Tee

PUBLISHED BY THE METROPOLITAN GOLF COURSE SUPERINTENDENT ASSOCIATION

President's Message

THE START OF A NEW SEASON

A look at what's in store for area superintendents

As we return from our winter turf conference and vacations, we're all entering into the spring season with the highest levels of motivation and anticipation for a new golf season. Unfortunately, one thing many of us may not have anticipated this spring is what has begun to look like a severe drought situation for New York City, Westchester Country, and some of the other surrounding areas. Mayor Koch has already imposed Phase 2 of the drought emergency water restrictions, and it doesn't appear that the situation will improve significantly in the near future.

But we're fortunate—as we were in 1985—to have Ted Horton, director of sports and grounds at Westchester Country Club, representing us on the New York Drought Emergency Task Force. We will also receive correspondence from Joe Alonzi, superintendent at Fenway Golf Club. He has volunteered to help Ted on our behalf by acting as liaison to the MetGCSA Board of Directors.

We will do all we can to keep you informed of any water restrictions on golf turf. Right now, Ted anticipates that individual golf clubs will soon be able to apply for a variance to the current water restrictions. In the meantime, however, if you haven't already done so, you might want to look into alternate water sources, make changes to your (continued on page 4)

Special Feature

LITTLE-KNOWN FACTS ABOUT IRRIGATION SYSTEMS

Dennis Petruzzelli, a former irrigation specialist, offers insight into how to make the most of your irrigation system

to Greet

Let's face it, irrigation systems are probably one of the most important tools a golf course superintendent could have. Yet many take them for granted. They push a button or thread in a quick coupler sprinkler—and boom, instant water.

But particularly now, when we're all faced with a potentially severe drought, it's important to really know your system so that you'll be able to apply water efficiently and without waste.

For instance, how many of you know the gallon-per-minute output of your sprinklers? It's an important question. When water's in short supply, every minute counts. And 20 minutes on a particular area may be twice as long as necessary. But you won't know until you take the time to figure it out.

This article will give you a simple formula for calculating your system's output, but it will also offer a whole host of tips that'll be helpful if you're installing a new system—or just trying to make the most of your old one.

Knowing the Elevation of Your Water Source

Before anything else, you should check the elevation of your water source whether it's a pump station or city water. This information will help you calculate the gains or losses in water pressure throughout your course—a calculation crucial to effective water management.

If, for instance, you know one of your fairways is 10 feet higher than your water source, you can count on losing 4.33 pounds per square inch (PSI) in operating pressure in that area. Conversely, if a fairway is 10 feet lower, you'll increase your operating pressure by 4.33 PSI.

Adequate pressure throughout your course is essential in operating sprinklers at their optimum. To perform at their best, sprinklers require a range of 80 to 100 PSI at the base of the head. But where you know your water pressure is low, you can install a relatively new sprinkler on the market that operates at (continued on page 7)

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- 4 Meet your March meeting host
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Editor's Note

CHECK IT OUT The new-and-improved Tee to Green

Welcome to the new *Tee to Green* redesigned to better serve the MetGCSA membership. Our primary objectives for 1989 are a more concise, attractive, and timely newsletter. But keep in mind, good things take time—and we'll be tinkering with content, and probably format, for the next few issues.

As I mentioned last time, starting with this issue, Pandora Wojick will be serving as *Tee to Green's* managing editor and advisor. She'll not only be offering the committee professional advice and direction, she'll also be editing and laying out the newsletter. I look forward to working with Pandora on future issues.

The underlying philosophy of *Tee* to Green is, and always has been, communication and support. But to turn that philosophy into reality, it will take more than just the efforts of the newsletter committee: We need your participation and feedback.

That brings me to another of our objectives for 1989: to encourage the *entire* membership to become involved. As a beginning, we are enclosing a suggestion card in this issue. We'd like you to use it to jot down your thoughts on what you'd like to see in future issues of *Tee to Green*, and then return it to us. If you'd like to put your pen to paper and actually write up one of your suggestions, please let us know. Your help is always appreciated.

We've worked with Pandora on coming up with a list of subjects and sections we'd like to cover in future issues. *Many of them, you'll see, are dependent on your input.* It may help to keep these sections in mind when filling out the suggestion card—and offering any ideas in the future.

Special Feature: A lengthier article covering a golf course management topic of special interest.

■ *Work Smarts:* A "how-to" section, featuring tips and techniques you can apply on the job.

 Clippings: News briefs on studies, survey findings, and trends in golf course management.

Spotlight: Superintendent profiles.

• Notable Notes: News about Met members—everything from births and deaths to any special awards or recognition members have received.

■ *Upcoming Events:* An update on events worth attending.

Pro Tips: Helpful hints from area golf pros.

Understanding the Rules of Golf: Golf rules defined.

Tools of the Trade: Book reviews and information about new products, seminars, or job-related tools that will keep you informed and up to date in areas critical to your job performance.
Bull's-eyes and Blunders: Stories about the good and bad, funny and not-so-funny experiences you've have had on the job. Each experience should provide a basic lesson that would be of value to other superintendents.

Examples of topics for this section: A management technique that's worked well—or failed miserably (and why); how you've handled a sticky situation with a club member or someone on your Green Committee; a maintenance technique—or piece of equipment that's saved you time and money.

We'd also like to run the contributor's name, club, and phone number after his or her submission so other superintendents would know who to contact for more information or to discuss similar problems and successes.

As you can see, this is one section where your input is essential. So c'mon—give it some thought. **Letters to the Editor:** A section devoted to readers' comments on newsletter articles and any information or insights that would be of special interest—and benefit—to others. Again, we'd publish the contributor's name and club with each submission. **President's Message:** Notes from the Met president.

Editor's Note: The editor's comments. We hope you enjoy the new Tee to

Green. But most of all, we hope you become a part of it.

TIM MOORE Editor



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Editors TIM MOORE EARL MILLETT 914-592-7829 914-948-5606 **Managing Editor** PANDORA C. WOJICK **Editorial Committee** JOE ALONZI JEFF MCDOWELL TONY BAVIELLO MARY MEDONIS **BOB LIPPMAN** DENNIS PAT LUCAS PETRUZZELLI Advertising Manager

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Work Smarts

PATCH DISEASES

Three experts offer advice on how to keep them at bay

Patch diseases can be devastating. They're microscopic fungi that infect the roots and crowns of turfgrass and frequently go undetected—until it's too late. The first signs of patch disease: root discoloration, invisible to the naked eye.

Patch diseases common to the Met area are summer patch (Magnaporthe poae), take-all patch (Gaeumannomyces graminis), and to a lesser extent, necrotic ring spot (Leptosphaeria korrae).

Although the environmental conditions under which these diseases occur vary, the effect is the same: The fungi invades the turfgrass's root system, which results in reduced water and nutrient uptake and eventual death of the plant.

But the worst part is that large areas of turf are often damaged before there's even a hint of disease activity. For instance, bentgrass roots affected by take-all patch are often damaged under the cool, wet conditions of spring. Yet patches of dead turf may not show up until June or July.

The reason for the lag time? Although up to one-third of the root system may be destroyed in spring, the remaining healthy roots are able to support shoot growth—until summer, when the demand for water increases. During heat stress, the diminished root system is no longer able to support shoot growth, and the telltale patches appear.

Although there's no conclusive research on how to control patch diseases, experts have been experimenting with fungicides and application techniques that seem to be working. What follows are recommendations from three patch disease experts: Drs. Peter Landschoot and Bruce B. Clarke of the Cooperative Extension Service at Cook College, Rutgers University, and Dr. Joseph Vargas of Michigan State University.

Landschoot and Clarke: Prevention is the Best Medicine

In the January/February issue of *The Greenerside*, Landschoot and Clarke recommend a two-step approach to patch control: One, apply a fungicide at least one month before patch symptoms appear. And two, be sure the fungicides you apply reach the plant's root system. To do this, they recommend using systemic, as opposed to contact, fungicides and applying them with large volumes of water-or even a wetting agent.

Their field studies have shown a 20 percent increase in control of summer patch on turf treated with benzimi-dazole fungicides (Tersan 1991, Cleary's 3336, and Fungo 50) applied in 10 gal. of water/1000 ft² as opposed to the same fungicide rates in 2 gal. of water/1000 ft².

Theoretically, you can get similar results by irrigating immediately after you've applied fungicides, but Lanschoot and Clarke offer one caveat: If the fungicide dries on the leaf surface before watering, there's a good chance subsequent irrigation won't wash it into the root zone.

To prevent this problem, they propose several options: using granular fungicides; spraying during a light rain or when plants are dew-covered; and keeping tank pressure low so that spray droplets are larger and less apt to adhere to leaf tissue.

But whichever approach you chose, Landschoot and Clarke warn that none will be effective if you have excessive thatch and compacted soil. Both conditions can block fungicides from reaching plant roots, they say. The solution? Simple. A regular program of spiking and aerification.

In the end, however, what's most important in controlling patch diseases is *preventive* applications of systemic fungicides. Landschoot and Clarke have found that once disease damage starts, it generally won't stop with curative fungicide applications. The problem, they suspect, is that partially diseased turf roots can't take up enough fungicide to protect them from further infection.

Vargas: The Nitrogen Connection Vargas, in a recent talk at the Massachusetts Turf Conference suggested that patch diseases be managed by keeping nitrogen levels up in the four-pound range for greens and in the two-to-three-pound range for fairways.

Another recommendation: applying fungicides once in April and then again in May. The products he feels offer the best results are Bayleton, 2 oz./1000 ft²; Rubigan, 3 3/4 oz./1000 ft²; and Banner, 4 oz./ 1000 ft².

Tee to Green

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Spotlight

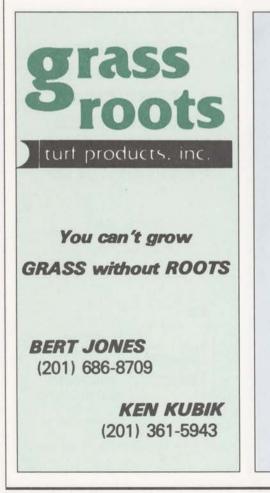
Meet Your March Meeting Host Jeff Scott, Apawamis Country Club

he Apawamis Country Club was the site of the MetGCSA's March meeting, which included a talk from Joseph McGrath, salesperson with National Concrete Structures, Ltd. Though like most March meetings, this one didn't include a golf schedule, we'd still like to introduce you to Apawamis' new golf course superintendent, Jeff Scott. Jeff came to Apawamis about a year ago from Knickerbocker Country

Club in New Jersey, where he worked three years as superintendent. No stranger to the New York area, Jeff got his start in the business at Fairview Country Club where he worked under Bob Alonzi, now superintendent at Winged Foot, for five seasons. He then spent the next year as assistant superintendent at Fenway under the tutelage of Joe Alonzi. Add to his credentials an associate's degree from the University of Massachusetts at Stockbridge and a placement period at the famed Baltimore Country Club.

Jeff and his wife Kathy and 3-year-old daughter, Anne, currently live on club grounds. But word has it, they won't be there long. They've just bought a house in Carmel, NY—not far from Patterson, where Jeff grew up—and they're planning to move in sometime in July. But that's not the only change in store for the Scotts: They're expecting a new addition to the family this fall. Boy or girl? Watch the Notable Notes section of this newsletter for an update.

TIM MOORE Knollwood Country Club



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President's Message

THE START OF A NEW SEASON

(continued from page 1)

cultural programs to reduce the effects of low water use, and notify your club membership of the potential consequences of these water restrictions to your golf course. Please feel free to call me, Ted, or Joe for an update on this potentially serious situation.

On a more positive note, this year for the first time, the MetGCSA will be sponsoring a hole-in-one contest in conjunction with the GCSAA at the Westchester Classic. This televised event will take place on the 210-yard 16th hole during Saturday and Sunday of the tournament. Should anyone hit a hole-in-one, the \$25,000 prize will be divided by giving \$12,500 to the winning PGA participant, \$7,500 to the United Hospital Charity Fund, and \$5,000 to the GCSAA Scholarship and Research Fund.

If all goes well, this public relations campaign will provide the most far-reaching exposure to date for our local association and should help to enhance the stature and image of all golf course superintendents. Special thanks to our public relations chairman, John O'Keefe (superintendent, Preakness Hills CC), for his extra efforts in single-handedly arranging all the details for this exciting event.

Hope you can tune in on June 10 and 11 or visit the Classic in person to observe this promotional activity, which will certainly benefit everyone involved.

SCOTT E. NIVEN, CGCS President MetGCSA

Quote Unquote

"It's a funny thing about life: If you refuse to accept anything but the best, you very often get it."

W. SOMERSET MAUGHAM English Novelist

Notable Notes

BIRTHS

Congratulations to:

- Glen and Denise Moore, Glenmore Landscape Service, Pound Ridge, NY
- Tony and Laura Baviello, Pelham Country Club, Pelham, NY
- Tim and Jennifer O'Neill, Country Club of Darien, Darien, CT
- All had baby boys born this past winter.

MEMBERS ON THE MOVE

Here's an update on area job changes:

- Mike Minor took over as superintendent at the Connecticut Golf Club, Easton, CT. Previous position: superintendent, Mahopac Golf Club, Mahopac, NY.
- Greg Stanley took over as superintendent at Rockrimmon Country Club, Stamford, CT. Previous position: assist. superintendent, Woodway Country Club, Darien, CT.
- Rick Schock took over as superintendent, Wee Burn Country Club, Darien, CT. Previous position: assistant superintendent, Wee Burn.

- Patty Knaggs took over as superintendent at Westchester Country Club, Rye, NY. Previous position: assistant superintendent, The Country Club, Brookline, MA.
- Charlie Smith took over as superintendent at Mahopac Golf Club, Mahopac, NY. Previous position: assistant superintendent, Mahopac.
- David Frey took over as superintendent at Leewood Country Club, Eastchester, NY. Previous position: assistant superintendent, Stanwich Club, Greenwich, CT.
- Dennis Petruzzelli took over as superintendent at Lakeover Country Club, Bedford Hills, NY. Previous position: irrigation specialist, Turf Products Corp., Windsor, CT.
- Bob Tosh, long-time superintendent at Rockrimmon Country Club, has moved out of the area to Manchester Country Club, Manchester, NH.

NEW MEMBERS

 Gina Gatto, Class B, Patterson Club, Fairfield, CT

- Rick Schock, Class B1, Wee Burn Country Club, Darien, CT
- David Wallace, Class C, Tee & Green Sod, Exeter, RI
- Joe Kennedy, Class C, Irra-Tech, Rye, NY
- Robert DeMarco, Class AS, Powel-ton Club, Newburgh, NY

IN MEMORIAM

The MetGCSA regrets to announce the recent death of Class A member Eugene Grady.

Gene started his golf course career at Fairview Country Club in Elmsford, NY. He moved to the new Fairview Country Club when it was relocated to Greenwich, CT, in the early '60s. In 1966, Gene was appointed greens superintendent of Tamarack Country Club in Greenwich, where he worked for 22 years, until his retirement in June 1988.

Gene's death was a shock to colleagues and friends. He'll be missed by all. Gene is survived by his wife, Tina Grady, of Safety Harbor, FL.



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Special Feature

IRRIGATION SYSTEMS

(continued from page 1)

40 to 70 PSI.

If you can't find elevation information in your records, the place to look next is your local Town Assessor's Office. They generally have that information on hand and are often willing to make you a copy at no charge.

Keeping Your Nozzles in Check Nothing is forever—and sprinkler nozzles are no exception. Their useful lifetime is generally about 10 to 15 years. Beyond that, they'll begin applying more water than they're designed to—often without your knowing it.

Aside from the obvious inefficient use of water, there's another hazard to operating with worn nozzles: You can overtax your pumps. Think about it: A system designed to operate nine *new* fairway sprinklers at one time, may not be able to accommodate nine fairways sprinklers with worn nozzles that are outputting above-normal amounts of water.

The advice here: Check your nozzles. If they're old, change them to get optimum performance from each sprinkler.

Verifying Sprinkler Head Spacing Surprising to many, a good number of those dry spots superintendents battle every season are caused by improper sprinkler head spacing.

So before you tamper with the original design of your irrigation system, keep in mind that only 75 percent of total sprinkler throw is considered effective coverage. In other words, if you want to change sprinklers in an area, and you know the ones you plan to install have a throw rate of 100 feet, then you've got to figure on placing them 75 feet apart—not 100 feet—for effective coverage. Common sense? Maybe. But not necessarily common practice.

Upcoming Events

1989 Met Meeting Schedule

April 27	Rolling Hills Country Club Scott Schukraft
May 25	Silver Spring Country Club Peter Rappoccio
June 20	Burning Tree Country Club Harry Nichol Invitational Tournament
July 11	Bonnie Briar Country Club Michael Medonis
August	Picnic
September	DATE AND SITE OPEN
October 16	Patterson Club Ray Beaudry
November	Annual Meeting

ATTENTION!!

The 1989 September meeting slot is still up for grabs. Please contact Tony Grasso, the tournament committee chairman, if you're interested in hosting this meeting.

The committee is also putting together the meeting schedule for 1990. Again, please give Tony a call if you're interested in hosting the meeting at your club.

Calculating Your GPM Output: The Key to an Efficient Watering Schedule

As we mentioned earlier, one of the keys to using your irrigation system and water—efficiently is knowing the gallons-per-minute (GPM) output of your sprinklers. For those of you who don't have this information on file, here's a formula to help you calculate it:

For Triangular Sprinkler Spacing

 $\underline{\text{GPM x 96.3}}_{\text{Spacing}^2 \text{ x .866}} = \text{inches/hour}$

For Square and Single-Row Spacing

 $\frac{\text{GPM x 96.3}}{\text{Spacing}^2} = \text{inches/hour}$

Precipitation rates and water scheduling go hand-in-hand. Once you've determined your sprinklers' precipitation rate, you can use that figure in calculating an efficient daily watering schedule.

Let's say you know one of your fairway sprinklers has a precipitation rate of a half-inch per hour and you want to apply one inch of water a week (which, by the way, is probably more than necessary). Using those figures, here's a formula that'll help you establish the length of your daily watering cycles:

<u>1.0"/week</u> = 2 hours of watering/week 0.5"/hour

<u>2 hours</u> = .28 hours x 60 minutes/ 7 days hour = 17 minutes/cycle

Though these formulas are designed to help you determine how long to operate your sprinklers, you can't go *solely* on these calculations. Remember, you also have to factor in such variables as wind, shade, rock, thatch depth, evapotranspiration (ET) rate, soil type, and slope and then adjust your run times accordingly.

It will take some experimenting, but look at it this way, you can't go too far wrong using these calculations as your starting point.

One note about evapotranspiration rate: If you'd like to calculate the ET rate on your course at different times of the year, and you don't have one of the newer irrigation systems that automatically adjusts run times for ET loss, you might want to contact your irrigation distributor. Thanks to years of weather-data record keeping, estimated ET rates for your region are available through your distributor.

Final Note

As you can see, it takes a lot of time and effort to fully understand your irrigation system and develop sound water management strategies.

If you experience severe constraints from your current irrigation system and have attempted some improvements unsuccessfully, it may pay to contact your local irrigation distributor or hire a consultant for an in-depth evaluation.

DENNIS PETRUZZELLI Lakeover Country Club

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