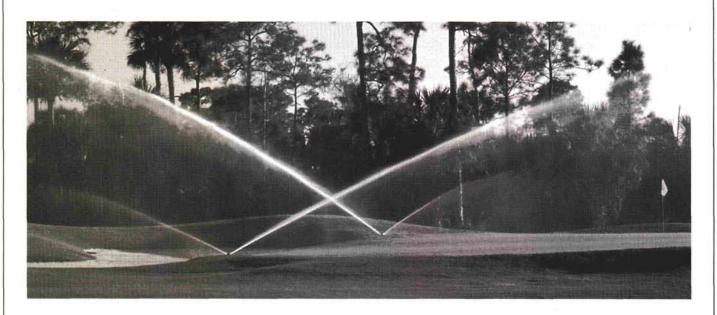


GOLF IRRIGATION



Irrigation by Rain Bird®

From the beginning, Rain Bird® golf irrigation has been focused first on the needs of the golf

industry and then on developing

products that meet these needs. Perhaps that's why you'll see Rain Bird products in use on world-class tournament courses, local country-club courses and municipal courses across the

country and throughout the world.

The Rain Bird commitment to product innovation, after-sales service and the wise manage-

ment of nature's resources allows us

to better meet the irrigation

needs of the golf world.

Call your Rain Bird distributor to find out why so many golf courses choose irrigation by Rain Bird.





(800) 373-4120

3105 N. MAIN

EAST PEORIA, IL 61611

PHONE: (309) 699-4120

FAX: (309) 694-1009

1600 SHORE RD., UNIT A
NAPERVILLE, IL 60563
PHONE: (630) 637-9029
FAX: (630) 637-9409

27225 150TH AVE. LONG GROVE, IA 52756 PHONE: (319) 285-5808 FAX: (319) 285-5809



BOARD OF DIRECTORS

PRESIDENT Ed Braunsky (Sue) Geneva G.C.

Home: 630-879-8536, Office: 630-232-0627

VICE PRESIDENT Kevin Czerkies (Peggy)

Sportsman's C.C Home: 847-949-7074, Office: 847-291-2352

SECRETARY / TREASURER Robert Maibusch (Cheryl) Hinsdale G.C.

Home: 630-789-1651, Office: 630-986-1323

EXECUTIVE SECRETARY George Minnis MAGCS P.O. Box 760

Batavia, IL 60510 Office: 630-406-5356, Fax: 630-406-5456

Fred Behnke (Nancy)

Mount Prospect G.C Home: 773-774-1486, Office: 847-632-9331

Brian Bossert

Bryn Mawr C.C. Home: 312-274-4724, Office: 847-677-4112

Donald Ferreri (Geri)

Seven Bridges G.C. Home: 630-357-7964, Office: 630-852-1746

Orchard Valley G.C. Home: 630-892-8389, Office: 630-907-8998

Luke Strojny (Debbie)

Poplar Creek G.C. Home: 630-830-7370, Office: 847-310-3618

Greg Thalmann (Trudi)

Home: 847-394-5410, Office: 847-228-3541

PRESIDENT EMERITUS Don Cross (Cindy)

Home: 847-965-3435, Office: 847-835-4296

COMMERCIAL REPRESENTATIVE

John Meyer (Jules)

Cannon Turf Supply Inc. Home: 630-898-8922, Office: 630-898-8922

PHOTOGRAPHY

Raymond Schmitz & John Meyer

TURFGRASS ADVISOR

Dr. Randy T. Kane

University of Illinois & CDGA 630-954-2753

EDITOR: Fred D. Opperman

810 Greenwood Avenue Carpentersville, IL 60110 Phone & Fax 847-428-5009 or email: magcsoc@aol.com

On Course is published monthly. All articles, double-spaced, are required by the first of the month to make the next issue. Advertising is sold by the column inch, sixth page, quarter page, third page, half page and full page.

This publication is not copyrighted. We would like to share our articles with any who would like to use them, but please give the author and *On Course* credit.

HEATURES

Front Cover

Eagle Brook Country Club 18th green.

2 On Course With the President Ed Braunsky

Director's Column

Bob Maibusch

6 Where Should I Go to College

GCSAA

ASK THE EXPERT

Are You Walking on Water?

Tom Brodeur

SUPER -N - SITE PROFILE

12 Greg Johnson -N- Eagle Brook **Country Club**

John Meyer

FEATURE ARTICLE

Toughening Up Turf Through Fall Feeding

Joseph Slater

Late Season Nitrogen Fertilization

John Street, Ph.D.

The View From M.S.U. 20

P.E. Rieke

1997 John Deere Team **Championship Results**

Holly Gilmour

28 What to Do if You're Pulled Over

30 the Bull Sheet

Fred Opperman

The Midwest Association of Golf Course Superintendents (MAGCS) is a professional organization founded in 1927 whose goals include preservation and dissemination of scientific and practical knowledge pertaining to golf turf maintenance.

We endeavor to increase efficiency and economic performance while improving and enhancing the individual and collective prestige of the members.

The MAGCS member is also an environmental steward. We strive to uphold and enhance our surroundings by promoting flora and fauna in every facet in a manner that is beneficial to the general public now and in the future.



have already started to make a list and check it twice! No, not the one that we all have for that fat guy in a red suit. This list is more of a good/bad list. We all have had that thought in our heads as we go through each day to write down the things that go right and the things that go wrong, the products that work and those that do not. A lot of these thoughts can produce better results all around in 1998.

Start off by stocking some of those parts that you will "never use." The recent UPS strike turned out to be a nightmare for many of us. I thought I would make it through the strike when everything seemed to break down at once. Next year, I will stock a few more items. By the way, a big "Thank You" to all of those commercial members who went out of their way to get the parts through to us.

I use simple round tee markers. I made a note the other day not to use simple round tee markers anymore. While moving markers the other day, I noticed a trend. I would have the round marker in my hand and the metal spike would remain in the turf. Put it on the list.

I did have a few "good" items to put on my list. I had a lot of problems with localized dry areas early in the spring. I applied a granular wetting agent as recommended and had tremendous results. No more LDS! Need to mark that down. Other good points included cutting areas at a higher height of cut. Why scalp the heck out of a area when leaving it grow longer not only looks better but also allows it to stay green into August.

One of the other good things I wrote down was the need to take an extra ride around the golf course at the end of the day or on the weekends just after the crew leaves. This gives you the chance to see the work that has been done for the day and allows you to "pick up" after the crew. I also take along a rake to check for those pesky clippings.

One other item I scribbled down the other day was to see more golf courses in the area. We have so many good golf courses in the MAGCS, it's a shame that we cannot play them all. I am so impressed with the shape of all of the courses that we play. Thanks to all who host our monthly meetings. Everyone should consider hosting a meeting in the future. Write that down on your list.

While biking the other day with my family, I thought of another item. I need to do this more often. I also thought about taking more time out for my family. Several fellow superintendents that I have talked to this past year took—can I say two bad words—summer vacations. Train your people right, and take the time off for those you care for.

As I thought about becoming president of the Midwest around a year ago or so, one of the items that I put on a list was to have a food donation at one of our monthly meetings. At this month's meeting at the gorgeous Eagle Brook Country Club, please bring along a couple of cans of non-perishable food. This would look good on any one's list of good things. We will be handing out tickets to those who contribute for a chance at a few MAGCS golf prizes. The food will be taken to the Batavia Food Pantry. Let's hope we can have this opportunity on our list again in 1998.

Take out a notepad this week, and jot down those things that were good or bad. A few minutes now will pay off for a better year in 1998. Thanks to all for their food donations at Eagle Brook!

Ed Braunsky, CGCS President, MAGCS

sights! nera! Action!

Coming soon to Anaheim, Calif., the 69th International Golf Course Conference and Show will be held in the Anaheim Convention Center. Don't miss this action-packed week of educational opportunities, the newest golf course products and services, and the chance to network with fellow professionals.

Educational Seminars

Monday through Thursday, Feb. 2-5 and Saturday, Feb. 7

Trade Show

Friday through Sunday, Feb. 6-8

Distributor Preview Hour

Friday, Feb. 6



1421 Research Park Drive Lawrence, KS • 66049-3859 800/472-7878 www.gcsaa.org

Educational Sessions & Torums

Thursday through Sunday, Feb. 5-8

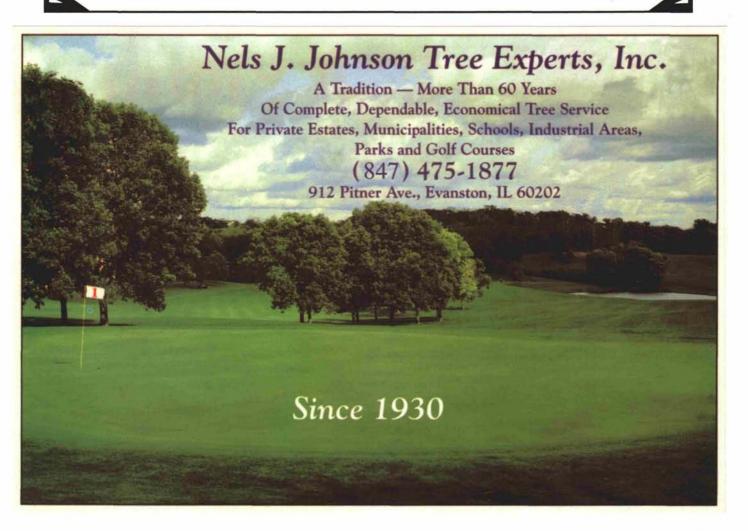
GCSAA Golf Championship

Saturday, Jan. 31, Practice Round Sunday, Feb. 1, Four Ball Championship Monday and Tuesday, Feb. 2-3, Championship

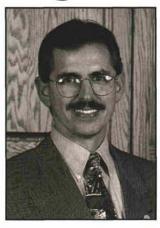
REGISTER TODAY!



February 2-8, 1998 Anaheim Convention Center Trade Show: February 6-8



My Favorite Year



Bob Maibusch, CGCS, MG Hinsdale G.C.

ow that the 1997 golf season is almost over, I can look back and honestly say that this has been my favorite year. I turned 40 this summer, and in anticipation of that sobering event, I finally acted

on several personal goals that I had set for myself.

The first goal was a long overdue pilgrimage to "The Masters" in April. After years of being fascinated with this tournament and venue, it would have been only natural to have overinflated expectations of the actual event. Incredibly, it was the only time that I can remember where my highest expectations were far exceeded. Anyone in the business who has not made this trip should take the time to do so. It is simply indescribable, and the opportunity that Augusta National has given to all Class A golf course superintendents for free admission is a fabulous benefit of GCSAA membership that we should all be grateful for.

My second venture into new territory was attending the GCSAA Chapter Relations meeting in Maryland in June. Although I have attended committee meetings before, this one coincided with our biggest men's event of the season. In 15 years at Hinsdale Golf Club, I had never missed a "big" event. After discussing it with my grounds chairman, he gave me the go-ahead, and it was a great experience for me. An added benefit was the opportunity to attend the US Open at Congressional Country Club while I was out there. It also made me realize what a commitment our GCSAA Board of Director members make to this association. They are required to do this regularly and, in some cases, have jeopardized their own jobs for the betterment of the association.

(continued on page 32)



Mariani Nursery, Inc. 13715 Horton Road, Kenosha, WI 53142 Doug Levernier, Manager 414-857-6529

YOUR GOLF COURSE SPECIALIST



Delivery to Your Site Available







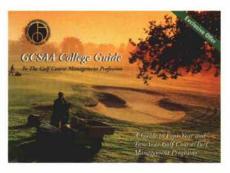
543 Diens Drive • Wheeling, IL 60090 • (847) 537-2177 • FAX (847) 537-2210

Where Should I Go to College?

new GCSAA publication, "Guide to Colleges," can help students and their parents answer this question. Available in June, the guide offers information on 2- and 4-year turfrelated educational programs.

The guide is divided into four sections:

- Section 1 details the golf course superintendent's profession and relationship to the golf industry.
- Section 2 describes a sample curriculum outline for both 2- and 4-year programs.
- Section 3 is organized alphabetically by schools and offers an in-depth profile of each

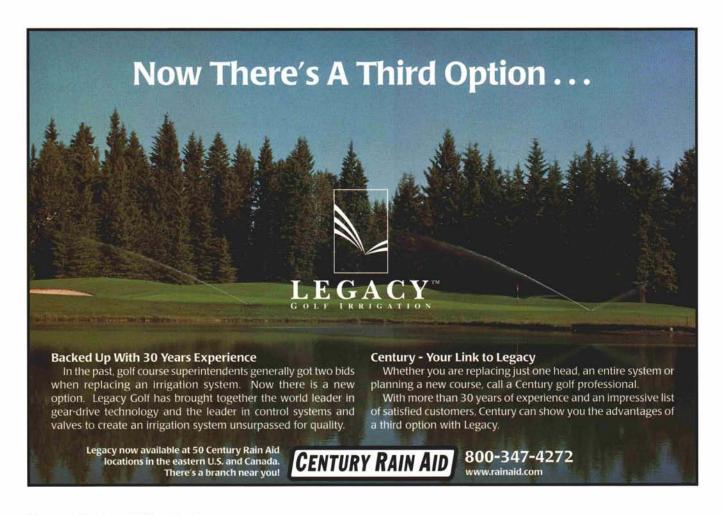


institution. Each profile includes the institution's name, geographical location by city and state, degrees offered, brief description and "fast facts" about the undergraduate program, special features of the program, educational facilities and contact information.

 Section 4 is a geographical listing of all national and international turf-related programs that GCSAA has on file. The listing includes 1-year certificate programs, correspondence courses and short courses.

To select the program that best fits their needs, students and parents also find helpful the information on faculty, special research and laboratory facilities, the types of degrees conferred, the number of hours required for a degree, internships required, career placement assistance, tuition costs and much more.

The "Guide to Colleges" will be distributed free to all participating 2- and 4-year institutions of higher education. It will also be available for \$30 through the GCSAA bookstore.



Chipco_® Aliette_® Signature_™

New and improved protection against Summer Decline

In 1994 the CHIPCO® ALIETTE® + Fore fungicide combination provided superintendents with the first effective management tool for summer decline. While improving such an effective combination may seem difficult, just 2 years later the CHIPCO® Group introduced new patented CHIPCO® ALIETTE® SignatureTM.

In combination with other fungicide partners CHIPCO® ALIETTE® SignatureTM provides superior disease control and enhanced turf quality versus CHIPCO® ALIETTE® + Fore®, with added benefits. And the results of the product's introductory year have superintendents everywhere talking.

Tankmix options provide added flexibility

The biggest improvement CHIPCO® ALIETTE® SignatureTM offers is the option for superintendents to customize their stress management programs to fit specialized needs. SignatureTM can be tankmixed with additional fungicides, such as CHIPCO® 26019, Dithane® T/O or Daconil Ultrex®.

This eliminates the need for another fungicide application to cover diseases such as dollar spot. Plus, it allows turf managers to use products they might already have on hand.

Research shows products effectiveness

During 1996, university trials with CHIPCO® ALIETTE® SignatureTM were conducted in many areas of the country to study the products performance. Research showed that Signature TM tankmixes consistently out-performed ALIETTE®+Fore® not only for brown patch control, but also in terms of turf quality.

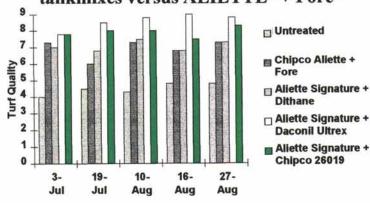
The unique patented formulation of CHIPCO® ALIETTE® SignatureTM makes it the best product currently available for summer decline tankmixes. In Addition, many superintendents who used SignatureTM in its introductory year found that it gave turf a more natural green color. Turf treated with SignatureTM appeared to have a healthier color than turf treated with ALIETTE® + Fore®.

The outstanding performance that superintendents have come to expect with ALIETTE® + Fore® is enhanced with ALIETTE® Signature™ tankmixes. It is a true systemic chemistry that begins working within 2 hours of application.

If anything has been learned about summer decline in the past three years, it is that improving turf quality, color and vigor is as important to managing the complex as effective disease control.

SignatureTM in combination with fungicides such as Daconil Ultrex®, CHIPCO® 26019 and Fore® provides virtually complete control of *Pythium* and *Rhizoctonia* (brown patch), two species that play a big role in summer decline, while increasing turf quality and health.

Turf Quality: CHIPCO® ALIETTE® Signature™ tankmixes versus ALIETTE® + Fore®



1996, Dr. L.T. Lucas, N.C. State University, Penncross Bentgrass

CHIPCO and Aliette are registered trademarks of Rhone-Poulenc Ag. Co. Always read and follow label requirements.

Rhone-Poulenc Ag Company P.O. Box 12014, 2 T.W. Alexander Dr. Research Triangle Park, N.C., 27709 1-800-334-9745

Are You Walking on Water?

Tom Brodeur Crystal Tree Golf & C.C.

responsibilities of golf course superintendents that has no impact on golf course playability but often affects the bottom line of success is that of lake and pond algae control.

More than once, just when my staff and I thought we had all the details covered (that is, the golf course looking and playing great, and we're "walking on water"), we play host to an unwelcome guest in the form of an algae bloom in one of our 16 retention ponds. To many, this may not be a problem of immediate importance, but in our case, it can be to one or more of the occupants of the 435 surrounding residences whose property values are plummeting with each dividing algae cell. Reminders come in the form of "friendly" passing conversation on the street or a "pleasant" message left on telephone voice mail. For the ambitious critic, not too much time can be taken to type a beautiful letter on monogrammed stationery (providing copies for the club and homeowners association presidents), or even taking a course in photography and applying the newly-learned skill to capture the "scum" observed in adjacent waters isn't unthinkable.

Ok, I am exaggerating a little about the photography course. Algae control is for many superintendents part of the job. It seems to be an imperfect science with several control strategies, some of which can be expensive and not always provide consistent results. According to John Cotell of Marine Biochemists, the primary aquatic weed control problems faced by golf course superintendents in the Midwest are suspended planktonic algae and filamentous algae blooms.

After speaking with local superintendents who have experienced successful algae control, the common thread is utilizing a combination of strategies adapt-

Algae control is
for many superintendents part of the job.
It seems to be an
imperfect science
with several control
strategies, some of
which can be
expensive and not
always provide
consistent results.

ed to local circumstances. Most of the problem lakes are characterized by shallow depth, nutrient-rich bottoms, poor natural water movement, little or no natural plant buffering, and a source of excessive nutrients like a golf course or nearby homes.

Tony Kalina at Prairie Landing Golf Club may have the best example of the benefits of native plant buffering and good water movement. Tony feels that because of the native prairie that wraps around most of his water and good natural flow, he is not required to treat any of his water. He does have the acceptance factor for the wild look throughout, which many golf courses do not.

At Midlane Country Club, Brad Anderson does have the acceptance factor in about nineteen acres of wetlands that are currently undergoing plant restoration, but he also has twenty acres of water that he performs algae control on annually. Brad feels that the water adjacent to homes near the golf course are where his worst problems exist. He preaches "simplicity" in his aquatic management practices. He has had one employee trained to monitor and treat his water for about three hours, every two weeks, for the past three years. His chemical treatment is with granular chelated copper sulphate, blue dye, and an infrequent application of aquathol on an asneeded basis. Brad stressed that he uses granular products over liquid to avoid unwanted residues in the sprayer. Midlane also has stocked grass carp which Brad feels are beneficial. More than anything, Brad believes in getting started with monitoring and treatment immediately after ice melt in March.

Another superintendent who believes in getting a jump on potential problems is Dan Albaugh at Ruffled Feathers Golf Club. Dan retains the services of an outside contractor (Environmental Management, Inc.) each season to monitor algae development and implement any necessary control measures. Dan pays the contractor a

(continued on page 10)

Introducing Country Club².

Country Club² contains short-chained water-soluble methylene ureas that deliver nitrogen consistently — even in sandy, low temperature or low moisture areas — providing up to 95% of its nitrogen source in 12 to 16 weeks. That's because Country Club² doesn't rely on microbial action alone. It also releases nitrogen through controlled solubility in the presence of water. So it works efficiently in any soil type — providing noticeable green-up within days and sustained feeding for weeks. For more information on Country Club², contact your authorized Lebanon Turf Products distributor or call 1-800-233-0628.



Available in greens or fairway grades.

Turf Products, Ltd. (630) 668-5537



Petroleum
Technologies
Equipment, Inc.

(800) 732-9401

ONE TOWER LANE • SUITE 1700
OAKBROOK TERRACE, ILLINOIS 60181
PHONE 630-573-2910 • FAX 630-579-9087

"Don't Be Caught Off Guard By The 1998 Underground Storage Tank Regulations Act"

SERVICES OFFERED

- Underground Tank Removal, Installation & Upgrades
 - Above Ground Tank Installation
 - Petroleum Equipment Distributors
 - Distribution & Installation of Compressed Natural Gas Equipment
 - Pump Sales & Service
 - General Contracting
 - Key and Card Fuel Management Systems

"FULL SERVICE PETROLEUM EQUIPMENT INSTALLATION SPECIALISTS"

Are You Walking on Water?

(continued from page 8)

flat fee each year for monitoring and applying chemicals to his 18 lakes and creeks. Chemicals, primarily copper sulfate, are an additional expense. Most of the treated lakes at Ruffled Feathers are characterized as "federally mitigated wetlands" and are only about four feet deep according to Dan. When he arrived at Ruffled Feathers, Dan says that he could retrieve golf balls off the top of the water the algae was so thick. After stocking sterile grass carp and instituting his current monitoring and treatment program, the result has been virtually no algae problems. Dan is considering adding one of the several biological controls currently available to his program next year.

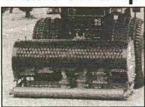
One superintendent who has utilized biological controls with apparently excellent results is Ken Lapp at Cog Hill. Ken

Ken then installed a slow-release bacteria reactor... that he says very quickly clarified the water and within a month had eliminated the algae entirely.

had an interesting story regarding his currently 4-foot-deep irrigation pond which is scheduled for dredging this fall. Prior to the Western Open this past July, the sprinkler system at Cog Hill began clogging, while not coincidentally the irrigation pond was building up a healthy algae bloom. It got to the point that the Cog Hill staff was cleaning sprinklers and the intake box on a daily basis. Ken then installed a slow-release bacteria reactor from a company called Bio Verse that he says very quickly clarified the water and within a month had eliminated the algae entirely. He has since added them to several other lakes. Ken explained that he had previously done nothing in the way of chemical control, which may explain why his results were so dramatic. According to manufacturers of the biological products, chemical and biological treatment are incompatible,

(continued on page 14)

COMMERCIAL TURF & TRACTOR NORTH AMERICA'S #1 VERTI-DRAIN DISTRIBUTOR Built on Experience, Service, and Customer Satisfaction!



VERTI-DRAIN





Give your roots a little

ROOM'







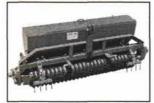
MASSEY FERGUSON



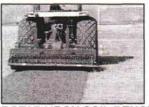
AERAVATOR



VERTI-SEED



BRILLION SEEDER



QUALITY EQUIPMENT

ROTADAIRON SOIL RENOVATOR