meadows, which is built on open, rolling prairie land, enjoys a climate conducive to growing strong, tight turf and keeping it that way.

"It's unusual for us to have more than three or four days in a row with temperatures in the 90s," Brandenburg says. "Generally, we have cool nights in the summer and normally have a breeze that dries the course out."

Lee Bestrom, golf course superintendent at Eagle Rock Golf Club in Billings, Mont., is fortunate as well.

"We don't use insecticides on the course because there's no need to," he says. "We'll spray a little herbicide to keep dandelions and thistle down, usually in the spring and fall, because that's a forever type of problem. We have a climate well-suited to growing strong turf. We aren't humid, even in the summer."

Bestrom and his maintenance crew spray for weeds as needed, but mostly look to prevent problems.

"If you don't prevent, then you have to control," he says.

Tennyson treats the fairways at Sagamore with an insecticide annually to prevent grubs that attract skunks and crows, which can seriously damage the turf when they chase grubs in the soil.

At Fairview Farm, Neumann and his crew spray insecticides with the active ingredient imidacloprid wall-to-wall in June or July to control grubs.

"We're pretty aggressive with the greens to keep the cutworms down," he says. "Our herbicide and insecticide spraying amounts to about 10 percent of our budget. Where we're spraying and applying fungicide and fertilizer on a regular basis, we might spray once a year to control weeds and pests and then attack an area as needed."

Jonathan Burke, golf course superintendent at The Ranch Golf Club in Sheffield, Mass., sprays once or twice a year to prevent the emergence of Japanese beetle grubs, but he doesn't spray for the Bluegrass weevil. In fact, he encourages the weevil in some areas, as long as they don't chew on the bentgrass, because they can help keep *Poa annua* out of some areas.

"I'm spraying fungicide perhaps once a month or even once a week in some parts of the course," he says. "I spray herbicide to control crabgrass every other year. We'll go after postemergent crabgrass or broadleaf as needed, and in general, keep a close eye on things."

"Sometimes the members at a club care if there's a dandelion by the third tee box," he

IPM development

An integrated pest management program can be a valuable tool to help superintendents prevent and control insects, weeds and diseases. An IPM program also can reap economic and environmental benefits by reducing the amount of materials and manpower needed to maintain turf.

Six important steps when developing an IPM program are:

- Site assessment;
- Monitoring;
- Setting thresholds for action;
- Stress management;
- Identification and optimization of management options; and
- Evaluation.

Source: GCN research

adds. "If you have the time and the budget to be that selective, it's great, but most golf courses don't have that luxury."

The building of American links-style golf courses recently led to hands on weed management in some instances.



Knappenberger

"On two of our courses that have fescue and bluegrass in the rough areas, we go in and spray to keep the crabgrass, dandelions and clover down during the spring," says Andy

Knappenberger, superintendent of Turning Stone Casino Resort's three 18-hole golf courses in Oneida, N.Y. "Later in the



Crabgrass, dandelions and clover are some of the pests in the fescue and bluegrass roughs on two of the three golf courses at Turning Stone Casino Resort in New York. Photo: Turning Stone Casino Resort

season, we don't do much about it, but we will go in and hand-pull some of the larger plants like milkweed. We don't want them crowding out the grasses."

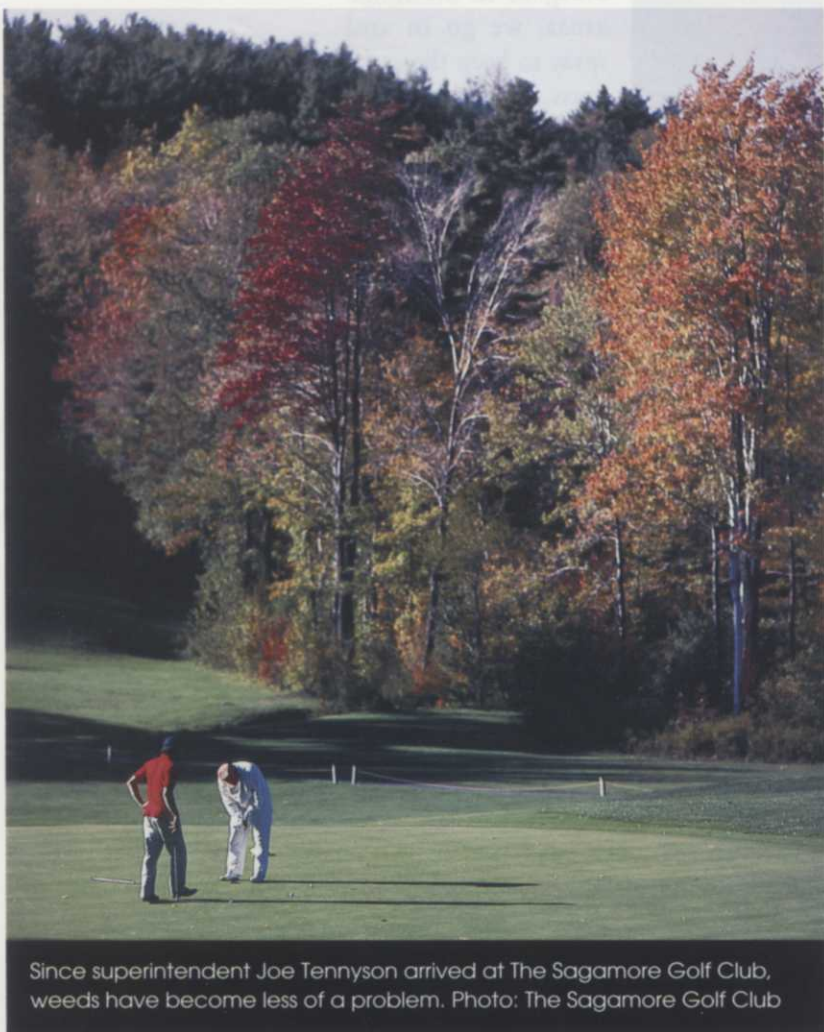
A bigger battle

In the Southeast region of the country, weed and insect management on golf courses is much different.

"We have a broad spectrum of pests in the Florida market," Lowe says. "Mole crickets and nematodes are our number one pest, but we have had some wonderful, very specific products come down the pike the last few years [that have the active ingredient fipronil], which [are] wonderful on mole crickets and gives us a good six months of suppression."

"Interestingly, we're seeing pests that weren't pests 20 years ago," Lowe adds. "The common earthworm, which throws castings onto the turf and can gunk up mowers, is one. You're even seeing the problem pop up in the Northwest where the climate is conducive to their multiplying."

Because of the mild climate and constant growing season, superintendents in the South and Southwest spend much more time and money managing pests and weeds than their brethren in the North and Midwest.



Since superintendent Joe Tennyson arrived at The Sagamore Golf Club, weeds have become less of a problem. Photo: The Sagamore Golf Club



Jonathan Burke, superintendent at The Ranch Golf Club, encourages weevil in some areas because they can help keep *Poa annua* out of areas. Photo: The Ranch Golf Club

"We're treating almost year-round for some weeds," Lowe says. "We might do three or four applications to attack *Poa annua* and goosegrass in the pre-emergent stages. If it breaks out, then you attack it as needed. The *Poa annua* seeds can sit there dormant for up to 15 years ready to go. It all goes back to the budget of the club, and some clubs have members that have higher standards for their course than others."

In some areas of the South, a herbicide and insecticide program might be as much as 60 percent of a superintendent's total material and manpower budget, according to Bud White, USGA senior agronomist in the mid-continent region of the United States that includes Texas, Oklahoma, Louisiana, Arkansas and New Mexico. Brown says it's probably about 40 percent in the Southeast.

"Most superintendents I work with are on a regular schedule for herbicide and insecticide spraying," he says. "Many use [pesticides with the active ingredients trifloxysulfuron sodium and prodiamine] to control sedges and green kyllinga in the fairways, roughs and green and tee slopes. In January, they'll touch up with an application of Roundup (active ingredient glyphosate). By doing this, it isn't such an astronomical cost than if you're going out in the spring and summer with postemergent applications. That can be very costly in material and manpower."

In some areas of the Southeast and Southwest, fire ants are a big concern for superintendents. Fire ants are working their way up the coast in the East and into the southern parts of the West Coast, White says.

"In the Midwest, it's been a rapid spread," he says. "Superintendents are very aggressive with them because a bite to an allergic person can send him or her to the hospital. Some of the [pesticides with the active ingredient fipronil] work well to control the ants."

Rotating weapons

Many industry experts consider it wise for superintendents to rotate their chemicals when treating for pests and weeds. Studies have shown insects and weeds can build resistance to certain products. Some experts say one should use five or six different chemicals, and others say one should wait to see if a pest or weed develops a resistance and then change, according to Neumann.

"We rotate our mixes," Brandenburg says. "One reason is because different chemicals work differently on weeds and fungi. There has been proof of some resistance to the same chemical, so it's a good idea to rotate mixes."

"You rotate your chemistry for several reasons, the most important of which is to guard against resistance," Lowe says. "You don't want to spray for pests using a chemical they have become resistant to. That could lead to outbreaks."

Superintendents say they'll mix herbicides and insecticides with fungicides and fertilizers whenever possible to eliminate the need for separate spraying, saving time and manpower cost. GCN

John Torsiello is a freelance writer based in Torrington, Conn. He can be reached at jtorsiello@megahits.com.

Still a challenge

JUST LIKE THE LARGER ONES, NINE-HOLE FACILITIES STRUGGLE TO MAINTAIN BUSINESS AND INCREASE THE NUMBER OF ROUNDS

by
JOHN
WALSH

Is short good in golf? When it comes to hitting your driver it's not. But what about course length and the time it takes to play a round?

One of the reasons for the trend of declining rounds in various markets throughout the country is that many people don't want to spend the hours needed to play the game.

"It's hard to devote five hours to something," says Peter Grass, CGCS, of the nine-hole Hilands Golf Club in Billings, Mont.

This might lead one to think nine-hole golf courses would have an advantage over larger facilities because of the perception they take less time to play (even though one could play nine holes at an 18-hole or larger facility). However, they're having just as much difficulty maintaining busi-

ness and increasing the number of rounds generated.

Course characteristics

Hilands is a bit different from other courses because it doesn't depend on a certain number of rounds, Grass says.

"We're private and don't operate on cash," he says. "If we depended just on the cash register, we wouldn't have the conditions we do. Our niche is upper end. Rounds aren't essential to us. Play in our area is down a bit, but we're holding our own."

The 275-member club features a course that isn't stereotypical, according to Grass, who has been at Hilands for 30 years. The town was built up around the 80-year old course, so there's no room to expand. And because the course is located three or four

minutes from downtown it's convenient for many golfers.

"But it's never so packed that you can't just show up and play within 15 minutes," Grass says. "There's not a lot of guest play."

The club's membership lost 30 members three years ago, and the golf course maintenance budget was tight, according to Grass, whose maintenance budget including labor is \$220,000 this year. The initiation fee was \$7,500 before it was lowered to \$2,500 to generate interest. Thanks to renewed interest, the initiation fee climbed to \$4,000. Annual dues are \$2,200.

"Being private is more comforting," he says. "The best benefit of being a private course is control over the rules and being able to educate members better and teach proper etiquette. People in this area are more



Being a nine-hole facility, Downers Grove Golf Club in Illinois is busier during the week than the weekend. Photo: Bernie Bak



Geneva Golf Club is undergoing a \$1.8-million capital improvement project that includes bunker and tee renovation. Photo: Geneva Golf Club.

relaxed and aren't so quick on the trigger to fire someone at the sight of a problem on the golf course."

The 106-year-old Geneva Golf Club in Illinois also is landlocked. The private nine-hole facility 40 miles west of Chicago sits on 40 acres of land. The 165-member club – 90 of which have equity in it – has been stable, according to Ed Braunsky, CGCS, who has been at Geneva 26 years. The course generates between 7,000 and 8,000 rounds annually. In 2004, the course generated 6,700 rounds, and in 2005 generated almost 7,000. Braunsky, who has a maintenance budget of \$193,000 and a capital expenditure budget of \$35,000, says time constraint is an issue with many golfers.

"Time is money," he says. "We're right

includes renovating bunkers and tees, which is estimated to cost \$300,000. Golf course architect David Esler is trying to return to old-style bunkering with jagged edges, Braunsky says. Also, fescue moundings will be installed to get away from the runway look.

"Primarily, golfers feel a course has to be 18 holes, and that's why the renovation is important," Braunsky says. "We hadn't done bunkers since the late 1980s."

After the renovation, the 2,900-yard course will be a par 34 with a slope rating of 132.

In addition to the bunkers and tees, the clubhouse and the pool will be renovated. The pool renovation is estimated to cost between \$700,000 and \$800,000.

a bit from \$1.1 million in 2002-03 to \$1 million last year. The course was generating 50,000 rounds in 1998, and now is generating 46,000 rounds. However, the maintenance budget hasn't been cut too much, according to Pozen.

Yet Downers Grove isn't generating more rounds because of its size, unfortunately, Pozen says. Through mid-July, rounds declined 4 percent year over year, which is equivalent to 1,000 rounds, but the driving range business has increased 3 percent, according to Vann Bennett, golf course manager, who has been there for 4.5 years. Bennett says the performance of Downers Grove is in step with the trend that people don't or aren't willing to devote 2.5 hours or more to a round of golf.

Despite the decline of the number of rounds, Downers Grove generates steady business during the week.

"People like to play 18 holes on the weekends," says Pozen, whose staff consists of two full-time workers and six seasonal workers. "Here, it's a different mentality. We get more business during the week – Monday through Thursday – compared to the weekend. We generate more rounds than others during the week."

"We're private and don't operate on cash. If we depended just on the cash register, we wouldn't have the conditions we do."

– PETER GRASS, CGCS

near the metro station, so golfers can get the train home and squeeze in a round of golf."

Like Grass, Braunsky says being private has its advantages.

"Members can come tee it up and go," he says. "There are no tee times, and we don't have a waiting issue or have log jams. The members know who plays when."

Currently, Geneva is undergoing a \$1.8-million capital improvement project that

Another landlocked, nine-hole course that's trying to differentiate itself in a competitive market is the public Downers Grove Golf Club in Illinois. Built in 1892, Downers Grove was the original Chicago Golf Club, which moved to Wheaton, Ill., in 1899. Rounds and revenue have declined at Downers Grove since 2001, according to golf course superintendent Jeff Pozen. Net revenue declined from \$300,000 in 2001 to \$110,000 last year. Gross revenue declined

What's your condition?

Market conditions vary throughout the country, but they all have an effect on each golf facility. Grass says there's a lot of golf available in the greater Billings area – not a glut, but plenty of holes. He says Hilands is the only nine-hole course in the vicinity. Other courses in the area are: an 18-hole, par-3 city-owned course; three 18-hole

public-play courses; three 18-hole private courses and one 27-hole, soon-to-be 36-hole private course. All these are within a 13-mile radius of the city. Many golfers will travel 40 to 80 miles to play golf courses in smaller towns, Grass says. The Yellowstone Country Club, which is full according to Grass, is considered to be Hilands direct competitor for members.

"We're not hurting, but we're not full," he says. "If this was a public course, we wouldn't be as stable."

In the Chicago area, many courses are renovating and trying to keep up with the other courses in the area, according to Braunsky, who is the only full-time maintenance employee at Geneva and has as many as 14 seasonal workers.

"Golfers are staying closer to home, and we're an in-town club," he says.

On Tuesday nights, Geneva hosts an event where golfers play seven holes and socialize afterwards.

Like Geneva and Hilands, Downers Grove is in a competitive market. There are three executive courses and one par-3 course within a seven-mile radius, as well as 15 larger courses within a 10-mile radius – all of which are public.

"When you have that type of competition, you work harder to stand out," Bennett says. "If you don't have that competition, people come to you because they have no choice, and you don't want to do business like that."

A few ways Downers Grove tries to stand out is by setting up additional tees 150 to 175 yards from the green for kids and families. Bennett also is selling punch cards and buckets of balls at the range so people who buy in bulk receive a discount. He would rather do that than just slash prices. Green fees range from \$12.50 during the week to \$18.50 on weekends.

Negative perceptions

Nine-hole courses are not only having a difficult time growing their businesses compared to larger facilities, but they sometimes are viewed negatively by golfers because of their size.

"We hold our maintenance standards as high as any 18-hole course," Grass says. "The tide is changing. Seven or eight years ago, I served on a GCSAA committee and was 'the nine-hole guy.' I got ribbed and said, 'I'm nine-holes, and I'm OK with that.' Years ago, the perception was that a nine-hole course was a lesser cousin to an 18-hole golf course. But there are more nine-hole courses out here in Wyoming and Montana than 18-hole courses."



Hilands Golf Club isn't hurting, but it isn't full, according to Peter Grass, CGCS, who says that if the course was public, it wouldn't be as stable as it is. Photo: Hilands Golf Club

Grass says he has half the headaches with a nine-hole course compared to an 18-hole course.

"We do the same things on a nine-hole course that are done on an 18-hole course or larger, just less," he says. "The knowledge level is equal to that of superintendents on 18-hole courses. You still need the same skills whether you're caring for one hole or 27."

Naturally, the staff at Hilands is small. There are three full-time golf course maintenance employees: an equipment manager, assistant superintendent and Grass.

"I mow greens myself," Grass says. "I'm more hands-on. Half the time is administrative work, and the other half is out on the course. As the superintendent of a nine-hole course, you need to be a jack of all trades."

Pozen says course size all equals out.

"It's all a matter of scale," he says. "Nine-hole courses have less area. We have one fairway mower and one greens mower. But it's the same amount of hours and time as working on an 18-hole course."

Some golfers in the Chicago area have the perception that Downers Grove is an executive or par-3 course instead of the regulation nine-hole course that it is, Bennett says. That perception can be negative, but Bennett says he hasn't done much specifically to combat that perception. He says some locals still don't even know the 114-year-old course exists.

"We need to get people out here on the golf course so they can learn about its history and spread the word," he says. GCN



In the Chicago area, many golf courses are renovating to keep up with neighboring courses. The Geneva Golf Club is one of them. Photo: Geneva Golf Club

Rethinking greens to stay in the black

PROACTIVE COURSE RENOVATIONS AND REROUTING PROVIDE BETTER EXPERIENCES FOR GOLFERS AND AIM TO BOOST PROFITS

by
STEVE AND
SUZ TRUSTY

Golf courses are businesses. Despite the intangible benefits provided by the beautiful settings and the opportunities for exercise and relaxation, they're all about the bottom line. If there's no profit, there's no golf course. As with all other service providers, profit depends on pleasing customers. Remodeling and rerouting, handled well, can increase play and keep a course competitive within a market – in essence, using the greens to keep the course in the black.

The Crenshaw Cliffside Golf Course at Barton Creek Resort & Spa in Austin, Texas, the historic Green Lakes Golf Course at Green Lakes State Park in Fayetteville, N.Y., and the Bay Course at the Seaview Resort & Spa, A Marriott Resort in Galloway, N.J., are good examples of courses that are changing to stay ahead in competitive markets.

Making great better

The Crenshaw Cliffside Golf Course closed for renovation just when it was in the best condition it had been in during the past six years, says Ken Gorzycki, director of golf

course maintenance. However, it wasn't a difficult decision.

"We took an already great course (recipient of the Golf Digest 2006 Reader's Choice Best Course to Play in Austin) and made it better," he says. "It all stems around the quality level we expect for our clientele. Though we'd had no negative input from course users, we knew we could take the golfing experience to a higher level."

The renovation for the Ben Crenshaw and Bill Coore-designed, links-style course is a considerable one, yet it retains all the significant elements of the original design and beauty of the setting. And while the work requires a shut-down from June 12 to Sept. 15, the renovation is as practical as it is strategic.

The Tifdwarf Bermudagrass greens were 15 years old, and it was time to improve them from a variety standpoint, Gorzycki says.

"We selected Champion, which we have on two of the other three courses here, because it's given us the most consistently good putting surfaces for the longest time," he says. "Analysis of the greens showed the upper four to five inches had heavy organic buildup. Below that level, the sand was clean and still met USGA specs. We opted to strip off that contaminated layer, bring in clean greens mix compatible with the existing base, reshape the greens – basically matching their original contours with a few tweaks here and there – and sprig in the Champion."

The bunkers were renovated, too. The crew excavated the sand, removed the existing drainage, flushed out the outfall drain pipe, installed new French drains, reshaped them back to the original design and added new sand.

The Crenshaw Cliffside course was the resort's only track with only three sets of

tee boxes, Gorzycki says.

"We added about nine new tees to allow us to add the fourth tee – a forward men's tee between our current men's and ladies' tees," he says. "This change will speed up play and make it more enjoyable."

Additionally, one of the effluent storage ponds was relined.

The timing of the Crenshaw Cliffside renovation was critical. The course closed during a time of the summer when play is light and the Bermudagrass growing conditions are best.

"We allowed three weeks to prepare and sprig the greens, leaving seven to eight weeks for them to grow into full coverage, and another two or three weeks to get them groomed for play by Sept. 15," Gorzycki says. "The other work fits into that 10-week window."

The renovation, which costs an estimated \$550 million, has been going smoothly. Because it focuses on matching the original design, not much input was required from the architectural team. The main contractor, Golf Works, is based in Austin, and that helps from the logistical side. Gorzycki had worked previously with Golf Works at another course, and Golf Works has worked with Crenshaw in the past, creating a comfort zone on such a tightly scheduled project.

"Our superintendent and assistant have been overseeing the daily construction operations as well as keeping up the other maintenance," Gorzycki says. "I've also kept in close contact with them and the project manager. We're hitting our goal for excellence with the ability to retain that level consistently."

Solving a problem

The historic Green Lakes Golf Course was originally designed by Robert Trent Jones,

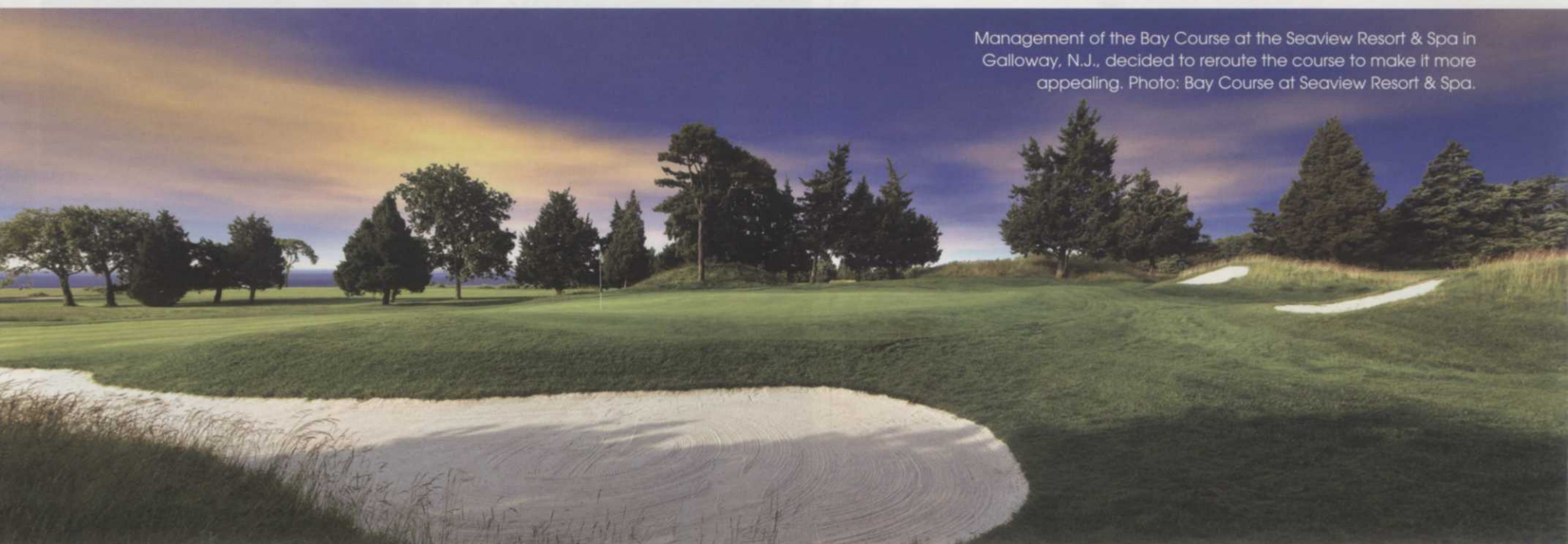
Why remodel?

The six most common factors leading to a remodeling program are:

1. Replacing old, worn-out components
2. Correcting hard-to-maintain areas
3. Making adjustments to improve weak holes
4. Improving aesthetics
5. Restoring historic value
6. Making the course as good as it can be

Source: American Society of Golf Course Architects

Management of the Bay Course at the Seaview Resort & Spa in Galloway, N.J., decided to reroute the course to make it more appealing. Photo: Bay Course at Seaview Resort & Spa.



Sr., in 1936. Known for its routing over a rolling landscape, it has been considered one of upstate New York's most popular courses. However, the par-5 12th hole always slowed play and backed up golfers.

"Golf course superintendent Dean Burton had identified its impact on slowing play long before we were able to schedule its renovation," says Brian Burnett, project manager for the New York State Office of Parks, Recreation and Historical Preservation. "Golfers had to play over a large bunker to reach a raised green that sloped steeply on both sides. A shot missed to the left of the green would get lost in the tall grass and trees. A shot missed right would bounce dramatically to the right or get lost in a waste area between the No. 12 green and No. 13 tee. It was as much about searching for balls as playing them."

The green had been relocated in the 1950s and was one of two that weren't part of the original course design. Architect Barry Jordan, owner of Jordan Golf Design based in Manlius, N.Y., was consulted to help fix the problem.

"My goal was to improve playability while creating a better blend with the original holes," Jordan says. "We considered returning the green to its original position, but it just didn't make sense."

"The present green location was workable, and the green itself is in good shape," he adds. "I recommended keeping it intact and renovating everything directly around it, including the adjacent 13th-hole tee

boxes. Now, several deep bunkers frame the hole and contain shots that previously would have been lost. And because it's a par 5, it's now more enticing to try to reach the green in two shots."

Much of Jordan's original sketch was retained in his final design. By shifting the front bunker to the right side of the hole, an alley to the green was created on the left side. Playability and strategy were considerably enhanced without diminishing the challenges. The reconstruction also included the rerouting of the cart path and correcting drainage that comes off the hillside. Jordan created a tight drawing and then popped it up in a 3-D model that contained all of the elevations, which helped save money during the construction.

Three different contractors worked on the project, which cost about \$70,000. Acts II Construction (Gouverneur, N.Y.) cleared trees and rough graded the site. Daly Landscape (Kirkville, N.Y.) handled the finish grading, constructed the five new bunkers and installed drain lines. Bushnell Nurseries (Bridgeport, N.Y.) installed a drain inlet and discharge piping, installed almost 50,000 square feet of sod and constructed 335 linear feet of new asphalt cart path. The sod came from Sky High Turf Farms (Chittenango, N.Y.). A bluegrass blend was used for the fairways and rough areas, and bentgrass was used for the apron on the No. 12 green and the new tee boxes on the 13th hole.

"Working with multiple contractors was



Much of architect Barry Jordan's original redesign of Green Lakes Golf Course was retained in his final design. Photo: Jordan Golf Design

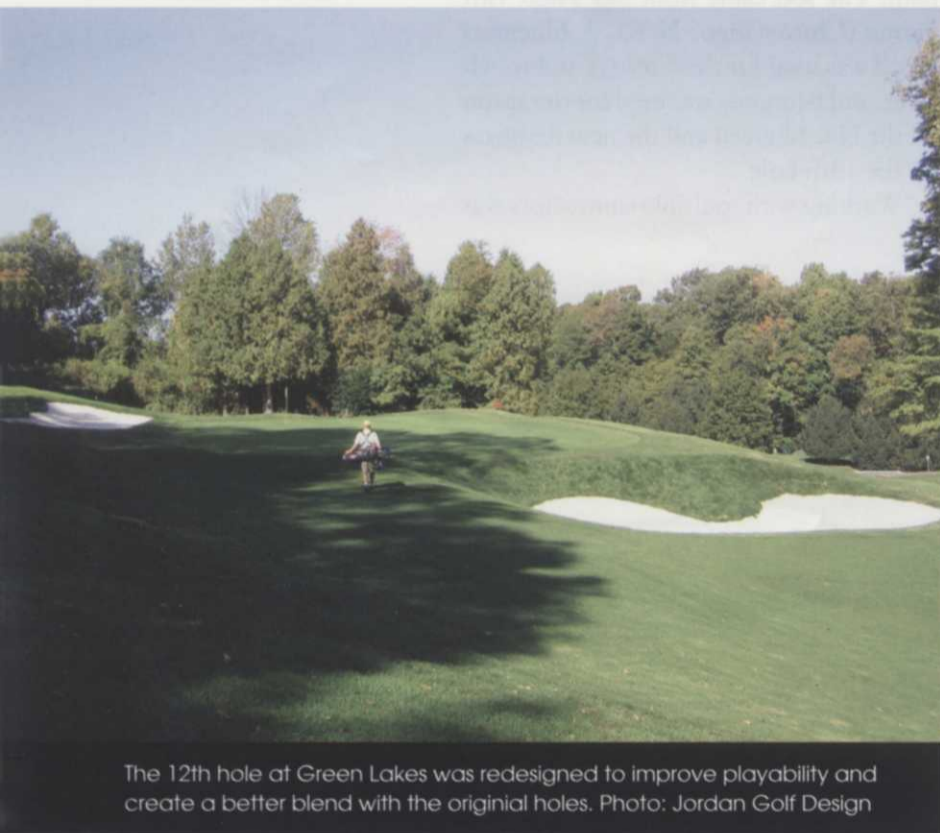
Renovation insight

Several publications from The American Society of Golf Course Architects provide valuable insight to the remodeling process. Especially beneficial are golf course component life span information ("Golf Course Items Expected Life Cycle") and the remodeling Q&A ("The Golf Course Remodeling Process - Questions & Answers"). ASGCA provides these and other informative documents free-of-charge by mail or e-mail. Call 262-786-5960 or e-mail info@asgca.org.

more difficult, but with costs a major factor and a narrow time frame to complete the project (June through August 2005) prior to installation of an irrigation system in the fall of 2005, it was the most workable alternative," Burnett says. "Barry Jordan and his project manager, Kurt Hackwelder, stayed on top of things from the design perspective. And Dean Burton and his staff were incredible, assisting in all aspects of the project. Working together, we made it happen on time with spectacular results."

Simple and effective

Although not a renovation, the driving force behind rerouting the Bay Course was to create inventory where there was demand, according to Steve Schaller, director



The 12th hole at Green Lakes was redesigned to improve playability and create a better blend with the original holes. Photo: Jordan Golf Design



The 15-year-old greens on the Crenshaw Cliffside Golf Course at Barton Creek were changed from Tidwarf Bermudagrass to Champion. Photo: Barton Creek Resort & Spa.

of golf for Seaview Resort & Spa.

"When there is more inventory (golf course availability) than users, golf course owners need to analyze why and determine what can be done to make their course more appealing," Schaller says. "We were after the delight factor."

The Bay Course is one of two courses on the property and is the host of the 2006 ShopRite LPGA Classic. Donald Ross designed the links-style course about 1914. The strategic rerouting restores Ross' original plan.

The rerouting didn't entail moving any greens or tees. There was no earth-moving or shaping or restructuring of the holes. It was basically a renumbering of holes nine through 17. It also eliminated back-to-back par threes and ends both nines on a par 5. The signature hole (previously the 13th and now the 17th) is a typical Donald Ross elevated green that's strategically bunkered to provide a challenge in the final stages of play.

The 10th hole was previously the 17th hole. The rerouting now puts the 10th tee near the first tee at the midpoint of the course. Golfers have an easy option to start from the front nine or the back nine if they wish to play only nine holes, according to Schaller.

"The new location is much more convenient for golf outings and tournament play with double tee starts," he says. "Before the rerouting, the LPGA contestants, officials and volunteers were shuttled about three-fourths of a mile to the second starting tee.

It also separated the area logistically for spectators and the media. This routing is easier to maneuver, speeds the pace of play and enhances the overall experience. Logistically, it improves the flow, allowing our staff to serve outing and tournament participants more efficiently."

The rerouting is part of recognizing who the customers are to accommodate their needs and wants Schaller says.

"We're not sure why the routing was changed from the original, but this reroute was a matter of adapting to a changing customer base and doing it ahead of the curve," he says. "There are so many cultural changes that affect the golfing community, and resort courses fill a special niche. People want to attend their meetings and play golf, join the family at the beach or take golf lessons, play volleyball or go to the spa. The options are great, and people want to experience as much as possible."

The cost to reroute the course was minimal – about \$5,000 – just a few basics such as renumbering the tee markers and reprinting the scorecards, according to Schaller. For golf course superintendent Mark Beumont, the change simply required rerouting of the maintenance sequence to get the course ready for players.

The rewards, in terms of efficiency, playability and golfer appreciation, are well worth the effort, Schaller says. GCN

Steve and Suz Trusty are freelance writers based in Council Bluffs, Iowa. They can be reached at suz@trusty.bz.

Phosphorus movement and uptake in Bermudagrass putting greens

Research at Auburn University was initiated to determine the effect of P rate and P placement on P uptake, extractable soil P, and turf performance in two hybrid Bermudagrass (cv TifEagle) putting greens. The study found:

- In both years of the study, Mehlich extractable soil test results indicate, according to those recommendations (P at 130 lb P₂O₅ acre⁻¹), additional P fertilizer was needed three to five months after the initial P application.
- Application of P in excess of recommendations (195 and 260 lb P₂O₅ acre⁻¹) didn't appear to be prone to downward movement (0-12 inch sampling) within the one-year evaluation.
- Shoot density, dry weight of roots (0- to 3-inch depth), clipping yield, and P

uptake by Bermudagrass all increased as P rate increased, typically up to a P fertilization rate of 195 lb P₂O₅ acre⁻¹.

- The method of P application (band or broadcast) rarely affected extractable soil P, and the only agronomic factor that was affected was P uptake by Bermudagrass. In that case, Bermudagrass growing in plots which received banded P had greater uptake of P than Bermudagrass growing in pots with broadcast P.
- Phosphorus fertilization of sand-based greens shouldn't be neglected, and slightly higher rates (or more frequent application) than that recommended by current AL soil-test recommendations might be warranted. Additional research is needed in this area to make sure long-term environmental impacts via P accumulation don't develop.

by Elizabeth A. Guertal, Auburn University



The method of phosphorus application rarely affected extractable soil phosphorus.

Saturated hydraulic conductivity of coarse-textured, root-zone mixes

To be qualified as a USGA green, construction requires total porosity (P_t), air-filled porosity (P_a) and saturated hydraulic conductivity (K_{sat}) of the sand mix meet specific values. Reports indicate that K_{sat} of the same material measured by different technicians and laboratories resulted in large variations that limit the utility of the data. The objective of this study was to develop a procedure for measuring K_{sat} of coarse-textured rooting mixes.

A new permeameter was developed. The saturation tank and permeameter was combined into a single system, hence, the soil column could be kept submerged in water at all times to avoid air re-entry into the sample.

Soil-moisture-density curves of sand and sand mixes showed the optimum sand mix moisture content for packing the sample was between 0.06 and 0.07 g g⁻¹. Research also indicated if peat moss is used as an amendment, the application rate shouldn't be more than 0.02 g g⁻¹ of sand.

When packing the soil column, the three-

layer approach, as described in the Proctor's test, was adopted and modified for column construction.

Both K_{sat} and bulk density of soil columns constructed by one-, two-, and three-layer approaches were evaluated statistically. Results indicated that the two- and three-layer approaches could generate adequate firmness comparable to a severely compacted putting green and provide consistent and uniform soil columns for K_{sat} measurement. For practical purposes, the two-layer approach was suggested for soil column construction to save time and labor.

No differences were found in bulk density and K_{sat} between sand columns packed by 1.32- or 3.02-kg hammers. Because a larger soil sample (76 mm in diameter) was suggested for measuring K_{sat} , the 3.02-kg hammer should be used in packing soil columns.

The developed procedure was tested by laypersons using the same sand mix and the results showed only about 10 percent differences in K_{sat} compared to K_{sat} measured by technicians. GCN

by She-Kong Chong, Anquan Zhang, Richard Boniak, Yanhe Huang, and C.-H. Ok, University of Southern Illinois



The saturation tank and permeameter was combined into a single system.

For more research information, visit the U.S. Golf Association's Turfgrass and Environmental Research Online (<http://usgatero.msu.edu>).





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 with TERRY

Fan stand

The Four Seasons Resort and Club, Dallas at Las Colinas hosts the EDS Byron Nelson Championship on the PGA Tour on its TPC and Cottonwood Valley courses annually. Like many courses in the transition zone that have bentgrass/*Poa annua* greens, greens fans are used to help provide a minimum wind speed of 3 mph to help cool the canopy.

Bryant Jennings, assistant equipment mechanic, built a metal stand to hold and store the greens fans during the winter and roll them onto trailers that transport them to and from each green.

The 4-foot-by-4-foot square stands are mounted on caster wheels. They're built using 1.5-inch square tubing for the outside frame; a 3-inch-diameter pipe that's 2-feet long; 4-inch, U-shaped channel iron to support the pipe; and 1-inch angle iron for additional support. With all of the components welded together, the fan mounting bracket slides into place.

The total cost to build the stand, including materials and labor, was less than \$100.

Other members of the Four Seasons team include Scott E. Miller, CGCS, director of golf and landscape operations; Russell Wilson, Cottonwood Valley superintendent; Lance M. Bailey, TPC assistant superintendent; Drew Fleming, manager in training; and Chu H. Kang, transportation manager.



Mower transport made easy

One alternative to using greens-mower transport trailers is to build greens-mower platforms on the back of golf carts that have been transformed into maintenance vehicles. This idea was conceived when seasonal employees at the Athens (Ga.) Country Club had trouble backing greens-mower trailers without jackknifing them.

The greens-mower platforms are bolted to the rear of golf carts. They're made in-house using 1.5-inch-by- $\frac{3}{16}$ -inch flat bar steel; 1.5-inch-by-1.5-inch-by- $\frac{3}{16}$ -inch angle iron; 1-inch-by-1-inch-by- $\frac{1}{8}$ -inch square tubing; $\frac{3}{4}$ -inch-by-22-inch-by-34-inch smooth expanded metal; and 1-inch, diamond-shaped mesh screen material that's all welded and bolted together.

The horizontal square tubing bracket keeps the greens mower from moving side to side during transit, and the transport wheel axles slide just above them and are used as a guide when loading and unloading. The metal transport brackets that swivel up and down are bolted to the flat-bar steel supporting brackets, which each have notches that slip over the mower transport wheel axles, keeping the mower in place while in transit. The metal mesh screen flooring is secured with two flat-steel brackets to help distribute the mower's weight.

Maintenance workers back the platform into a hillside or mound for easy loading and unloading. Workers also carry a round, 30-gallon plastic container to hold grass clippings. The container also holds the grass catcher while in transit. The metal leaf rake is used for hand-raking bunkers and general cleanup.

The materials and labor costs were less than \$150 for each platform.

At the Athens Country Club, Dowse B. "Buzz" Howell is the director of golf course and grounds; James Drinkard is the superintendent; Dennis Flanagan is the head service technician; and Bill Hurt and Chris Thorton are the co-assistant superintendents who conceived the idea. GCN

WideSpin 1530 topdresser

- Includes new spinner vanes
- Offers the ability to apply heavy topdressing applications as wide as 15 feet without attachments or 30 feet with light dressing
- Spinner angle is adjustable
- Offers an accessory cross-conveyor attachment for material handling
- Powered by a Vanguard 11-hp, electric-start, single-cylinder Briggs & Stratton engine

Turfco

For more information, visit www.golfcoursenews.com/readerservice #200.



G-Plex III riding greens mower

- Improved features include a simplified electrical system
- New air purge filter on the fuel line prevents engine hesitation on slopes and sharp turns
- Includes a wider, taller tank neck and larger cap
- Revised hydraulic valving ensures consistent front and rear lift phasing is maintained
- Mow pedal placement designed to improve operator comfort

Jacobsen

For more information, visit www.golfcoursenews.com/readerservice #201.



GP1 data logger

- Includes soil moisture control options
 - Provides an interface between soil moisture sensors and many types of irrigation controllers
 - Automatically records as many as 600,000 sensor readings
 - Features two analog channels
 - Housed in a sealed enclosure with battery power
 - Logger and control options are configured by PC or portable PDA

Dynamax

For more information, visit www.golfcoursenews.com/readerservice #202.



MP rotators

- Multitrajectory, rotating stream sprinklers
- Comprised of 8- to 30-foot rotators
- Supplemental to an irrigation system
- Fits popular spray heads and shrub adaptors
- Offers matched precipitation even after arc and radius adjustment

Ewing Irrigation

For more information, visit www.golfcoursenews.com/readerservice #203.



**More Info Than
a Seminar and
a Lot Less
Expensive**

tee-2-green.com

- Latest Creeping Bentgrass Info
- Industry's Only **FREE** Bentgrass Bulletin Board
- Downloadable Research

TEE 2 GREEN

Tee-2-Green Corp. • PO BOX 250
Hubbard, OR 97032 USA

Go to: www.golfcoursenews.com/readerservice - select #20

For more products, check out GCN's product e-newsletter, which is e-mailed twice a month on Thursdays. If you don't receive the newsletter, visit www.golfcoursenews.com to subscribe.



Navigator electric walking cart

- Features an electric on-board compass
- Compass allows the golfer to control the direction and speed of the cart
- Remote control can change direction
- Electronic sensors allow soft braking
- Includes twin monitors that are calibrated throughout the speed range
- Front wheel swivels 360 degrees

Bag Boy

For more information, visit www.golfcoursenews.com/readerservice #204.



362XP chain saw

- Updated chain saw offers a large bar mount
- Powered by a 4.6-hp engine
- Delivers rapid acceleration and consistent power
- Includes the company's antivibration system
- Air injection system removes as much as 97 percent of debris before it enters the air filter

Husqvarna

For more information, visit www.golfcoursenews.com/readerservice #205.



ProBlend fertilizer and seed

- New line of products including 31-3-8 fertilizer and four seed mixtures
- Seed blends include three-way GLC perennial ryegrass blend, ryegrass/bluegrass mixture 80/20, sun and shade mixture and tall fescue/bluegrass mixture 90/10
- Fertilizer is a high-analysis, slow-release product
- Seed blends formulated to cover a range of applications

Target Specialty Products

For more information, visit www.golfcoursenews.com/readerservice #206.



SPECIALTY PRODUCTS

Delivering Value

Tow Pro pull-behind turf aerator

- Self-contained, reciprocating aerator attachment
- Features a 12-hp engine
- Aerates with a 45-inch swath in a single pass
- Tongue connector design allows full-speed maneuverability
- Features a capacity of as much as 84,000 square feet per hour
- Operating speed reaches about 4 miles per hour
- Pivoting tongue offsets 15 degrees in either direction

Plugr

For more information, visit www.golfcoursenews.com/readerservice #207.



FOR SALE

TURBO TURF
HYDRO SEEDING SYSTEMS

Prices Start @ \$1295.00
For a FREE hydro seeding info pack & video call:

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

POND & LAKE LINERS

Colorado Lining INTERNATIONAL

| | |
|---------|-----------------|
| PVC | GCL |
| EPDM | XR-5 |
| RPP | HYPALON |
| HDPE | EROSION CONTROL |
| GEO-TEX | |

www.coloradolining.com
800.524.8672

Your Inside Line on Containment!

FROM THE GROUND UP

Got Thatch? Controlling Thatch Just Got Easier!

Contact:
John Wynne
Phone: 860-729-7639 or 304-624-3844
Email: owynne@comcast.net
Visit: www.i-mol.com
611 Baltimore Ave
Clarksburg, WV 26301

Get MOL Products!

HELP WANTED

MID-AMERICA GOLF AND LANDSCAPE, INC.

Currently interviewing for full-time positions in all areas of golf course construction. Resumes can be e-mailed to: www.mid-america-golf.com and click on Careers or faxed to 816/524-0150 (Attn: Kirk Grego).

Country Club Services is currently seeking experienced Project Managers, Superintendents, Shapers, Foreman, and Operators. Management applicants must have strong communication, organizational, and computer skills. Competitive salary, and compensation package. Please send resumes to countryclubsvcs@aol.com or Fax to 561-862-0447

CLEARY CHEMICAL CORPORATION
Cleary Chemical Corp, Dayton, NJ is seeking a technical sales representative for our Midwest territory.
Business/horticultural degree desired with a minimum of 3 years experience in the turf and ornamental industry. Qualified applicants must have strong customer relations and interpersonal skills. Basic computer knowledge a must.
We offer an excellent salary, bonus, and benefits package, including 401(k), minimal contribution to full medical coverage and company car.
For career opportunities and confidential consideration, send resume including salary history to careers@clearychemical.com or fax to 732-274-0894.

McDonald & Sons, Inc.
Seeking motivated, quality oriented Project Managers, Assistant Project Managers, Shapers, Operators, and Laborers to work on new construction and renovation projects around the country for Certified Builder. Applicants must have experience and strong organization skills. Managers need computer skills, knowledge of contracts/budgets, reading plans and attention to detail. Send resume to BigJohn@McDonaldGolfInc.com or fax to 410-799-5840 attn: John A. McDonald II.

Employment
Golf Course Company currently seeking experienced qualified Project Managers and Shapers for projects in Asia and Europe. Resumes can be e-mailed to frank@intergolfinc.com, faxed to 914-693-9506 or call 914-693-2024.

Territory Sales Opportunity

WATERTRONICS
ELECTRONICALLY CONTROLLED PUMPING SYSTEMS

We are currently interviewing for sales positions in various states.
Prior Irrigation, Landscape or Golf Course Industry experience with strong relationship selling skills essential.
Please send resume to: hr@watertronics.com or fax to: 262-367-5551

GOLF COURSE NEWS

Drive your sales by adding reprints to your marketing campaign.
Article Reprint Service

| COMPANY | PAGE | RS |
|--|-------|--------|
| Bayer Environmental Science | 4 | |
| www.bayer.com | | |
| Cleary Chemical..... | 9 | 12 |
| www.clearychemical.com | | |
| Dakota Peat..... | 51 | 21 |
| www.dakotapeat.com | | |
| Golf Course Builders Association of America...27 | | 19 |
| Links Seed..... | 14 | 16 |
| www.linksseed.com | | |
| Project Evergreen..... | 15 | 17 |
| www.projectevergreen.com | | |
| Rain Bird | 12 | 14 |
| www.rainbird.com | | |
| Roots..... | 52 | 22 |
| www.rootsinc.com | | |
| Scotts Turf-Seed | 18,19 | |
| www.turf-seed.com | | |
| Standard Golf Co | 7 | 11 |
| www.standardgolf.com | | |
| Tee-2-Green | 2,47 | 10, 20 |
| www.tee-2-green.com | | |
| Turf-Seed | 10 | 13 |
| www.turfseed.com | | |
| Z Screen..... | 13 | 15 |
| www.zscreen.com | | |

ADVERTISE 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.

All classified ads must be received five weeks before the date of publication. Visa, MasterCard, American Express and Discover are accepted. Payment must be received by the classified closing date.

For further information or to place an ad, contact Bonnie Velikonya at 330/657-2472 or bvelikonya@giemedia.com.



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.

I doubt it

For years, I've been telling people, "Golf course superintendents are like folks from Missouri – they always say 'show me.'"

Got a new biostimulant potion? Show me the research. A new piece of equipment? Show me a demo. Some "revolutionary" new technique? Show me who else has tried it.

Well, I'm not from Missouri, and I don't grow grass for a living, but 20 years of hanging out with you guys – plus the inherent cynicism that comes with being a journalist – also has made me a pretty tough sell for most things. The words, "I doubt it," often pop into my head or jump out of my piehole.

I'm particularly skeptical when a headline in the morning paper or on CNN screams a "new study" shows some particular substance we eat, drink or come in contact with regularly will probably kill us.

Sometimes it's bizarre ("New study links Buicks and hyperactivity"). Sometimes it's an incredibly obvious waste of taxpayer's grant money ("Research shows teenagers likely to experiment with sex"). It always reminds me of the old Chevy Chase gag on "Saturday Night Live's" Weekend Update segment where he says, "Scientists today announced that saliva causes cancer ... but only when swallowed in small amounts over a long period of time."

We can thank the marvelous field of epidemiology for most of these horror stories. Epidemiology is basically bookmaking for human health. For example, if you eat tofu exclusively at every meal, every day, the odds are you'll live 3.2 years longer than average. (I just made that up ... tofu really sucks ... don't eat it.)

Living your life based on this type of "science" is like throwing five bucks into a Final Four pool at work, only the odds are usually fuzzier than the 50-to-1 you might get if you pick Gonzaga to win it all. Also, I know if I place a bet with my bookie and win, he'll pay me. If I lose, I pay him. Epidemiologists bet with our tax money and get paid for it whether they're right or wrong.

It's my humble opinion many epidemiologists follow this tried-and-true scientific protocol: Decide what attention-getting notion you want to prove, and then figure out a way to maybe prove it. Next, publish the results in some obscure academic jour-

nal and hire a really good public relations agent to get you on TV and, of course, promote your new book.

Completely cynical? Yes. Completely wrong? I doubt it.

One month, coffee is horrible for you. The next, it's a lifesaver. Ditto for red wine, apple juice, PVC pipes, cell phones, eggs, estrogen, ethanol, chocolate, red meat, aspirin, Advil, etc. And now, when technology allows Dr. Dogooder of Whatsamatta U. to detect these nasty things within our bodies in parts per trillion, the number of "Scare the crap out of people" reports increases daily.

That said, here are a few things I doubt automatically when I read or hear about them:

Cancer clusters: Serious scientists – including those from the National Cancer Institute – have long dismissed the idea that isolated environmental factors cause acute outbursts of disease. Five cases of leukemia in the same zip code? It couldn't just be chance, so it must be the local paint factory. Unfortunately, victims often need something or someone to blame besides genetics or sheer bad luck. It's always easier – and often more lucrative for the lawyers – to point a finger at an industry.

Food safety: Thanks to the scare-mongers, there are people who worry about the microscopic contents of every bite they eat. Gosh, does this steak have cattle hormones in it? Could this tomato have been genetically modified? Here's a fact: We have the safest food supply in the world. Go to Ghana or Bangladesh if you really want "organic" products.

Global warming: Anything that gets Al Gore so excited automatically makes my B.S. meter jump off the scale.

Child abductions/abuse: Do you really believe there's been an "epidemic" of child abductions and child abuse during the past two decades, or do you agree that we've just gotten a lot better at reporting and record-keeping?

Internet identity theft: If you're really old like me, you probably remember when you used to leave a "carbon" copy of credit card receipts (with the complete numbers and signatures) sitting on a table at a restaurant.

Think that was less risky than buying something on a Web site with your Amex?

Bird flu: I'm dating myself, but I remember the "Swine flu" scare in the '70s. You younger folks might recall the SARS flap a couple of years ago. Potential epidemics sell newspapers and generate research grants. Period.

Pesticides: OK, you knew I was going to get to this eventually. During 20 years of working in this business, I'm not sure I've read even one "science-based" article about pesticides in a mainstream publication that was completely accurate. No matter how discredited, the same bad arguments and lousy studies surface every time a reporter decides to do a piece about pesticides used on lawns or golf courses.

With a few exceptions (John Stossel of ABC News, writer Michael Fumento, etc.), journalists are happy to do a quick Google search, grab some fiction from the Beyond Pesticides Web site or some other activist group and repeat the same junk that's been plaguing us for years.

Will reporters ever be more accurate when it comes to pesticides? I doubt it. It's easier to scare the daylight out of people than to do the research and tell the truth. I don't think the media are

antipesticide, they're mostly just lazy.

Being skeptical about the "latest research" about anything from global warming to bird flu to pesticide exposure is healthy. Every one of these studies is funded, conducted and promoted by someone with an agenda. Sometimes it's to receive more grant money for the next big study. Other times (such as with pesticides), the agenda is to force their views on the general public without regard to the science that supports the safety of the products. Activists honestly believe extremism – and even disinformation – in pursuit of their goals is no vice. That's morally reprehensible.

It's possible GCN might receive tons of letters and e-mails saying I'm right about skepticism. It's also possible you might write to say you disagree with me and tell me I'm just a grumpy, cynical old bastard and I'm wrong. But, you know what ... I doubt it. GCN

BEING SKEPTICAL ABOUT THE "LATEST RESEARCH" ABOUT ANYTHING FROM GLOBAL WARMING TO THE BIRD FLU TO PESTICIDE EXPOSURE IS HEALTHY.

Don't forget to check out Pat's Digital Coffee Shop column that appears twice a month in GCN's weekly e-newsletter. To subscribe to the newsletter, visit the GCN home page and click on the "news" drop-down menu.



The Quest Continues.



DAKOTA

Peat & Equipment



This year, we started with the operators and put their ideas into our redesigned Turf Tender product line. The result is a new, sleek design that continues to be the most dependable and versatile topdresser on the market.

Easier to maintain
Easier to operate
Easier to calibrate



Celebrating our 10th Anniversary of the Dakota Turf Tender. Check Out Our New Line.

800-477-8415 | www.dakotapeat.com



The Grass is Always Greener

TurfVigor® for Consistent Color on Greens, Tees and Fairways

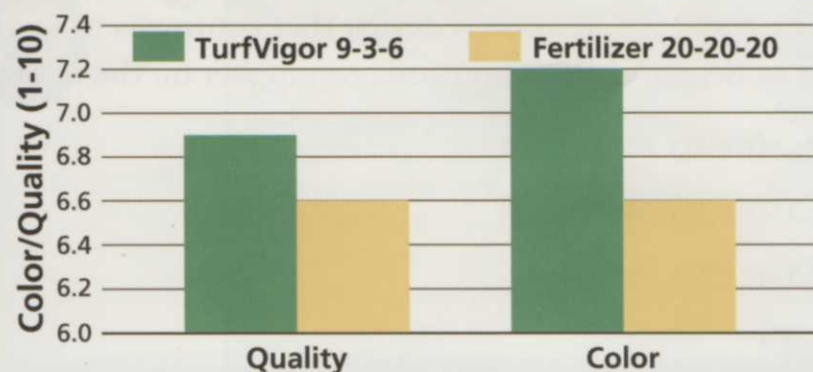
If you are looking for “knock-your-eyes-out” consistently greener turf in all play and weather conditions, look no further than TurfVigor® microbial fertilizer.

Here's how TurfVigor works on your turf:

- Maximizes nutrient uptake
- Improves color & quality
- Maintains root mass under stress conditions
- Accelerates physical damage recovery

University research shows the dramatic results.

Virginia Tech 2001 - Penncross bentgrass, USGA Spec Green 5/32" Equal Rates of Nitrogen



TurfVigor is part of The Roots® Challenge



The Roots Challenge provides season-long turf management solutions using Roots products to attain the healthiest turf possible – even in the most stressful conditions.

We will work with you to select the best program, monitor the applications and gauge the program effectiveness throughout the season. Attend a local Roots Challenge Technical Conference for all the details.

Take The Roots Challenge and see for yourself – The Grass is Always Greener.

roots® ... Our Name Says It All