

July/August 2005  
VOLUME 35 NUMBER 4

# Tee To Green

Published by the Metropolitan Golf Course Superintendents Association



## Board of Directors



**President**  
WILLIAM HEINTZ  
*Centennial Golf Club*

**Vice President**  
MATTHEW CEPLO, CGCS  
*Rockland Country Club*

**Treasurer**  
ROBERT NIELSEN JR., CGCS  
*Bedford Golf & Tennis Club*

**Secretary**  
ANTHONY GIRARDI, CGCS  
*Rockrimmon Country Club*

**Past President**  
TIMOTHY MOORE  
*Knollwood Country Club*

ROBERT ALONZI JR.,  
*St. Andrew's Golf Club*

KEVIN COLLINS  
*Aquatrols, Inc.*

CHARLES DENNY  
*Salem Golf Club*

GLEN DUBE, CGCS  
*Oak Hills Park Golf Course*

BLAKE HALDERMAN, CGCS  
*Brae Burn Country Club*

SCOTT IMBRO  
*Anglebrook Golf Club*

THOMAS LEAHY, CGCS  
*Sleepy Hollow Country Club*

GLENN PERRY, CGCS  
*Rolling Hills Country Club*

**Executive Secretary**  
INEKE PIERPOINT

## Tee to Green Staff

### Editors

ROB ALONZI                      GLENN PERRY  
914-478-5713                      203-762-9484

### Managing Editor

PANDORA C. WOJICK

### Editorial Committee

GLEN DUBE                      ERIC O'NEILL  
DAVE DUDONES                      BILL PERLEE  
CHIP LAFFERTY                      MIKE REEB  
SCOTT NIVEN                      GREG WOJICK  
BOBYORK

### Designer

TERRIE DUNKELBERGER

### Photographer

BILL PERLEE

### Advertising Manager

GLENN PERRY, 203-762-9484

TEE TO GREEN is published bimonthly by the Metropolitan Golf  
Course Superintendents Association

49 Knollwood Road, Elmsford, NY 10523-2819  
914-347-4653, FAX: 914-347-3437, METGCSA.ORG

Copyright © 2005

# Tee To Green



Cover: Century  
Country Club.  
Photo by golf course  
photographer Dan  
McKean.

## In this Issue

### Feature

Building a Better Bunker.....	2
Bunker Talk .....	6

### Departments

Upcoming Events .....	7
Scorecard .....	8
Member News.....	10
Work Smarts.....	11
Spotlights .....	12

# President's Message

## The Key to Meeting Member Expectations



I'm writing this after a particularly difficult span of weather. It reminded me of the importance of communicating about our maintenance needs and programs. And I don't mean just when there's a crisis that requires extraordinary measures and funds. I'm talking about sitting down with our green committees at set times each year and hashing out a logical program for each and every area of our golf course: our greens, tees, fairways, rough or native areas, and bunkers.

This helps eliminate surprises. When you work together to assess—and agree on—each area's strengths and weaknesses and set logical goals for continual maintenance and improvement, everyone's on the same page.

We all know how each area is to be managed and what the outcome or conditions should be.

There are other benefits to establishing sound maintenance programs. . . .

**It increases our understanding and helps us set priorities.** When you scrutinize the needs of every part of the golf course, you begin to set priorities. You determine which areas require the most attention—and when. Just as important, you agree on the resources and budget dollars required to implement each maintenance program.

As a group, for instance, you might decide that producing quality rough is a hot button, so you work together to establish a program that includes all the necessary components, such as proper irrigation, X number of funds for pest management, renovation/mowing equipment, nutrition, and manpower. You all walk away understanding the goal and what's required to make it happen.

**It helps us improve our performance.** With programs in place for each area of the course, your mission is clear. You know what is expected of you. You can focus your efforts on your membership's priorities. And better, you won't waste time trying to deliver conditions that are beyond your capabilities—given the available funds and resources.



*Will Heintz  
MetGCSA President*

**It results in good economics and sound budgets.** With a well-laid maintenance program, you have a well-managed budget. Part of establishing a program, after all, is assigning a dollar value to each area of the course. Ongoing budget reviews help you stay on track and avoid spreading those dollars too thin by trying to perform tasks that aren't required—or budgeted for. What's more, you're better able to spot when additional resources might be required to complete a maintenance function in-house.

### The Payoff

Many times, what's viewed as poor performance on our part is really the lack of an adequate program. Inadequate—or nonexistent—programs result in disappointments and inevitably criticism about course conditions.

If you don't have a concrete program in place, it's never too late to establish one. In fact, recommending this approach to your committee can only demonstrate your professionalism and your commitment to producing high-quality conditions.

In the end, the most important benefit of establishing workable programs for every area of play is that you will have a map to guide you in managing your course. This map will help you identify goals, define resources, limit budget overruns, and best of all, create realistic expectations—for yourself and your membership.

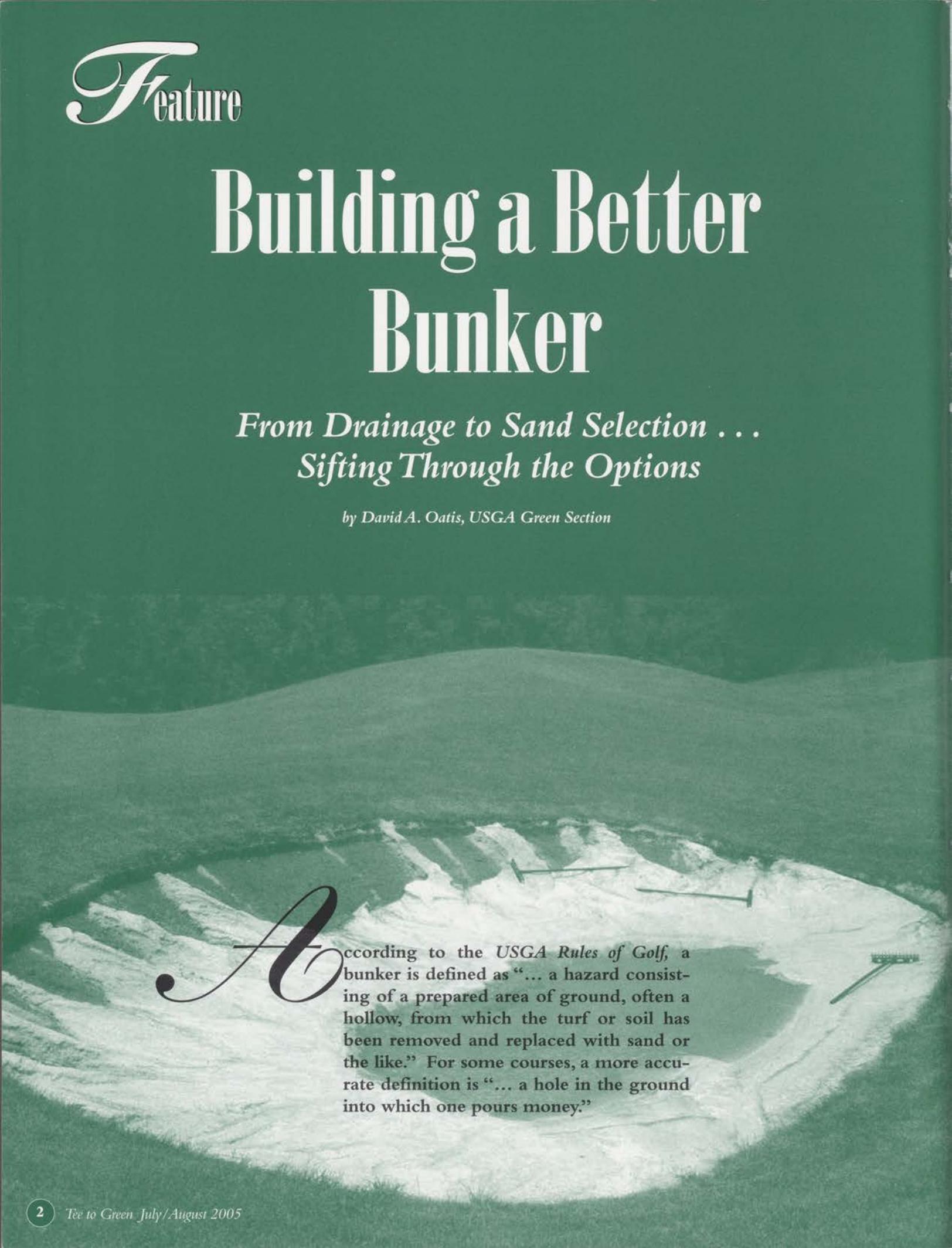
**Will Heintz**  
*President*

Feature

# Building a Better Bunker

*From Drainage to Sand Selection . . .  
Sifting Through the Options*

*by David A. Oatis, USGA Green Section*



**A**ccording to the *USGA Rules of Golf*, a bunker is defined as "... a hazard consisting of a prepared area of ground, often a hollow, from which the turf or soil has been removed and replaced with sand or the like." For some courses, a more accurate definition is "... a hole in the ground into which one pours money."

Let's face it, few areas of the golf course have received more attention in recent years than bunkers. Extraordinary amounts of money are being spent to design and create intricate mounding and bunkering, and even more money is being spent on maintaining these lavish creations.

Despite these grand expenditures, there are still plenty of bunkers that do not play well—or the way golfers would like. The problems they perceive are many:

- The sand is too hard, too soft, or too wet.
- There's too much sand—or not enough.
- The sand is too fluffy—no, it's too heavy.
- There's no lip; actually, the lip is too high.
- The ball doesn't release.
- We keep getting downhill lies.
- They're not fair.
- They aren't consistent!

Sometimes golfers' unrealistic expectations are to blame. Other times, it's the overall design of the bunkers or even their maintenance. But more often than not, bunker problems are the result of poor or insufficient drainage and improper sand selection.

If you're redoing your bunkers—or building one for the first time—here's a look at what you should be putting into them—to ensure they're as consistently playable as a haphazard hazard could be.

## Drainage: First Things First

Probably more important than anything else is that you ensure your bunkers have proper drainage. Without good drainage, your bunkers will likely become water hazards—and, worse, will need to be rebuilt.

There are two aspects of drainage to consider:

- the internal drainage characteristics of a bunker
- the surface drainage characteristics of the area surrounding a bunker

### Inside the Bunker

The combination of water volume and velocity is what causes sand to be moved around within a bunker, so it's important to arrange drain lines so that they capture the water before it has a chance to wash sand off the steeper faces.

Years ago, solitary drain lines in the bot-

oms of bunkers were usually considered sufficient. Now, however, with more elaborate bunker designs that showcase steeper faces, installing interceptor drains and/or the use of the various woven fabric products has become a necessity. Without them, it's impossible to avoid sand washouts. This means that sand has to be shoveled back up on bunker faces regularly, wasting labor, inviting contamination, and resulting in poor playability.

### Surrounding the Bunker

Bunkers that have water running into them from the surrounding area will wash out regularly, regardless of how much drainage work is done inside the bunker. Mounding and/or diversionary swales are easy ways to divert water away from bunkers. Failure to use these techniques will result in years of problems.

## The Long and the Short of Sand Stability

Sand selection is another aspect of bunker design that affects the short- and long-term performance of bunkers. Though sand preference is subjective, it's generally wise to choose a sand that is reasonably firm so that

plugged lies are not a consistent problem. There are two factors that have a strong impact on the relative stability—or firmness—of the sand:

- the particle shape
- the range of particles contained within the sand

### Particle Shape

Moderately angular sands are desirable for use in bunkers because they interlock. Rounded sands will not interlock and may remain very shifty for a long period of time. At the other end of the spectrum are sands that are extremely angular or even plate-like in shape. This type of sand may interlock too much, packing tightly and creating a very hard or crusty surface.

### Particle Size Range

The range of particle sizes included within a sand also has great bearing on its stability. Very uniform sands, ones with sand particles all in a narrow size range, tend to interlock less and, therefore, are less stable. At the other end of this spectrum are sands with a broad range of particle sizes. The smaller particles tend to fill the voids between the larger ones, which causes all of the particles to bind together and provide a very firm or hard sand.



*Poor drainage means the bunker will suffer from rapid contamination and will end up with a short life span.*

## Sand Depth: The Hazards of Spreading It Too Thin

Bunker sand depth also matters—particularly on steeper faces where sand may be more prone to movement. Too much sand on the face of the bunker frequently will cause balls to plug on the slope and under the lip. By contrast, too little sand on the floor of a bunker will place it at high risk for contamination from the subsoil—a troublesome and potentially costly problem you want to avoid.

Appropriate depths:

- On the face of a bunker, one to two inches is appropriate.
- On the floor of a bunker, where the sand is more stable, a minimum of four inches—and preferably six inches of sand should be maintained.

If you find that your bunker sand is so shifty that it plays well only at shallow depths—i.e., less than four inches—then your sand may be too uniform or too rounded. It's critical when selecting a bunker sand that you find one that will play well at a depth closer to six inches.

## Sand Color Cautions

Let's face it: Designers and green committee members are frequently drawn to a sand by its color. Some prefer white sands; others prefer a buff color. It's important to communicate, therefore, that color is not important to good play. In fact, if you opt to judge—or select—a sand by its color, rather than by its drainage or playing characteristics, you're setting yourself up for disappointment—if not a costly problem.

Dr. Alister MacKenzie on the subject of consistency . . .

*"It is possible to have too high a degree of perfection. If we have never had a bad lie, we are not likely to appreciate a good one, and moreover, the ability to play from a bad lie differentiates between a good player and a bad one."*

It is highly unlikely that MacKenzie would have advocated purposely making bunkers inconsistent, but based on this statement, it is questionable as to whether he would have promoted the extraordinary measures some superintendents now take to promote consistent playing conditions. In fact, there are many factors that affect how bunkers play, and a certain level of inconsistency is virtually guaranteed.

## Consistency: A Futile Pursuit?

On paper—or at first glance—a golf course's bunkers may appear to be consistent, even predictable in the way they play. They may all be equipped with the finest drainage; their sand may be the same color, depth, and particle shape and size; and what's more, they may even be uniformly well located and aesthetically pleasing.

But are they truly consistent? Golfers may expect so, but superintendents know better. Even bunkers that are built with the same techniques and with the same materials may not play consistently for a variety of reasons.



*Poor drainage makes for better water hazards than bunkers.*

*Failure to divert water around bunkers will result in more rapid deterioration and sand contamination. In extreme situations, it can even cause more severe problems!*

For one, the environment in which a bunker is located affects its drainage properties. Some bunkers drain more rapidly than others, allowing the sand to remain drier. Other bunkers located in low, shady areas with little air circulation will hold more moisture and will not dry out as quickly as bunkers that are oriented toward the south and subject to good air movement. Some bunkers may also receive more water from the irrigation system, making the sand more consistently moist.

## Let's Get Real

Is there an ideal? Not really. In fact, over the years, many courses have chosen sand simply by its reputation at other courses . . . or because course representatives played from a different sand at a neighboring course on a day when the sand played very well—or when they, themselves, happened to play their bunker shots well.

Unfortunately, most sands will, at some point, play well, just as most golfers will, at some point, hit good bunker shots. In the long run, the best way to select a



bunker sand is to try several types on your own golf course for at least one, and preferably two, seasons in a side-by-side comparison. It's very important to choose a sand based on its playability characteristics over a longer period of time so that it can be judged in a variety of moisture extremes and circumstances.

## In the End

Golfers must take some responsibility for identifying the playing characteristics of each bunker. They must realize that bunker sand will play differently when it is wet than when it is dry, and some bunkers will dry out more quickly than others.

Funny that many golfers are eager to perfect their swings—spending hours at the range—but few think to practice bunker shots. If more golfers worked at their bunker play, one has to wonder if there would be fewer bunker complaints.

About consistency . . . Within reason, consistency is a desirable and attainable goal. However, variation in how a course plays from area to area, day to day, and month to month are things that the observant golfer should note and account for. After all, isn't the infinite variety of golf an intrinsic part of its charm?

*David Oatis is the director of the USGA Green Section's Northeast Region.*



*Extreme mounding can make interesting hazards that will require plenty of time and labor to maintain!*

# Bunker Talk

Four Met Area Supers Share Their Sentiments—and Their Members'—on Bunker Care and Conditions

# W

e're presenting, here, the best kernels gleaned from four superintendents' responses to our informal survey on bunkers. It delved into everything from maintenance practices to member—and even personal—expectations.

The respondents were Chip Lafferty of Rye Golf Club, Blake Halderman of Brae Burn Country Club, Sean Cain of Sunningdale Country Club, and David Dudones of North Jersey Country Club.

Here's how their responses shook out. . . .

- The number of bunkers on these four, 18-hole courses ranged from 52 to 88.
- No power rake users in this group. Most of the guys spend at least five days a week grooming their bunkers with hand rakes. This is still the most suitable method for small bunkers and bunkers with high faces and other design peculiarities.
- Labor hours devoted to bunker maintenance is high. Repairing washouts, alone, after just two to three inches of rain, takes this group an average of 50 man-hours—a high price to pay for hazard maintenance.
- Even those who have renovated and enhanced their bunker drainage within the past 10 years still battle problems with washouts and contamination.

## Bunker Musings

**Chip Lafferty, Rye Golf Club, Rye, NY**

*Bunker style:* Severe to medium faces.

*Bunker sand:* Firm, white sand from Carriere & Sons.

*Bunker renovations:* Ongoing renovation in-house.

We do ongoing renovation, adding and redistributing the sand in the bunkers to make sure it's the proper depth and to avoid contamination problems.

In general, bunker conditioning doesn't seem to be a major concern among our members. The bunkers are pretty well placed, which makes the course appropriately challenging. And our members realize that a bunker is a hazard that essentially needs to be avoided.



**Blake Halderman, Brae Burn Country Club, Purchase, NY**

*Bunker style:* The standard, gradual caped bunkers.

*Bunker sand:* 150 sand from Alan Cruse, four to five inches in depth.

*Bunker renovations:* Renovated all bunkers in 2001 with Ken Dye.

Our members have a number of "problems" with our bunkers. They, like me, don't like the contamination. They complain about this more than playability. As a result, we're looking into installing liners. They also find the access in and out of some of the bunkers difficult. They particularly feel it's difficult to rake the bunkers all the way back out the way they walked in. There are several bunkers on the course where we've added steps to allow them to exit the bunkers near the steep faces. We'll probably do more of this when we attack the liners.

Another common complaint is that the bunkers are inconsistent, which at first, I assumed was because the balls were plugging, but more often, the problem is really that there's not enough sand. We've been working to correct this by checking sand depths and placing two inches of sand on the face with five to six inches of sand in the bottom of the bunkers. We also have irrigation around every bunker, which, of course, helps with the turfgrass, but it also keeps the sand somewhat firm.

Some members also think the faces on the fairway bunkers are too penal because they would like to be able to hit a long iron to the green. I feel at some point bunkers need to be hazards. Look at the British Open at St. Andrew's this year: You're not hitting a 5 iron out of those bunkers! With that being said, it is the members' course. I did raise the bottom of one fairway bunker, and I'm planning to do a couple more to make it more enjoyable for the members.

**Sean Cain, Sunningdale Country Club, Scarsdale, NY**

*Bunker style:* Medium faces.

*Bunker sand:* A-Pro white sand from U.S. Silica.

*Bunker renovations:* Renovations done from 1996 to 1999 by Stephen Kay.

Our bunkers have a more modern design to them, and many don't challenge the A or B player. Bunkers should invite the misplayed shot into them on the front side and challenge the player to make a quality shot out of them on the green side.

Our green complexes have lost their Seth Raynor style. Now, we have bunkers that have a lot of "fat on the bone," which is for aesthetics and doesn't allow wayward shots to end up where they're supposed to . . . which is in the bunker.

If there were one thing I would change about our bunkers on the maintenance end, it would be to add liners. Members do complain about there being small rocks in bunkers. Liners, I feel, would help with washouts and keep the sand clean.

In the end, though, I think golfers need to be reminded that bunkers are hazards that should be avoided, and if they end up in them, there should be some degree of penalty.

**David Dudones, North Jersey Country Club, Wayne, NJ**

*Bunker style:* Medium faces with grass slopes and capes.

*Bunker sand:* 150 sand from Alan Cruse.

*Bunker renovations:* All bunkers were renovated in 1996 by Brian Silva; minor in-house changes have been made since then.

The good golfers like the bunkers firm; the poor ones like them soft. It's a no-win situation, so I try to keep them consistent. Even if we don't water at night, I will water all the bunkers in the morning before raking. It helps with consistency, and they look better after a rake. Besides, the banks always need water. I've been trying to communicate to members the fact that bunkers are supposed to be hazards. Some members think they should be able to 5-iron their way out of all fairway bunkers. I get comments like, "That fairway bunker is really a greenside bunker. I can't get it over the lip and reach the green."

## Upcoming Events

# The Now-Complete Calendar of Events

### Sage Advice on Bunker Building and Care—From Beyond the Met

“Bunkers are one of the primary facets of improving golf courses, and their maintenance is also one of the most labor-intensive sides of the business.” Those are the words of former Muirfield Village Superintendent Mike McBride in the July *Golf Course Management* article “Bunker Mentality.” Well-versed on the subject, he now runs his own company, On-Course Management, which offers design and renovation services and agronomic and maintenance consulting.

His 30 years in the golf course business have taught him more than most of us care to know about bunkers. We thought it might be useful, therefore, to add McBride’s insights to our own superintendents’ thoughts on bunker building and management. They follow:

- Develop a bunker maintenance routine in which only specific bunkers, usually the ones with the most use, are raked and groomed every day. “Don’t waste daily labor and costs on the others,” he says. “You can really save time and effort for other maintenance activities that need attention.”
- Bunker edging can be carried too far. “It can actually become detrimental to bunker design and integrity,” says McBride. Instead, he suggests trimming only the turf around the edges, not the soil or thatch.
- When it comes to liners, McBride prefers installing them only on the flashings, not the bottoms, and then tucking them up under the sod around the lip of the bunkers. The idea is that in cases of washing, the liners will secure the soil, etc., on the high faces.
- Don’t be penny wise and pound foolish when it comes to building new bunkers. McBride advises paying attention to detail and stressing specs on the high side. “Bunkers that are properly built require less maintenance down the road,” he says.

*Special thanks to Dave Dudones for conducting our survey. Dave is a member of the Tee to Green Editorial Committee and superintendent at the North Jersey Country Club in Wayne, NJ.*

Our 2005 Meeting and Social Calendar is now complete, and we’re looking ahead to next year. To secure a golf meeting for 2006, call either of our Tournament Committee co-chairs: Tom Leahy at 914-941-8281 or Chuck Denny at 914-669-5959. To host a social event, please call any one of our Social & Welfare Committee co-chairs, who include Tom Leahy and Chuck Denny and also Bob Nielsen, who can be reached at 914-234-3779.

#### Second Round of Met Championship

*Monday, September 19*  
Connecticut Golf Club  
Easton, CT  
Host: Mark Fuller, CGCS

#### Superintendent/Green Chairman Tournament

*Monday, October 17*  
Century Country Club, Purchase, NY  
Host: Kevin Seibel

#### Annual Assistants Championship

*Thursday, October 20*  
Anglebrook Golf Club, Lincolndale, NY  
Assistant Host: Scott Imbro

#### Met Area Team Championship

*Monday, October 24*  
Aronimink Golf Club, Philadelphia, PA  
Host: Henrique Holanda

#### Annual Meeting

*Wednesday, November 9*  
St. Andrew’s Golf Club  
Hastings-on-Hudson, NY  
Host: Rob Alonzi

#### MetGCSA Christmas Party

*Saturday, December 3*  
Westchester Country Club, Rye, NY  
Host: Joe Alonzi, CGCS

### Educational Event

#### First Annual Empire State Green Industry Show

*Tuesday – Thursday, November 15 – 17*  
Rochester Riverside Convention Center  
Rochester, NY

Sponsored by four industry associations—NYSTA, New York State Arborists - ISA Chapter, Inc., New York State Nursery/Landscape Association, New York State Flower Industries—this trade show and conference will offer the opportunity to attend educational sessions as well as shop the hundreds of exhibitor booths displaying golf course industry equipment and supplies.

Call Jill Cyr, 800-873-8873/518-783-1229, or visit NYSTA’s online tradeshow information, [www.nysta.org/greenshow/home.html](http://www.nysta.org/greenshow/home.html), for further information.

### Fundraising Event

#### UMass Turf Education Fundraiser

*Thursday, October 20*  
Cape Cod National Golf Club, Brewster, MA  
Host: Steve Cadenelli, CGCS

Held for the first time last year, this event raised more than \$60,000 for UMass’s Joe Troll Turf Research Center. This year, the UMass Turf Advisory Board is sponsoring this worthy outing in support of the UMass turf program. The cost is \$225 per person, with \$100 of that fee going toward the turf program. You’ll have lunch at Cape Cod National and then join fellow golfers at the nearby Wequasset Inn for dinner. As last year, your donation is tax deductible.

We hope you’ll plan to be there! For more information, call Steve Curry at 413-329-4912.

## Invitational Hosts Take Tournament Trophy

Fairview was not only the host of this year's Invitational, but also the victor of this year's tournament trophy. MetGCSA superintendents and club professionals and officials were more than happy to be invited back again this year after heavy downpours forced the cancellation of this event in 2004. What a difference a year makes! Beautiful weather greeted the 17 teams vying for the prestigious Invitational title.

A special thank you to our host superintendent, Mike Mongon, and the entire staff at Fairview for a great day.

Here's a look at the tournament results:

### Low Net Winners

- 56 Fairview Country Club  
*Mike Mongon, Walter Campbell, Tim Clinton, Ed Pavelle*
- 58 North Jersey Country Club  
*Dave Dudones, Keith Grassing, Paul Samanchick, Erv Allaghi*

### Low Gross Winners

- 66 Brae Burn Country Club  
*Blake Halderman, Paul Alexander, Len Shendell, Seth Blumenfeld*
- 69 Fenway Golf Club  
*Bob Alonzi, Heath Wassem, Steve Frankel, Bruce Frank*

### Closest to the Pin

- Superintendent:** Matt Ceplo  
*Rockland Country Club* Hole #3
- Golf Professional:** Greg Pace  
*Pelham Country Club* Hole #14
- Club Official:** Erv Allaghi  
*New Jersey Country Club* Hole #8
- Club Official:** Steve Geisler  
*Salem Golf Club* Hole #16

### Longest Drive

- Golf Professional:** Nick Maselli  
*Old Oaks Country Club* Hole #11
- Other:** John Mroz  
*Highland Golf Club* Hole #17

— Chuck Denny

## Two-Ball Tourney Progresses to the Semi-Finals

The 2005 Two-Ball Tournament has progressed to the semi-final round in both the First and Second Flights. With only four teams vying for the championship in each flight, the competition is becoming fierce. So much for a friendly round of golf. It's all business now! The defending champs for this year's championship are both sitting on the sidelines after receiving devastating losses. Dube/Halderman got beat by the #16 seed in the first round when neither player could hit the broad side of a barn. They did fight back from 4 down on the back side to lose 1 up to a nice Matt Ceplo par on the last hole at Old Oaks.

Johnston/Severino lost in the second round to the always tough Leahy/Millet team at Metropolis.

### First Round Highlights

The first round was full of excitement as 16 matches were to be played. One of the biggest stories of the round was about the man who got the "sweaty palms" title last year for four-putting the final hole of his match for a loss. This year, Bobby Steinman did a 180! He and his teammate, Scott

Apgar, were 3 down after 9 when Steinman played just one over par for seven holes (quite a feat for the Second Flight) to get back to all square. They eventually won the match on the 20th hole after Doug Middleton missed a three-footer on the 19th hole for a victory. What a match!

Other first-round highlights were:

- the Alonzi/Alonzi team being defeated 3 & 2 by Calladio/Fuller at their home-course-away-from-home, Silver Spring.
- Scott/Seibel and Denny/Heintz lost at their real home courses, Century and Centennial. That's just not supposed to happen!
- Flynn/Rappoccio and Dickinson/Lafferty did manage to be victorious at their home courses—Silver Spring and Rye—but both matches were extremely close with Dickinson/Lafferty closing their match on the 19th hole.
- The Collins/Lerner team wins the prize for the least amount of holes played while advancing to the semi-finals. They won a rain-shortened, 11-hole match over Wicks/Ziesmer (that left them plenty of time for libations) and then received a forfeit in the second round. They should be well rested for their next tough match up against Flynn/Rappoccio.

## The Advertising Opportunity You've Been Waiting For!

As promised, *Tee to Green* is now accepting inserts from suppliers interested in advertising their products or services in the center of our publication.

Call Advertising Manager Glenn Perry at 203-762-9484 for further information.

## Two-Ball Results: Rounds One and Two

### More Notable Plays

Reeb/Wojick seemed to have the most relaxing match, once they got past the fact Reeb thought he was playing in a father/son tournament and suggested he and Wojick wear matching shirts. Reeb's team spirit was a little much for Wojick, who refused to cooperate. In the end, they jelled perfectly on the course, ham-and-egging their way around Round Hill. By the 12th hole, they were well ahead and decided to stop and enjoy a cold drink with their gracious host, Bill Gaydosh, which allowed Martineau/Scheyhing's 4 & 3 defeat to be handled with smiles.

Reeb/Wojick's victory put them in an epic battle of the "gray beards" in the second round as they faced Flynn/Rappoccio at Piping Rock. Rappoccio reported that they jostled their way around the grounds, finally finishing on the 19th hole as Sir Flynn sank a six-foot putt for par. Another great match!

Other notable second-round stories in the First Flight include Alexander/Dudones taking out Grasso/Tretera at Grasso's home course 2 & 1, and two other matches needing extra holes to complete the match. It certainly has been a year of close matches. As they say, "That's why we play the game!"

Good luck to the teams in the semi-finals, and thank you to all those superintendents and clubs that have hosted our Two-Ball matches.

The four semi-finalists are Dickinson/Lafferty vs. Alexander/Dudones and Cain/Wentworth vs. Benedict/Lippman in the First Flight and Leahy/Millett vs. Calladio/Fuller and Collins/Lerner vs. Flynn/Rappoccio in the Second Flight.

Look for the 2005 champions to be announced in the next *Tee to Green!*

— Blake Halderman, CGCS

### First Flight: Round One

- 16) Matt Ceplo/Jim Swiatlowski  
*defeated*
- 1) Glen Dube/Blake Halderman  
*1 up at Old Oaks*
- 8) Bert Dickinson/Chip Lafferty  
*defeated*
- 9) John Genovesi/Eric O'Neill  
*19th hole at Rye GC*
- 12) Tony Grasso/Scott Tretera  
*defeated*
- 5) Scott Niven/Larry Pakkala  
*2 & 1 at Rockrimmon*
- 4) Grover Alexander/Dave Dudones  
*defeated*
- 13) John Currie/Chris Smith  
*in a forfeit*
- 11) Sean Cain/Jeff Wentworth  
*defeated*
- 6) Rich Browne/Glenn Gallion  
*5 & 3 at Siwanoy*
- 14) Tony Girardi/Rick Schock  
*defeated*
- 3) Earl Millett/Jud Smith  
*3 & 2 at Quaker Ridge*
- 10) Brian Benedict/Bob Lippman Jr.  
*defeated*
- 7) David Fleury/Glenn Perry  
*5 & 3 at Round Hill*
- 2) John Barlock/Chad Esposito  
*defeated*
- 15) Chuck Denny/Will Heintz  
*1 up at Centennial*

### First Flight: Round Two

- 8) Bert Dickinson/Chip Lafferty  
*defeated*
- 16) Matt Ceplo/Jim Swiatlowski  
*20th hole at Sleepy Hollow*
- 4) Grover Alexander/Dave Dudones  
*defeated*
- 12) Tony Grasso/Scott Tretera  
*2 & 1 at Metropolis*
- 11) Sean Cain/Jeff Wentworth  
*defeated*
- 14) Tony Girardi/Rick Schock  
*19th hole at Century*
- 10) Brian Benedict/Bob Lippman Jr.  
*defeated*
- 2) John Barlock/Chad Esposito  
*in a coin toss*

### Second Flight: Round One

- 1) Bob Johnston/Matt Severino  
*defeated*
- 16) Scott Ferguson/Tom Weinert  
*in a forfeit*
- 9) Tom Leahy/Mark Millett  
*defeated*
- 8) Kevin Quist/Charlie Siemers  
*1 up at Ardsley*
- 12) Scott Apgar/Bobby Steinman  
*defeated*
- 5) Tony Campanella/Bill Middleton  
*20th hole at Tamarack*
- 4) Jim Calladio/Mark Fuller  
*defeated*
- 13) Bob Alonzi/Joe Alonzi  
*3 & 2 at Silver Spring*
- 6) Kevin Collins/Nick Lerner  
*defeated*
- 11) John Wickes/Jason Ziesmer  
*1 up after 11 holes at Centennial*
- 14) Gary Arlio/Bob DeMarco  
*defeated*
- 3) Mike Scott/Kevin Seibel  
*2 & 1 at Century*
- 7) Dennis Flynn/Peter Rappoccio  
*defeated*
- 10) Joe Kennedy/Peter Waterous  
*2 & 1 at Silver Spring*
- 2) Mike Reeb/Greg Wojick  
*defeated*
- 15) Chuck Martineau/Fred Scheyhing  
*4 & 3 at Round Hill*

### Second Flight: Round Two

- 9) Tom Leahy/Mark Millett  
*defeated*
- 1) Bob Johnston/Matt Severino  
*2 up at Metropolis*
- 4) Jim Calladio/Mark Fuller  
*defeated*
- 12) Scott Apgar/Bobby Steinman  
*2 up at Bedford*
- 6) Kevin Collins/Nick Lerner  
*defeated*
- 14) Gary Arlio/Bob DeMarco  
*in a forfeit*
- 7) Dennis Flynn/Peter Rappoccio  
*defeated*
- 2) Mike Reeb/Greg Wojick  
*19th hole at Piping Rock*

Reminder: The remaining matches should be completed by the following dates:  
Match 3 ~ August 29  
Final ~ September 30

# Congratulations to Our 2005 Scholarship Recipients

by *Matt Ceplo, CGCS*  
*MetGCSA Vice President*

**A**t the July Education Meeting at Ridgeway Country Club, the Scholarship and Research Committee awarded a total of \$10,600 in scholarships to nine deserving members' children.

My first year chairing this committee has really been an eye-opener. I never realized just how rigorous the application process—and the competition—for a Met scholarship really was.

To complete an application, you have to provide transcripts from your past three semesters, list jobs you've held in the past three years, provide two current statements of character, write a one-page statement that includes a description of why a college education is important, list all extracurricular and community activities as well as how you feel they will benefit you in the future.

With applications in hand, the committee selects candidates based on their maturity, academic history, ambition, extracurricular activities, and effort exhibited in completing their application. Reviewing applications is a tough job considering each submission is roughly nine pages or more and we get roughly 15 applications a year!

Please join me in congratulating this year's scholarship recipients. They certainly have earned it!

**Chris Baviello**, son of Tony Baviello, superintendent at Twin Lakes Golf Club, will be a freshman at Lehigh University with a major in biology and political science.

**Ryan Beaudry**, son of Ray Beaudry of Atlantic Irrigation, will be entering his sophomore year at Manhattanville College with a major in business and a minor in French.

**Robyn Buschini**, daughter of Frank Buschini of Knollwood Country Club, will be a freshman in the Nursing program at SUNY Delhi.

**Meghan Degraw**, daughter of Brian Bolehala of Cleary Chemical, is a sophomore at the University of Scranton and is enrolled in the Baccalaureate Nursing program.

**Katelin Flynn**, daughter of AL member Dennis Flynn, will enter her sophomore year at the University of Vermont as a studio art major.



**Katherine Fuller**, daughter of Mark Fuller, superintendent of Connecticut Golf Club, will enter her sophomore year at the University of Connecticut. She is leaning toward a degree in fine arts.

**Katherine Kennedy**, daughter of Les Kennedy, superintendent of the Blind Brook Club, is pursuing an accounting degree at Northeastern University.

**Jessica Mahoney**, daughter of Dave Mahoney, superintendent of Siwanoy Country Club, will be a freshman at Cortland College pursuing a degree in communications.

**Kevin Moore**, son of Glenn Moore of Glenmore Landscape Services, will be in his sophomore year at Providence College with a major in public and community service.

Scholarship funds are generated largely from the Annual Bill Caputi Scholarship Raffle, which has become an institution at our yearly Christmas party. The raffle was named in honor of Bill, who was superintendent at Hampshire Country Club and died unexpectedly at a young age.

Please remember to support the scholarship raffle again this Christmas. Wouldn't it be great to raise enough money to fund even more scholarships for our membership's deserving sons and daughters?

*Matt Ceplo, chairman of the Scholarship and Research Committee, is superintendent at Rockland Country Club in Sparkill, NY.*

*Pictured with Scholarship & Research Committee Chair Matt Ceplo (right) are (l to r) Robyn Buschini, Jessica Mahoney, Katherine Fuller, Meghan Degraw, Chris Baviello, Kevin Moore, Ryan Beaudry, Katelin Flynn. Not pictured is Katherine Kennedy.*

## Member on the Move

**Mike Dukette**, formerly with Lesco, Inc., has accepted a position with Bayer Environmental Science.

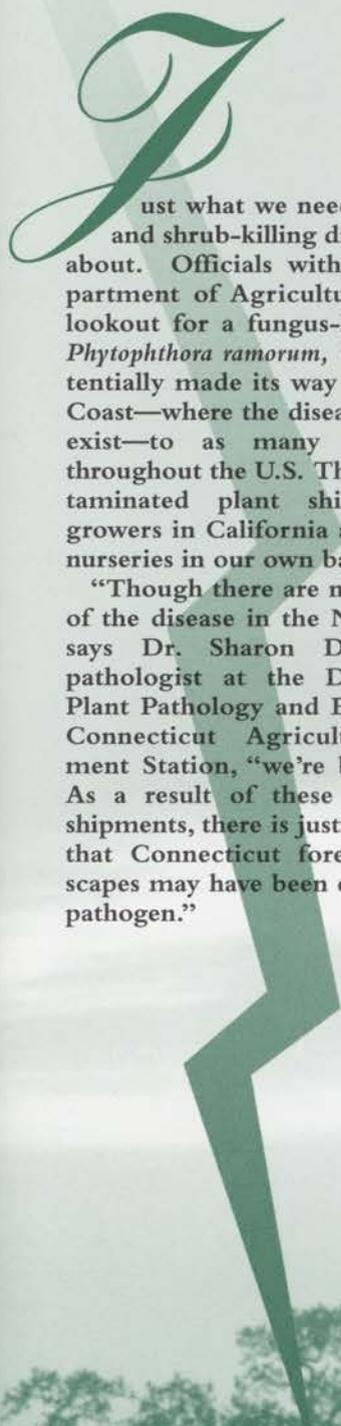
## Congratulations

We'd like to congratulate **Bob York** on his promotion to marketing associate for BASF Professional Turf & Ornamentals. Bob previously served as a senior sales specialist for the Northeastern region, which included Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. Though Met members won't be seeing Bob in the field anymore, he assures us that there will be a new rep on the job by the time you read this announcement.

## In Sympathy

We'd like to offer our condolences to Crystal Springs Superintendent **Tim Powers**, whose father, Kenneth Powers, passed away July 8.

# Will Your Plantings Fall Prey to *Phytophthora ramorum*?



ust what we need: another tree and shrub-killing disease to worry about. Officials with the U.S. Department of Agriculture are on the lookout for a fungus-like organism, *Phytophthora ramorum*, which has potentially made its way from the West Coast—where the disease is known to exist—to as many as 39 states throughout the U.S. The carrier: contaminated plant shipments from growers in California and Oregon to nurseries in our own backyards.

“Though there are no known cases of the disease in the Northeast yet,” says Dr. Sharon Douglas, plant pathologist at the Department of Plant Pathology and Ecology at The Connecticut Agricultural Experiment Station, “we’re being vigilant. As a result of these contaminated shipments, there is justifiable concern that Connecticut forests and landscapes may have been exposed to this pathogen.”

## Plants at Risk

More commonly known as “Sudden Oak Death,” the disease’s name is somewhat of a misnomer: First, it doesn’t come on suddenly and, second, it affects many more species than just oaks.

More aptly renamed “Ramorum Blight,” the pathogen attacks an extremely diverse group of herbaceous and woody species. Among some of the more common hosts for this disease are viburnum, Japanese pieris, rhododendron, heather, Douglas fir, and several species of oak, including chestnut oaks, white oaks, and northern red oaks.

For a complete list of plants in jeopardy, log on to [www.aphis.usda.gov/ppq/ispm/sod/usdasodlist.html](http://www.aphis.usda.gov/ppq/ispm/sod/usdasodlist.html).

## How Does It Spread?

A key avenue for dispersal of *P. ramorum* over long distances is through shipments of infected nursery stock. You can also spread the disease through contaminated soils, potting media, and water, as well as through infested timber, firewood, and woodchips stored under moist conditions.

Local spread of *P. ramorum* commonly occurs from movement of infected plant material, through rain and irrigation water, and by handling plants in nurseries and transporting contaminated soil in shoes of hikers and tires of bikers.

*Phytophthora ramorum* is considered to be a cool climate species with optimal growth at 68°F, but studies have demonstrated the organism’s ability to survive beyond these parameters, within the temperature range of 36° to 80°F.

Moisture is also important for survival, spread, and infection of *P. ramorum* as evidenced by natural infections of forests in coastal “fog belts” of California. Studies have shown that spores do not survive drying but survive for at least one month under moist conditions. Numerous studies on survival parameters of this organism are ongoing.

## I.D.ing the Disease

The disease symptoms associated with *P. ramorum* are very diverse and primarily determined by the host species. On trees, the disease symptoms result in lethal stem cankers in the bark, cambium, and outer xylem that expand and girdle the stem and kill the tree. These cankers often ooze and bleed.

Symptoms typical of many non-oak host species are foliar blighting and shoot die-back. These symptoms are less severe than cankers and include leaf spots and blotches.

Unfortunately, disease symptoms characteristic of *P. ramorum* infections are often indistinguishable from other diseases or effects of insect problems that we frequently encounter in our woodlands and landscapes. Examples of some look-alike problems are bacterial wetwood, borers, winter injury, mechanical injury, and infections by other fungi.

Because of these look-alikes, diagnosis of Ramorum Blight can be very difficult. If you’re in doubt about what is causing a particular symptom on a plant, contact your state Agricultural Experiment Station for assistance.

## Are There Controls?

Though chemicals used to treat *Pythium* may help to suppress the disease, there is really nothing available to knock it out entirely. And besides, according to Dr. Robert Marra, a plant pathologist with The Connecticut Agricultural Experiment Station, there’s no use in trying to control the disease. Any infected plant or tree must be removed, incinerated, and then the USDA cordons off—and monitors—the area for two years. They want to be certain the disease does not spread to other plants.

The good news in all this is that no cases have cropped up in our area yet. Dr. Marra’s advice: “Be alert but not alarmed.”

# Century's Kevin Seibel to Host Superintendent/Green Chairman Tourney

by Rob Alonzi

This year's Superintendent/Green Chairman Tournament, scheduled for October 17, finds a new venue at Century Country Club in Purchase, NY. Our host for the day is Golf Course Superintendent Kevin Seibel, who has been with Century Country Club since 2003.

Century was founded in 1898 as the summer playground for a group of Wall Street bankers along the Long Island Sound. The nine-hole course played along the water, in the Throgs Neck section of the Bronx, just north of the present-day toll plaza for the Throgs Neck Bridge. In 1922, the club purchased 175 acres at its current location on Anderson Hill Road, with the facility opening in 1924.

Built by renowned Golf Course Architects H. S. Colt and Charles Alison, the Par 71 golf course plays 6,078 yards from the front, extending to 6,807 yards from the back. "Century's strengths are its Par 4s and its tightly bunkered, slick back-to-front greens," says Kevin, warning that several holes demand the drive carry the crest of the ridge in the landing area to leave an open, visible shot at the green.

## A Logical Career Path

Kevin's fondness for the business began as a teenager. "I grew up in Cherry Hill, NJ, not far from Woodcrest Country Club," he explains. "For six summers, I worked on the grounds crew. It was great, because I could ride my bike there."

By the time he graduated high school, Kevin was so well versed in the inner workings of golf course maintenance, that it seemed only natural that he pursue a career in turfgrass management. While continuing on the grounds crew at Woodcrest, he enrolled in the Cook College Turf Program at Rutgers University, completing his certificate in 1996.

When a position on the grounds staff at the prestigious Pine Valley opened, Kevin jumped at the opportunity. He worked at the course for three years.

After Pine Valley, Kevin became a spray technician at yet another top-ranked course, the Merion Golf Club. Quickly moving up the ranks, Kevin became Merion's West Course superintendent and eventually its East Course superintendent.

After six years at Merion, Kevin found his new home, in 2003, at Century Country Club.

When you visit Century this fall, you'll get a taste of what's to come. "We're in the beginning stages of developing a master plan for the course with Golf Course Architect John Harvey," says Kevin. The plan will involve tees, bunkering, fairway contouring, and selective tree removal. Currently underway, for all to see, is a new 10,000-square-foot practice green and short game area. "We expect to finish this area up by late this summer. Then over the course of the upcoming years, we'll be pecking away at the rest of the master plan," he adds.

## Off the Course

Away from the course, Kevin enjoys spending time with his wife Carolyn, sons Alex and Ben, and their two dogs, Austin and Lacey. But he also finds time to enjoy his passion for baseball. "I play softball in the summer within the Harrison Town League,



Kevin Seibel

and I'm a serious Philadelphia Eagles fan," he says, noting that he attends as many games as possible.

This fall, after a long, hard season, he's hoping everyone has a ball—playing the Superintendent/Manager Tourney on October 17.

*Rob Alonzi, co-chairman of the Tee to Green Editorial Committee, is superintendent at St. Andrew's Golf Club in Hastings-on-Hudson, NY.*

# It's Round Two for the Met at Connecticut Golf Club

*O*n September 19, the MetGCSA will make a return trip to Connecticut Golf Club for Round Two of the Met Championship. Even if you played Connecticut Golf Club last year, this is one course you won't mind revisiting. Located in rural Easton, CT, the 39-year-old golf course was selected in 1984 by the American Golf Course Architects Association as one of the 150 best-designed and most beautiful courses in America.

Some things never change. Better than ever, in fact, Connecticut Golf Club has, for the past seven years, been tweaking and refining the course's original Geoffrey Cornish design. Carrying out the club's master improvement plan is our host superintendent, Mark Fuller, and his staff. "Work began in '98," says Mark, "with the installation of a new, high-density poly irrigation system and included rebuilding all the bunkers and tees and two entire green complexes. But, of course, as with any renovation, once you get into it, you find yourself fixing and adding everything from drainage to cart paths."

Renovations or not, the course is dramatic. It plays 6,200 yards from the front, all the way to 6,900 from the back, rising and falling through corridors of trees and granite and around several ponds. The layout is tight, and the greens are large, undulating, and quick. It is a true test of golf. So get ready.

The club, by New England standards, is relatively new. Opened in 1966, it was founded by Lawrence Wien as a businessman's golf club—not a country club, not a social club. It was a club devoted solely to playing golf. Membership began with 39 of Wiens' golfing buddies and was—and still is—by invitation only. "Today, the cap on membership has been raised to 190," says Mark, "and play is reasonable at 10,000 rounds per year."

## And Now for Something Completely Different

Mark's affection for the business began long ago, when he worked summers at what was then a 9-hole course: Crestbrook in Watertown, CT, where he grew up. Mark didn't follow your typical path to golf course superintendentdom. Out of high school, rather than pursue a turf degree, he completed a B.S. in graphic arts and photography from the University of Bridgeport. "After graduating," says Mark, "I worked 45 days in the field I'd studied and then realized it was crazy. I hated being inside."

He accepted a position in 1974 on the crew at The Longshore Club in Westport, CT. Within a year, Mark was elevated to assistant superintendent, and then in 1976, he became Longshore's superintendent. "I was in the right place at the right time," says Mark of his quick progression through the ranks.

He pursued formal training in turfgrass management at the UMass Winter School in 1977, remaining at Longshore until 1983. That's when he accepted the multifaceted role of superintendent/property manager and general manager at the infamous Quechee Club in Vermont.

Covering all the bases, Mark pursued and completed an M.B.A. in 1989 from Northeastern University.

After nine years at Quechee, Mark took his schooling and experience back to Connecticut—and the Connecticut Golf Club, where he's remained, happily ever after, for the past 14 years.

## Beyond Work

Mark lives in Newtown, CT, with his wife, Kim, and their 4-year-old Bernese mountain dog, K.C. They have two daughters, Kelly and Katie. Kelly has finished her studies at UMass as a graduate student and has accepted a position as an art teacher in



Mark Fuller, CGCS

an elementary school outside of Portland, ME. Katie is entering her sophomore year at the University of Connecticut.

In between his busy work schedule, Mark manages to eek out the time to enjoy his passion for kayaking, whether it's on a lake, river, or ocean. When asked if he likes the thrill of maneuvering class five rapids, he said, "No. If I want excitement and danger, I lace up my skates and play a little hockey with 'the boys' during winter months."

## An End in Sight

After coddling the course through what's become nearly a complete facelift, Mark is finally starting to see the light at the end of the tunnel. "I'm very happy with the renovation," says Mark, "and I'm looking forward to hosting this event and giving back to my peers and to the association that has always supported me and my family."

# Patron Directory

*Patrons listed on this page are supporting our association. You are encouraged to support them.*

- Al Preston's**  
Gary Shashinka  
810 Howe Avenue  
Shelton, CT 06484  
203-924-1747
- Aquatrols Corp. of America**  
Kevin P. Collins, N.E. Territory  
Manager  
1273 Imperial Way  
Paulsboro, NJ 08066  
609-841-2077
- Argento & Sons, Inc.**  
Louis Argento  
1 Prospect Avenue  
White Plains, NY 10607  
914-949-1152
- Atlantic Irrigation Specialties, Inc.**  
Ray Beaudry  
111 Lafayette Avenue  
N. White Plains, NY 10603  
914-686-0008
- Blue Ridge Peat Farms**  
Gene Evans  
133 Peat Moss Road  
White Haven, PA 18661  
570-443-9596
- Cardinals Inc.**  
John Callahan  
Complete Distributor of Golf Course  
Accessories & Turf Maintenance  
Supplies  
800-861-6256, FAX 860-673-8443
- Down To Earth**  
David Griffin  
All Phases of Golf Course  
Construction  
914-576-7693, CELL 914-413-3173
- E/T Equipment Co.**  
Bruce Pye / John Rizza  
425 South Riverside Avenue  
Croton, NY 10520  
914-271-6126, FAX 914-271-6146
- Glenmore Landscape Service**  
Glenn S. Moore  
98 Hack Green Road  
Pound Ridge, NY 10576  
914-764-4348
- Greenacres Company**  
Dave Pijnenburg  
75 Codfish Hill Road  
Bethel, CT 06801  
203-748-0558
- Harrell's Turf Specialty**  
Joe Stahl  
795 Rt. #148  
Killingworth, CT 06419  
203-209-6951
- Ira Wickes / Arborists**  
John W. Wickes  
11 McNamara Road  
Spring Valley, NY 10977  
845-354-3400
- Irra-Tech, Inc.**  
Joseph D. Kennedy  
18 Merritt Street  
Port Chester, NY 10573  
914-937-7273
- Leggette, Brashears & Graham, Inc.**  
Robert Good  
126 Monroe Turnpike  
Trumbull, CT 06611  
203-452-3100
- LESCO, Inc.**  
Charlie Siemers  
65 Primrose Street  
Katonah, NY 10536  
914-755-4202
- Louis DeLea & Sons, Inc.**  
444 Elwood Road  
E. Northport, NY 11731  
631-368-8022
- Metro Turf Specialists**  
"Customers, Our Top Priority"  
203-748-GOLF, FAX 203-743-0458  
EMAIL mail@metroturfspecialists.com
- Plant Food Company, Inc.**  
"The Liquid Fertilizer Experts"  
Tom Weinert  
914-262-0111 / 800-562-1291
- Soil Solutions LLC**  
Anthony Decicco / John Decicco  
7 Whittemore Place  
Ryebrook, NY 10573  
914-393-0659, FAX 914-939-5010
- Steven Willand, Inc.**  
Gary Mathis  
4 Production Drive  
Brookfield, CT 06804  
203-775-5757
- Storr Tractor Company ~  
Flowtronex**  
Rick Krok / Gary Lynott  
3191 U.S. Hwy. 22  
Somerville, NJ 08876  
800-526-3802, FAX 908-722-9847
- Surfside Wetting Agents**  
Liquid ~ Granular ~ Pellets ~  
ZAP! Defoamer  
Robert Oechsle: 800-401-0411
- Syngenta Professional Products**  
Lee A. Kozsey  
Banner Maxx, Primo Maxx, Subdue  
Maxx, Daconil, Heritage, Medallion  
610-861-8174, CELL 215-796-0409
- Tee and Green Sod, Inc.**  
Golf Course Sod Products / Installation  
Wayne Rice: 401-641-2972  
Dave Wallace: 401-789-8177
- The Care of Trees**  
Mike Cook, NY: 914-345-8733  
Jim Twomey, NJ: 201-445-4949  
Ken Clear, CT: 203-847-1855
- The Pond Connection**  
Jeff Stahl  
203-858-4136  
NY / NJ / CT
- The Roger Rulewich Group**  
David Fleury / Marshall Victor  
Golf Course Design, Renovation, &  
Construction  
800-465-3668, FAX 413-648-0211
- The Terre Company of  
New Jersey, Inc.**  
Byron Johnson  
Seed, Pesticides, Nursery Stock, &  
Fertilizer  
973-473-3393
- Tuckahoe Turf Farms, Inc.**  
Skip Deubel  
800-243-7582, CELL 860-306-8883  
www.tuckahoeturf.com
- Turf Products Corp./TORO**  
Bryan Diggle, Irrigation  
860-874-2812  
Richard Schock Jr., Equipment  
860-729-2237  
Scott Wosleger, Yamaha Golf Cars, &  
Utility Vehicles: 860-306-6400
- Valley View Wholesale  
Greenhouses**  
Frank Amodio  
229 Smith Ridge Road  
S. Salem, NY 10590  
914-533-2526, FAX 914-533-2050
- Westchester Tractor Inc.**  
John Apple  
14 Meadow Street  
Goldens Bridge, NY 10526  
914-232-7746
- Westchester Turf Supply, Inc.**  
Bob Lippman / Dave Lippman  
"Serving the Fine Turf Profession"  
845-621-5067, FAX 845-621-7180  
EMAIL westturf@suscom.net
- Wilfred MacDonald, Inc.**  
Glenn Gallion  
19 Central Boulevard  
S. Hackensack, NJ 07606  
888-831-0891