

Safety on the Golf Course: The Proper Perspective

Despite reports to the contrary, researchers indicate golfers should not be alarmed by the application of plant protectant materials on golf courses.

"Any discussion of health concerns must be based on accurate data," says Jeff Nus, Ph.D., director of research for the Golf Course Superintendents Association of America (GCSAA). "Any discussion must also include an accurate portrayal of risk."

According to Nus, safety begins with the professional responsible for the application of materials on the golf course, the golf course superintendent. Those in charge of treating golf courses must, by law, be trained and licensed, and their operations are subject to inspection. He notes application of plant protectants in excessive amounts and frequency is not only fiscally irresponsible, but unhealthy for turfgrass as well. Nus explains that golf course superintendents monitor the drying process to allow golfers access to the course.

"Research has shown that once the pesticide dries on the leaf of the turfgrass plant, you really can't just casually brush it off," says Clark Throssell, Ph.D., and co-director of Purdue University's Turfgrass Research and Diagnostic Center. "To get any pesticide at all you have to take a rough cloth and vigorously rub the grass leaf. Obviously, no one out playing golf is going to do that in the course

of a round. As we take another look at these pesticides, overall we're finding that they provide almost no risk for casual exposure to levels that would be of any concern."

Christopher Borgert, Ph.D., a toxicologist who has served as an advisor to the federal government on toxicity testing for pesticides and industrial chemicals, points to previous research that indicates those who apply chemicals for their livelihood do not suffer a greater degree of health problems than the normal population. Common sense suggests that these individuals are more highly exposed than golfers.

"From a personal standpoint, exposure to chemicals on the golf course under normal circumstances is certainly not something I would worry about," Borgert says. "My personal viewpoint is relevant because my family and I live next to a golf course. Any concern for hormonal disruption is unfounded. It is not supported by the available data or sound reasoning."

All agree, however, that the golfer bears some responsibility to make the golf experience as healthy as possible. Golfers should not put tees in their mouths, lick golf balls or put cigars or cigarettes in contact with the ground. Common sense should be the rule in making contact in any outdoor environment, including the golf course.

—GCSAA

Cascade™

High Performance
Water Infiltration
Chemistry

**TURF
PARTNERS**



Leading the industry in turf
and ornamental management

*The Ultimate Wetting Agent that
treats the cause of Localized Dry Spot
(LDS) and promotes healthier turf
and improved root growth*

Cary Femrite
(612) 856-3100

Leif Erickson
(800) 728-0354

Chris Quinlan
(612) 920-6114

Bunker Preparation—

(Continued from Page 28)

parallel to play from tee to green. While greenside bunker performance improved significantly, fairway bunker performance, unfortunately, did not. In fact, fairway bunker playability remained a hot topic.

Specific questions were posed to members to pinpoint where corrective measures were needed. These efforts exposed concerns about fairway bunker sand performance. Specifically, during dry weather the sand would become soft and present a difficult playing condition. A cuppy, slightly buried lie would result in spite of the low trajectory of the golf ball when it entered the bunker. Examining the playability of all the bunkers revealed that one particular aspect

of turf maintenance provided relief to the undesirable bunker condition. Where adequate irrigation coverage was available, sand performance could be maintained in the desired manner.

With this knowledge in hand, fairway irrigation was modified to provide a method by which to manage and improve fairway bunker sand performance. Irrigation heads were installed so fairway bunker sands could be irrigated on an as-needed basis. In fact, during the summer months, bunker irrigation is performed on a daily basis. A 20-minute cycle proved to be more than adequate while not negatively impacting playability. As an added benefit, the fairway bunkers can now be monitored regularly as to their ability to handle heavy precipitation. If drainage problems occur, corrective measures can be implemented and consistency is ensured.

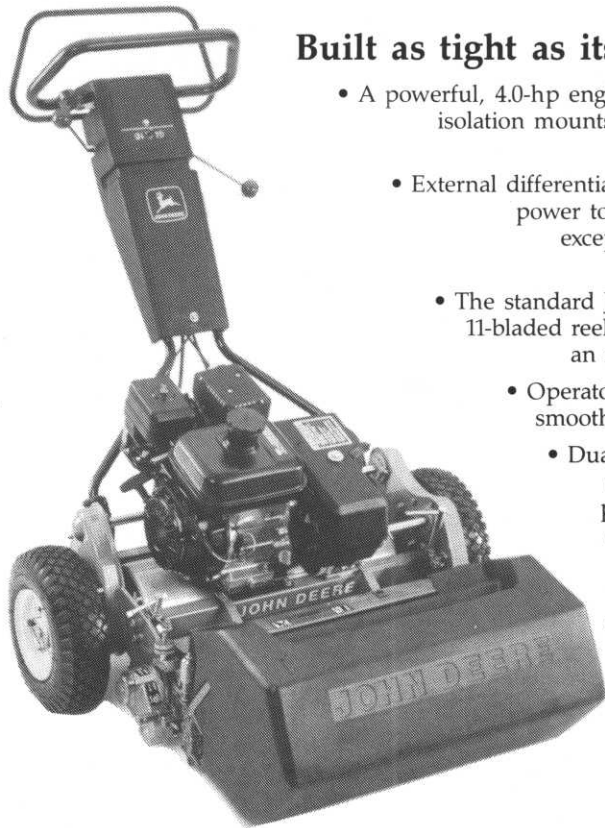
“Complaints regarding inconsistent bunker performance are often a function of poor drainage.”

Course maintenance goals in general and bunker maintenance goals in particular are directly related to the desires of the players. Steve's experience symbolizes the importance of utilizing strong communication strategies to meet the needs of the membership. Maintenance practices can be altered and in fact can evolve to produce effective results. When it comes to bunker preparation, experience speaks here: “It takes much more than a rake.”

(Editor's Note: Keith A. Happ is an agronomist in the Mid-Atlantic Region, visiting courses in Delaware, Maryland, Pennsylvania, Virginia and West Virginia. Keith joined the USGA Green Section Mid-Atlantic staff in 1993. This article was reprinted with permission from the USGA Green Section.)

John Deere

180 Walk-behind Greens Mower



Built as tight as its cutting width.

- A powerful, 4.0-hp engine powers the 180 while isolation mounts and lateral bracing help reduce vibration.
- External differential drive on the 1870 splits power to both traction rolls — for exceptionally straight tracking and easy turning.
- The standard John Deere-manufactured 11-bladed reel on the 180 helps deliver an exceptional quality-of-cut.
- Operator-presence safety bail fits smoothly against the handlebar.
- Dual aluminum traction rolls on the 180 are smooth to provide a more consistent surface. They combine to cover the entire length of the bedknife.
- Both the 180's machine-grooved and machine-smooth front rollers are cut from solid bar stock to deliver more strength and better mowing performance.
- Grass catcher designed to maximize clipping retention, stays securely in place and is easy to remove and install.



Polfus Golf & Turf

12040 Point Douglas Drive S.
Hastings, MN 55033

Phone: (612) 437-7747

Fax: (612) 437-3483

2000



2000 ESA Call For Entries

Environmental Steward Awards (ESAs) were made to 37 GCSAA members in 1999. In 2000, such recognition could go to you.

For the eighth year, the ESAs will be presented to GCSAA members around the world who have demonstrated a commitment to environmental stewardship efforts on the golf course. The awards are sponsored by Novartis Turf & Ornamental Products, Rain Bird, Textron Turf Care And Specialty Products with Cushman, Jacobsen, Ransomes and Ryan brands, and Pursell Technologies Inc.

The standardized application form focuses on environmental efforts in the areas of technology use, resource conservation, water quality management, integrated pest management, wildlife/habitat management and education/outreach. Photos, videos and related materials will not be accepted with the entries, but will be later requested from those selected as national and international winners. Superintendents previously recognized as a national winner of the ESAs are not eligible to apply for the 2000 awards *unless* they have moved to a new facility from where the award was made.

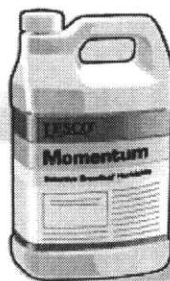
Applications are available from the May issue of *Golf Course Management*, affiliated chapter presidents, the GCSAA service center (800/472-7878), program sponsors or the GCSAA web site (www.gcsaa.org), where it may be printed out or completed and submitted electronically. Entries are due to GCSAA on or before Oct. 1, and winners will be notified in November.

Since 1993, participating sponsors of the ESAs have donated more than \$125,000 to The GCSAA Foundation, and more than 200 golf course superintendents have been recognized.

MOMENTUM™

The Next Generation of Broadleaf Weed Control

A Premium Selective Herbicide Exclusively from
LESCO



- New, improved chemistry formulation combines TIPA 2,4-D, triclopyr and clopyralid acid for highly effective control with virtually no odor
- Fast acting - dandelions and clover curl within hours of application
- Better and broader spectrum weed control than most other popular broadleaf herbicides

Ask your sales representative about this great new product exclusively from LESCO, or call 800-321-5325

LESCO®

LESCO is a registered trademark and Momentum is a trademark of LESCO, Inc.

Consider yourself a candidate.

Applications for the 2000 Environmental Steward Awards are available from the May issue of *Golf Course Management*, the GCSAA web site (www.gcsaa.org), affiliated chapter presidents, program sponsors and the GCSAA service center (800/472-7878).

We'll look forward to receiving your application by October 1, 1999.

2000



 NOVARTIS

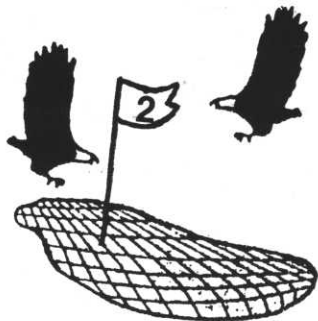
RAIN BIRD

 PURSELL

TEXTRON
TURF CARE AND SPECIALTY PRODUCTS
CUSHMAN JACOBSEN
RANSOMES RYAN



*A partnership program benefiting
The GCSAA Foundation*



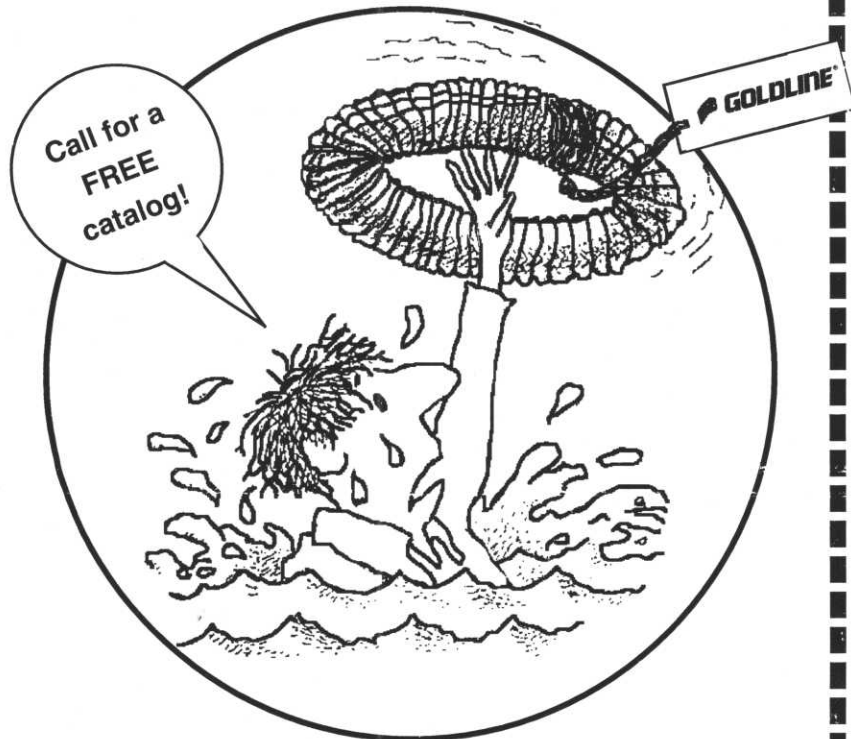
Mel Strand, CEO
35 years experience

Double Eagle Golf Construction

*Redesign the Old
...Construct the New*

17715 Jefferson St. NE • Ham Lake, MN 55304 • (612) 434-0054

Not every hole has to have a
WATER HAZARD!



Prinsco PE pipe will keep your
greens and fairways dry...
and always ready to play.



PRINSCO

Manufacturers of GOLDFLO Dual-Wall and
GOLDLINE Corrugated Polyethylene Pipe

800-992-1725

Applications For 1999 MGCSA Scholarship Awards Are Available at the MGCSA Office

The MGCSA provides scholarships to students attending college or vocational programs at any accredited post secondary institution.

Scholarship recipients are selected on the basis of academic record, potential to succeed, leadership and participation in school and community activities, honors, work experience, a statement of education and career goals and an outside appraisal.

Questions regarding the scholarship program should be addressed to:

**MGCSA
Scholarship Committee**
240 Minnetonka Ave. So.
P.O. Box 617
Wayzata, MN 55391

* * *

Phone: (612) 473-0557
Toll Free: 1-800-642-7227
Fax: (612) 473-0576

**Applications must
be postmarked by
July 1, 1999**

1999-2000 MGCSA DUES STATEMENT

JUNE 1, 1999 — MAY 31, 2000

NAME _____

HOME ADDRESS _____

CITY _____ STATE _____ ZIP _____

HOME PHONE _____

CLUB/FIRM _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

CLUB/FIRM PHONE _____ FAX _____

MOBILE PHONE _____ PAGER _____

E-MAIL _____

SEND MAIL TO: HOME CLUB/FIRM

SPOUSE'S NAME _____

YEAR JOINED MGCSA _____ MEMBER OF GCSAA

GCSAA MEMBERSHIP # _____

(will be checked with GCSAA)

Certified Golf Course Superintendent

PESTICIDE APPLICATORS LICENSE # _____

**THIS FORM MUST BE FILLED OUT COMPLETELY AND ATTACHED
WITH YOUR PAYMENT. IT WILL BE RETURNED OTHERWISE.**

MGCSA DUES STRUCTURE*

JUNE 1, 1999—MAY 31, 2000

CHECK ONE

- | | |
|--|---|
| <input type="checkbox"/> CLASS A \$80.00 | <input type="checkbox"/> STUDENT 30.00 |
| <input type="checkbox"/> CLASS B 80.00 | <input type="checkbox"/> ASSOCIATE 80.00 |
| <input type="checkbox"/> CLASS C 80.00 | <input type="checkbox"/> AFFILIATE (Vendors) 165.00 |
| <input type="checkbox"/> CLASS D 70.00 | |

*\$20.00 of the listed dues of each membership goes for the subscription to the MGCSA's Official publication "HOLE NOTES."

\$20.00 for additional subscription of Hole Notes for friend of MGCSA
(Supply name and address on separate piece of paper)

- 1) FILL IN FORM COMPLETELY.
- 2) CHECK CLASSIFICATION AMOUNT.
- 3) PLEASE RETURN STATEMENT WITH YOUR REMITTANCE.
- 4) DUPLICATE STATEMENT INCLUDED FOR YOUR RECORDS.
- 5) CLASS CHANGES MUST GO THROUGH MEMBERSHIP CHAIRMAN.
- 6) IF DUES NOT PAID BY SEPTEMBER 1st YOUR MEMBERSHIP WILL BE DROPPED.
- 7) **RETURN BY DUE DATE - JUNE 30, 1999.**

AMOUNT ENCLOSED \$ _____

"While contributions or gifts to the Minnesota Golf Course Superintendents' Association are not tax deductible as charitable contributions for Federal income tax purposes, they may be tax deductible under other provisions of the Internal Revenue Code."

PLEASE MAKE CHECK PAYABLE TO **MGCSA** AND MAIL TO:

MGCSA
P.O. Box 617
Wayzata, MN 55391

FOR SALE

Used Irrigation Heads

Toro 690s
Toro 680s
Toro 650s
Toro 630s

Contact: JIM NICOL, CGCS
Hazelint National GC

(612) 448-3626

FOR SALE

Used

**TORO 474 1" BRASS
QUICK COUPLER VALVES**
with standard cover.

Requires 1 1/4" valve key.
\$15.00 each.

Contact: DAVID WOOD
Oxbow CC

(701) 588-4266

FOR SALE

1-Vermeer T300A trencher on tracks, with 4-way backfill blade, strong 4 cyl. Wis. air-cooled engine, many new parts including chain and stinger. \$2,500. Also 1-Glenmac-Harley rock rake/land-leveler. 3 point mount, pto driven, with hydr. scarifier. Good condition \$3,500. Contact:

FRED FABIAN, JR., CGCS
Teal Wing GC, Hayward, WI

(715) 462-3422

FOR SALE

5-gang Toro Fairway Mower
16-inch Steel Wheels with fair to good reel stock.

\$900 or best offer

Contact: LEROY BLEHL
Dawson CC

(320) 769-2212

Evening: (320) 598-7787

FOR SALE

**Two 1996 Toro
Hydroject 3000s**

460 hours
460 hours
Chemical Application
Kit included

\$27,500 for Both Units
Contact: PAT DEAN

(800) 944-2555

FOR SALE

Cushman/Broyhill

240 gal. sprayer
Model RC-1B sprayer control
Excellent Condition
\$1,500 / Best Offer

Contact: KURT HOVALDT
Marshall Golf Club

(507) 532-5164

FOR SALE

Turfco Met-R-Matic II

Pull Topdresser

18 cubic foot capacity
Well-maintained.
Good condition.

\$400

Contact:
RICK FREDERICKSEN
Woodhill Country Club

(612) 473-5811

FOR SALE

1978 Greensmaster III
with Core Pusher. Completely rebuilt by South Florida Turf. Only 500 hrs. . . . \$2,000

One Set Toro 11-blade Single Point Adjust Greensmower Reels with Groomers.
Excellent condition . . . \$1,800

Combination of items negotiable.

Contact: DOUG VEILLETTE
Little Falls Country Club

(320) 632-3584

FOR SALE

**Toro Greensmaster III
(For Parts)**

Does not need reels.

Contact:

KEVIN FROEMMING
Crow River Country Club

(320) 587-2785

FOR SALE

Set of

Toro Verticut/Thatching Reels
for Toro Triplex Greensmower.
Perfect condition—used only once!
\$2,500

**Toro Greensmaster III
Utility Mower**

Model 4323. New Engine.
Miscellaneous spare parts.
Contact: SCOTT GREENFIELD
Spoooner Golf Club

(715) 635-6438

FOR SALE

**Older Worthington
5-gang Reel Mower**

Good Condition.

Contact:

DAN, DEAN or MATT
River Falls Golf Club

(715) 425-2838

WANTED

Set of Toro
Verticutters for Greens

Contact: TODD GRIMM
Meadows Golf Club

(218) 299-5243

Territory Manager

(Turf Sales for ND and Western MN)

We invite those interested in pursuing a career in the turf management industry to join our growing and reputable company. This individual should be willing to overnight travel and has a degree in turf management or related field experience with strong sales background. This successful candidate will receive a base salary of \$27K-\$32K depending on his/her qualifications. A company vehicle with travel allowance, health insurance, 401K, and a very generous bonus program is provided.

If interested, please fax your resume with salary history to: (701) 232-7278 or mail to: The Tesson Company, 2001 Great Northern Dr., Fargo, ND 58102. Attn: Doug Laubenstein, No phone calls, please.

WANTED

**Finish Grading Equipment
Seeders, Drags and
Rock Pickers**

Contact:

KEVIN CLUNIS, CGCS
Tanner's Brook GC

(612) 759-3615

FOR SALE

**1997 Southern Green
Soil Reliever
(Deep Tine)**

Only used about 8-10 hrs.
Includes stand and rear roller
\$12,000 or best offer.

Contact: BOB
Oak Marsh

(651) 730-0416

FOR SALE

1994 Jacobsen GK422

Walking Greensmowers
Sharpened, Serviced, Ready-To-Go. Excellent Cond. . . \$2,100 ea.

1986 Jacobsen PGM 22

Walking Greensmower
Sharpened, Serviced, Ready-To-Go. Excellent Cond. . . \$1,400

Contact: TROY OR TERRY

(715) 386-9262

EQUIPMENT FOR SALE

1987 Jac Greensking IV	.....	\$5,500 or B.O.
1992 Jac Tri-King	.....	\$2,500 or B.O.
1994 Jac Aerator	.....	\$4,000 or B.O.
1994 SmithCo Bunker Rake	.....	\$3,000 or B.O.
1976 Cushman 3-Wheel Short Box	.....	\$1,200 or B.O.
1988 Club Car Carryall II	.....	Best Offer
1990 Club Car Carryall II	.....	Best Offer
1970 F-10 Reel Mower	.....	\$3,200 or B.O.
\$969 5-Gang Reel Mower	.....	\$1,200 or B.O.
1980 5-gang Reel Mower	.....	\$1,800 or B.O.
1989 Mars Sweeper	.....	Make an Offer

Contact: PAT or ERIC
Dellwood Hills Golf Club

(651) 426-4406

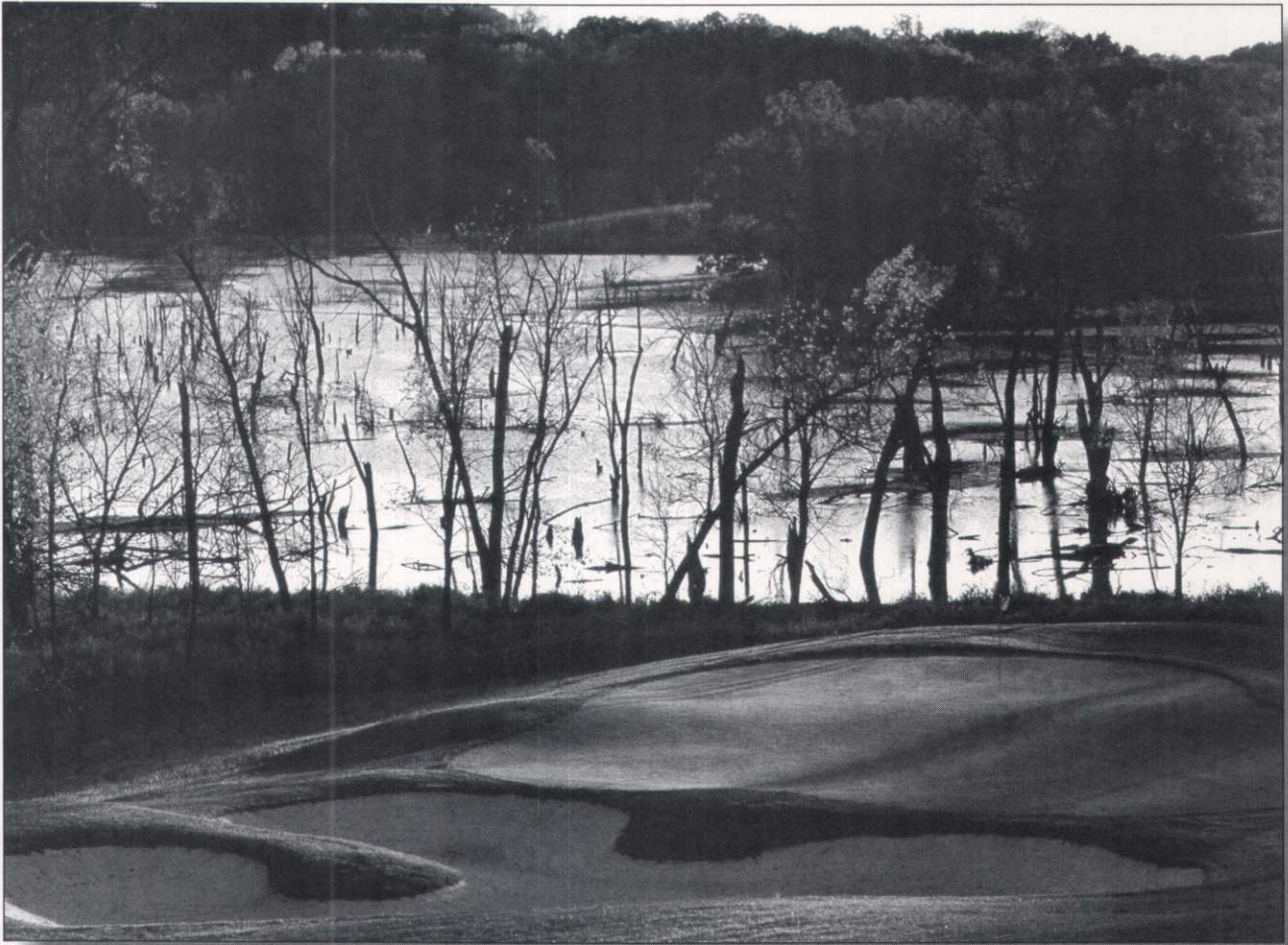
USED EQUIPMENT SALE

Cushman Trucksters from	.....	\$1,995
Liquid-cooled Cushman Trucksters	.....	\$6,495
Kawasaki Mule 1000	.....	\$4,495
Cushman GA-60 Aerator	.....	\$12,500
Topdresser for Cushman	.....	\$1,995
Toro 450D Reelmaster	.....	\$7,995
Toro GM300 Greensmower, New Motor	.....	\$4,995
Toro 216 Reelmasters, from	.....	from \$2,995
Toro Aerators	.....	\$4,495
Core Destroyer for Cushman Mower	.....	\$2,495
7-Gang PTO-driven Reel Mower	.....	\$3,995
F-10 and Parkmasters	.....	from \$3,495
Hustler 400 Wing Mower	.....	\$4,995

CUSHMAN MOTOR CO., INC.

(612) 333-3487 or 800-759-5343

When you need **Top Dressing Material...**



you need Plaisted.

Plaisted Companies is the one call for all your golf course materials, including top dressing blends to meet your most demanding specifications.



Plaisted Companies

INCORPORATED

P.O. Box 332 • 11555 205th Avenue N.W. • Elk River, MN 55330

612-441-1100

Construction Materials • Top Dressing Blends • Bunker Sand • Carpath Aggregate • Drantile & Decorative Rock

Photo courtesy of Burian Photography®

EDITOR'S CORNER

By Steve Shumansky
Perham Lakeside Country Club



Summer Stress?

Has it hit you yet? Has the greenspeed thing been brought to your attention yet? It sure has mine. Has the weather been screwing things up for you? We all enjoy a little rain, thunderstorms we can do without, at least the lightning. And the above average rainfall in May has certainly set some things back. Another early start as far as opening, a few warm days, and then, rain and cool temps has set the poa back a bit. For me here in west central Minnesota, I had some poa check out on me, and trying to overseed seemed to be somewhat of a lost cause because of the cool nights and soil temps not where I would have hoped. We all try to do our best, but we are all at the mercy of the weather. Something I remember someone once said, "There are those who have lost turf, and there are those who will." Just remember in the scope of things, it's only grass, don't beat yourself up over it, it'll grow back after a while. I'm no expert, but I have learned, just do what you can do.



POND FILTRATION INC.
POND PERCULATOR

**TO BRING A POND BACK TO LIFE...
YOU MUST FIRST BRING LIFE
BACK TO THE POND!**

"Nature's Way"
to restore
your pond.

SAFE, ECONOMICAL & EASY TO INSTALL

Re-Circulates (Inversion) from TOP to BOTTOM
Oxygenated water... 120,000 gallons per hour
\$18.00 per month electrical usage

Available At:

HEBERG
AGGREGATES

"Built on Service"

Call
Mark Danelski
(651) 423-5048
For All Your
Pond Needs

A Lake, A Boat and.....

Some relaxing times I hope everyone that enjoys doing, does!! I don't know what it is about water that relaxes us so much. Be it pleasure boating, fishing or both. Loading the family up in the boat or going fishing with a few buddies. Just being out on a lake brings on a mellow feeling that makes us relax, and for those of us who fish, it has a bonus!! Something good to eat!! Fishing opener here in west central Minnesota was rather good this year. Of course there wasn't anything caught for the wall here, but we sure had enough for a few meals. A nice fire and wild-life to enjoy. I hope wherever you went, you had an enjoyable experience, too!

Salary Survey

By now I hope you have received your results on the salary survey conducted this spring and find it useful for your needs. And at this time I would like to thank E. Paul Eckholm CGCS, and the rest of the research committee for their efforts in calculating the salary survey for the MGCSA. In talking with Paul over the past couple of months, he spent some time on it. I thought it was done in a way, well, easy to read and understand. There was no reason to get really nit picky on every detail. Short, sweet and to the point. Works for me!! And I hope it works for you as well.

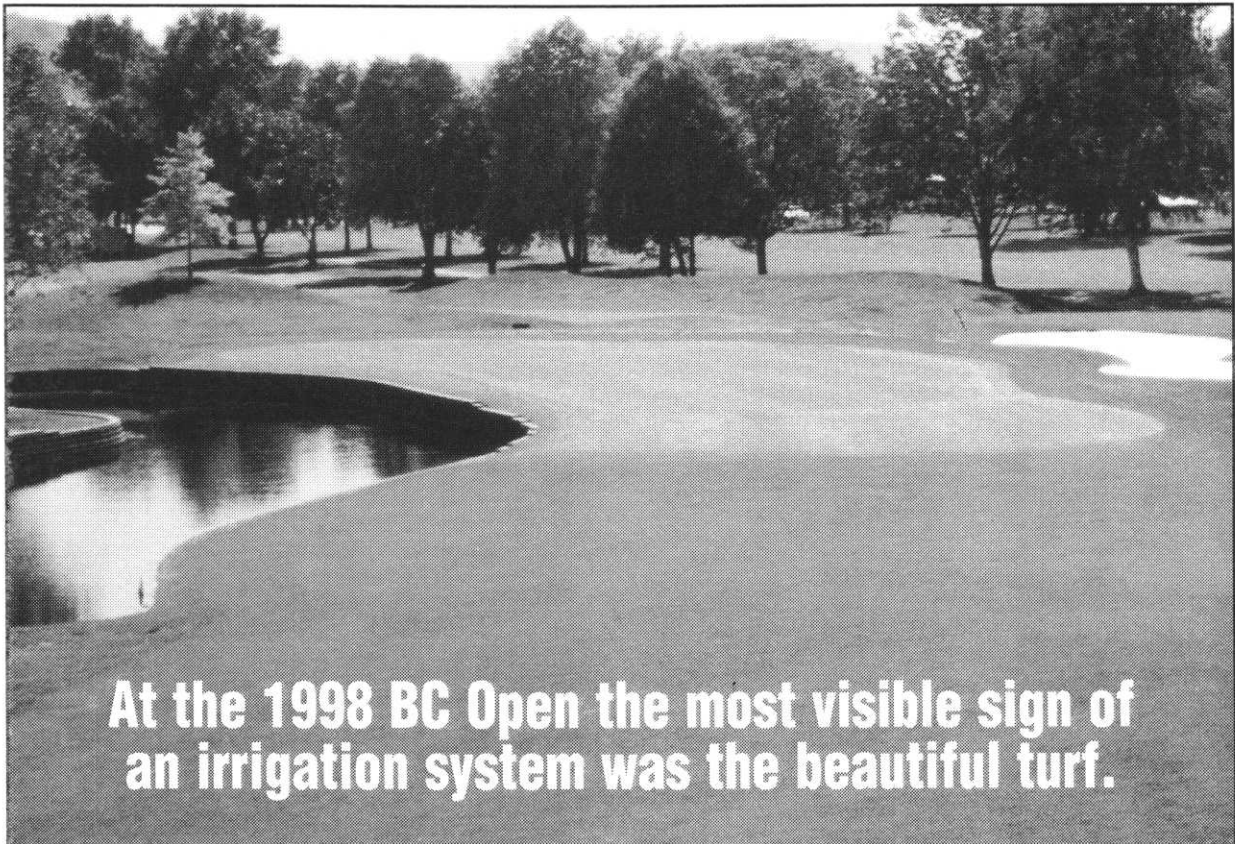
Summer Vacation?

Have you planned one yet? Well...have you? I think I'll spend mine growing in a new nine holes...but before the tough times, I'm gonna take a break. I hope you do as well. Just remember, your golf course will still be there when you get back, and you're not going to impress anybody by saying, "I only had three days off so far this year." They're gonna think your nuts! Life is way too short. So plan on getting away from it all for a while and have fun and enjoy. With that I'll close. Keep smiling!

—Steve Shumansky
Editor



HEAD PROFESSIONAL Tom Kristo, left, and his assistant Brent Heit, handled the scoring at the May Mixer at Hillcrest CC.



At the 1998 BC Open the most visible sign of an irrigation system was the beautiful turf.



Get Rain Bird decoders and bury the evidence.

Six years ago, En-Joie Golf Club, host of the 1998 BC Open, switched from a competitive system to Rain Bird decoders and a Nimbus™ central control system. They've been impressed with the improved aesthetics, a reduced risk of vandalism and easier, cost-effective installation. Decoders eliminate the need for pedestals, require less wire and labor for installation and can be controlled remotely with The FREEDOM™ System. If you're looking for a different solution with proven reliability take a closer look at a Rain Bird decoder system today.



<p>PLYMOUTH 9835 10th Ave. N. Plymouth, MN 55441 612-542-1188 FAX 612-546-7515</p>	<p>EAGAN 1971 Seneca Road Eagan, MN 55122 612-687-0282 FAX 687-0382</p>	<p>ST. CLOUD 415 Sundial Drive Waite Park, MN 56387 320-259-6448 FAX 320-259-0165</p>	<p>SIoux FALLS 2303 W. 50th Street Sioux Falls, SD 57105 605-357-9577 FAX 605-357-9960</p>
--	---	---	--