

What's new at...

TPEC

Tanaka
POWER EQUIPMENT

TPEC is a factory authorized
Tanaka distributor for the Midwest



We carry all models
&
Parts



ONLINE

TPEC eStorefront

- Order Genuine Toro OEM parts at your convenience 24/7
- Receive Winter Parts Pricing throughout the year when ordered online
- Track part orders online
- Research part numbers through online parts manual
- Order parts by 3 p.m. (CST) and receive in stock parts within 24 hours and back-ordered items within 48 hours
- Order from TPEC's award winning parts team
- Free freight on orders of \$40 or more through April 30th

Call your TPEC Account Executive for more information on
Tanaka products and to sign up for TPEC eStorefront

Whitey Anderson 630-251-4832
Joe Etten 630-284-8492
Tim Snell 708-284-8497

Larry Collins 630-217-1922
Dave Holler 630-244-6477
Steve Stewart 630-284-8496

www.tpec.com



2006 BOARD OF DIRECTORS

PRESIDENT

Gary Hearn, Salt Creek G.C.
Home: 630-540-1460, Office: 630-773-4790
E-mail: g.hearn@worldnet.att.net

VICE PRESIDENT

Tim Anderson, Naperville C.C.
Home: 630-718-9601
E-mail: tjanderso@aol.com

SECRETARY / TREASURER

Dave Braasch, Glen Erin G.C.
Home: 608-757-2328, Office: 608-856-0240
E-mail: dbraasch@gleneringolf.com

EXECUTIVE DIRECTOR

Luke Cella
MAGCS, 11855 Archer Ave., Lemont, IL 60439
Office: 630-243-7900, Fax: 630-257-0362
E-mail: luke@magcs.org

BOARD

Paul Bastron, Glen Flora C.C.
Home: 847-746-7212, Office: 847-244-6305
E-mail: pdbastron@sbcglobal.net

Tony Kalina, Prairie Landing G.C.
Home: 630-690-2683, Office: 630-232-1650
E-mail: tkalina@prairielanding.com

Tom Prichard, Ivanhoe Club
Home: 815-337-9217, Office: 847-566-2050
E-mail: tprichard@tivanhoeclub.com

Todd Schmitz, Phillips Park G.C.
Home: 630-851-5636, Office: 630-898-5296
E-mail: tschmitz@aurora-il.org

Dan Sterr, Stonebridge C.C.
Home: 630-357-4871, Office: 630-898-6139
E-mail: Djsterr@aol.com

Scott Witte, Cantigny G.C.
Home: 630-497-1909, Office: 630-260-8182
E-mail: switte@tribune.com

PRESIDENT EMERITUS

Phil Zeinert, Elgin C.C.
Home: 815-748-5730, Office: 847-622-4823
E-mail: eccsuper@elgincc.com

COMMERCIAL REPRESENTATIVE

Sharon Riesenbeck, Waupaca Sand & Solutions
E-mail: sharon@waupacasand.com

CLASS 'C' REPRESENTATIVE

John Ekstrom, Hinsdale Golf Club
Home: 815-521-4130, Office: 630-986-1323
E-mail: snapp79@aol.com

TURFGRASS ADVISOR

Dr. Randy T. Kane
University of Illinois & CDGA
630-257-2005

EDITORIAL CHAIRMAN

Scott Witte
E-mail: switte@tribune.com

ASSOCIATE EDITOR

John Gurke
E-mail: Boomding@aol.com
Brad Anderson
E-mail: bradkim@earthlink.net

GRAPHIC ARTIST

Mark Karczewski

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.

MAY 2006
Volume 59 No. 12

FRONT COVER

Midlothian's finishing hole.
Photo courtesy Midlothian Country Club.

3 ON COURSE WITH THE PRESIDENT Tournament Time

Gary Hearn

5 SUPER -N- SITE Dave Behrman, CGCS -N- Midlothian Country Club

Scot White

9 FEATURE ARTICLE Contaminated Irrigation Water and Sodium Accumulation

Vence Zolman

13 MIDWEST BREEZES

Brad Anderson

15 FEATURE ARTICLE The Benefits of a Remodeling Master Plan

Raymond Hearn

19 ASK THE "EXPERT" Taking Cues From Mother Nature

Peter Leuzinger

22 THE BULL SHEET

John Gurke

27 HUMOR Cheers! Here's to Our Future!

Keith Krause

31 TECHNICALLY SPEAKING WITH Factory Training

Wes Danielwicz

36 MIDWEST PERSONALITIES

37 MAGCS IN MOTION

The Midwest Association of Golf Course Superintendents (MAGCS), founded December 24, 1926, is a professional organization 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.

All editorial and advertisement inquiries should be directed to Luke Cella, Publisher, *On Course*, 11855 Archer Avenue, Lemont, IL, 60439. (630) 243-7900 or visit www.magcs.org for rates and requirements. Statements of fact and opinion are the responsibility of the authors alone and do not imply an opinion on the part of the officers or members.

The Greatest Walk on Earth

Cut by the Greatest Walk on Turf

Why do the turf professionals at Pebble Beach Golf Links® use only the Jacobsen® E-Walk™ to manicure the most played greens in the world? Its unmatched quality-of-cut has been proven in independent studies to provide healthier turf. Its consistently high frequency-of-clip and adjustable weight distribution offer unprecedented flexibility and control. And its whisper-quiet, energy-efficient electric motors can boost revenue and reduce costs. The E-Walk is just one of the many reasons Pebble Beach® chose Jacobsen as its official supplier of turf maintenance equipment. To improve the turf and financial health of your course, contact your local Jacobsen dealer today or log on to jacobsen.com.

The 9th green at Pebble Beach Golf Links®

1.888.922.TURF • jacobsen.com



PEBBLE BEACH
RESORTS
Official Supplier of Turf Care
Maintenance Equipment



WHEN PERFORMANCE MATTERS™



Barri's
EQUIPMENT
COMPANY

Barri's is proud to combine its 45 plus years of
sales and service experience with Jacobsen's
eighty years in manufacturing.

Waukegan, IL 847.336.1205

Ingleside, IL 815.363.4100

Frankfort, IL 815.464.6650

www.burrisequipment.com

©2006 Jacobsen, A Textron Company. All rights reserved. Pebble Beach®, Pebble Beach Golf Links®, The Heritage Logo, The Lone Cypress™ and their underlying distinctive images are trademarks, service marks and trade dress of Pebble Beach Company. Used under license.



Tournament Time

As memories of Augusta fade, let us draw our attention to home with a slew of golf events in our own “backyards”. Some will receive national media attention and some are the seasonal highlight of the everyday golfer or member that our courses and clubs support. We, as Golf Course Superintendents, look forward to setting up our individual golf courses for competition no matter the skill or performance level of play. It gives each of us the opportunity to showcase our own course and the hard work our staffs put forth. As you set up your courses for local championships and competition, I would like to recognize a few of our member’s and their courses. As readers, we step into their shoes and try to understand the trials that lie ahead for each of them; please give them support, you never know when you may be sharing the same experience. Trust me on this, it happened to me in 1987 during the Western Open.

Ken Lapp and staff of forty-three will quietly prepare #4 – Dubsdread for the fifteenth consecutive time.

The Western Open

The annual Chicago area stop and the oldest tournament of the PGA Tour is the Western Open. The tournament will take place at Cog Hill Golf and Country Club on July 3 thru 9. Ken Lapp and staff of forty-three will quietly prepare #4 – Dubsdread for the fifteenth consecutive time. Prior to the Western Open, Tim Kelly and the Village Links of Glen Ellyn will host their 26th Western Open general qualifying round. These rounds give the opportunity to local, tour, and other out-of-state golf professionals to compete in the Western Open. Tim and the Village Links have hosted every one of these events since 1983 excluding ‘86 and ‘03 when they were closed for renovations. Tim and staff will again ready the Village Links for the first of two qualifying rounds on June 28 and the final round on July 3 prior to the Western Open.

Western Amateur Championship

Ron Fox, CGCS and the Point O Woods Golf and Country Club from across our freshwater “big pond” in Benton Harbor, Michigan, will host this year’s Western Amateur Championship July 31 thru August 6. This is the 35th consecutive time this event will be played at Point O Woods and may produce another notable winner as in years past. Andy North, Ben Crenshaw, Curtis Strange, Hal Sutton, Scott Verplank, Chris DiMarco, Phil Mickelson, Justin Leonard, and Tiger Woods have all claimed victory on these links. The course is open for member play the day before the tournament begins but this doesn’t stop Ron. He starts modifying his maintenance practices about a month prior to the start of the event. Modifications include changing the height of cut on greens from 0.120” to 0.09”, double cutting greens two weeks out and increasing the height of cut around green banks from 2.5” to 5.0”. During the tournament Ron intensifies maintenance by: double mowing greens two times per day, rolling greens twice daily (green speed averages 12.5), and mowing tees and fairways twice daily.

PGA Championship

Tom Lively, CGCS and Medinah Country Club will host the 2006 PGA Championship the week of August 14 thru 20. Preparation for this Championship began shortly after Medinah hosted the 1999 Championship with the

hiring of Rees Jones to prepare plans to renovate the #3 Course. The renovation moved from paper to practice in 2002. The layout remains the same, however significant changes have been made:

- A few hundred trees were removed to provide more sunlight around greens.
- All greens were killed and reseeded to improved cultivars.
- Seven greens were completely redesigned and rebuilt.
- All bunkers and most tees were rebuilt, reshaped and some repositioned.
- The most significant changes happened to two par 3s, numbers 13 and 17. The 13th green was rebuilt and enlarged to accept (or not accept) shots from the new championship tee of 244 yards. The 17th green was moved from the top of the hill to the water's edge that players will be forced to carry from an elevated tee of 196 yards. In August, the course will play from 7,561 yards.

Hooters Tour / LaSalle Bank Open / Illinois Opens / Futures Tour

If you can't make it to the major tournaments this year or don't like large crowds, check out a few of the smaller events scheduled in our area. The Hooters tour will take place the second week of May when Chuck Ardell will host at Indian Lakes Golf and Resort in Bloomingdale. Steve Daurer, superintendent of the Glen Club has two events to contend with this summer. He will prepare his course for the LaSalle Bank Open, a stop on the Nationwide Tour on June 8 thru 11 and then do it all over again on July 31 thru August 2 when he hosts the Illinois Open. Dave Drendel will be in the spotlight this summer when he hosts the Illinois Women's Open the last week of July at his golf club, Mistwood in Romeoville. Mike Boudreau, the Superintendent at my old stomping grounds, Kankakee Elks Country Club, will host the Futures Tour on June 9 thru 11.

I wish all these fine Superintendents good luck this year with their events and thank them for representing our profession in the best light possible. The conditions they provide are "unlike any other" in any region of the world.



[Editor's Note: Scott Witte, CGCS is hosting the Western Junior Amateur at Cantigny Golf Club this July 17 thru 21 and will be profiled next month in OC.]



Call today for a free DryJect demonstration.

© Advanced Agro Technologies, Inc.; DryJect LLC, 2005

See the unique aeration and subsurface injection of DryJect®.

Only DryJect aerates three dimensionally-side to side, front to back and even connects hole to hole. It's a revolutionary concept using powered water - a patented Venturi process - to open the soil for air, water and amendments in high volume without disturbing the surface.

DryJect's the only machine that can inject while aerating. Following a water blast into the turf, it instantaneously injects a selection of flowable dry amendments - sand, peat, diatomaceous earth, calcine clay, zeolites, top dressing, seed, wetting agents, insecticides, or biological products, you select the mix. For root zone modification, DryJect can use about one ton of material per green. DryJect allows you to start a soil modification program even as part of your regular aeration. DryJect has been used on some of the nation's top golf venues including Oakmont, Winged Foot and Merion. Also, the Dallas Cowboys Training Center uses DryJect.

Why own equipment when you can contract for it with an authorized, experienced DryJect Service Center Contractor? Call today for more details, pricing.

DryJect® Only DryJect Contractors can inject while aerating.

DryJect® Chicagoland LLC

6207 Washington
Downers Grove, IL 60516

Steve Junk (630) 660-3512
stevejunk@aol.com

Andy Womack (217) 549-5173
william_womack@sbcglobal.net

www.dryject.com

Dave Behrman, CGCS -N-



*The Behrman's at last year's Cougar game.
(Zachary, Benjamin, Chris, Dave & Taylor)*



On the Southside in Midlothian, lies one of the oldest golf courses in the country, Midlothian Country Club founded in 1898. Herbert J. Tweedie originally designed the private club as an old traditional links course with narrow fairways and strategic water features. Over time, more than 1800 trees were planted on the property creating scenic corridors for play. The terrain is flat with gradual inclines, but don't let it fool you, this quiet little country club was host to the U.S. Open in 1914. In fact, Midlothian Country Club has hosted several events including the Hagen Invitational in 1939, the Victory Open in 1948, and the Western Open in 1969 and 1973. In the early days Midlothian was the club of the who's who of Chicago and this month you have a chance to play this great gem of the Southside.



*Bunker renovations at Midlothian CC
designed by Lohmann Golf Designs.*

also served on the ITF board for 8 years from 1987-1995. Certified for 20 years, Dave has been a devoted member of the GCSAA and MAGCS and is always looking to advance the turf profession.

Midlothian Country Club is rare for another reason, Dave Behrman, CGCS is only the fourth Superintendent in the club's 108 year history. For nearly 80 years the Duchr family oversaw the maintenance operation and now Dave is starting his 11th year at Midlothian Country Club. Growing up in Tinley Park, Dave started his career path at the age of 15 by working for Dudley Smith at Silver Lake Country Club. Dave attended Penn State and graduated in 1978 after an internship at Flossmoor Country Club. Dave immediately took his first Superintendent position at Deer Creek Golf Course in University Park. That same year, Dave was elected to the Board of Directors of the MAGCS and eventually became the youngest President in 1986 at the age of 29. After completing eleven seasons at Deer Creek, Dave made the step to Riverside Country Club in fall of 1988. While at Riverside, Dave spearheaded a master renovation plan which he oversaw until he left for Midlothian Country Club in 1996. During this same time, Dave

(continued on page 6)

Since Dave has been at Midlothian Country Club, he has helped regenerate the status of the club and the turf management program. Dave said the hardest sale he had to make was convincing the greens committee to spend \$10,000 on Architect Bob Lohmann for a course evaluation. At that time, the membership and green committee felt the club was in excellent condition. After multiple site visits with Bob and a few years of discussion the implementation of a Master Plan was set into motion. Over the past 9 years Midlothian welcomed the construction of a new clubhouse and the installation of a new irrigation system all while Dave and his staff replaced the entire sub-surface drainage system, rebuilt 15 of the 18 tees, and oversaw the dredging of 4 of the 5 water features on

the course. Most recently, in the spring of 2004 the course was reopened after a complete bunker renovation with design work done by Lohmann Golf Design and construc-

wouldn't be possible without his devoted staff of 22 and especially his Assistant of 5 years Rob Lewis.

The Berhman family includes Dave's wife of 23 years, Chris and their three children. Their two sons attended the University of Illinois, Zachary, 21 is a senior studying economics and Benjamin is 19 pursuing a degree in advertising. Their daughter, Taylor is 16 and attends Andrew High School in their home town of Tinley Park. Dave is looking forward to finishing his accomplished career at Midlothian Country Club and looks forward to hosting the May ITF/MAGCS meeting on the 22nd.

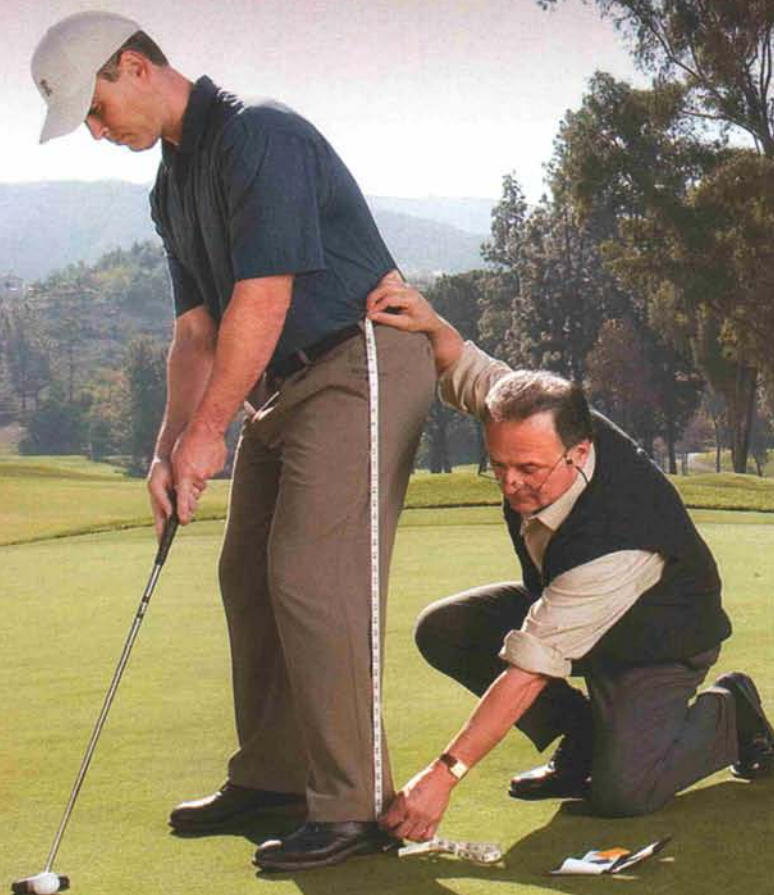


A view from the clubhouse at the historic Midlothian CC.

tion completed by Golf Creation and Hollembeak Construction. This project was featured in Golf Course News and earned recognition as a finalist for private club renovation of the year. Dave is quick to note it







Conditions worthy of devotion.

Golfers will work around just about anything to play a well-conditioned course. It's that commitment that motivates Syngenta to provide you with what you need to enhance play. Products like Heritage® fungicide ensure that turf is disease-free and best able to respond to your agronomic plan and course schedule. It controls a broad spectrum of diseases from the inside out so that neither weather nor mowing can hinder its effectiveness. Heritage is an important part of a preventive spray program, which you can find for your area at GreenCastonline.com.

At Syngenta, we understand why golfers schedule their lives around ideal conditions. Our job is to create products that help make those conditions happen most often.



Contaminated Irrigation Water and Sodium Accumulation

How Evil Is It?

Good quality irrigation water is a very distinct element, conducive to growing healthy and vigorous turf. It definitely pays off to be proactive in finding the right water source, as deterioration of turf quality is a lagging indicator, the result of a fundamental problem of sodium accumulation in soil.

The detrimental impact of the 2005 drought . . . will reverberate in the coming years, unless appropriate corrective steps are taken.

Irrigation Water

A good source of irrigation water is a blessing that every golf course turf manager should cherish. Superintendents who irrigate courses with good quality water have nothing to fear. Their only apprehension, and appropriately so, should be overwatering. Not every golf course, however, has top quality water at its disposal. Thus, water quality should be a paramount concern of those superintendents who have to irrigate their courses with less than perfect water.

The scope of water contamination is apparent from water analyses performed by specialized laboratories. Several well-established parameters are measured and compared with the Minimum Water Quality Limits for turf irrigation.

Turf's worst enemy is water salinity. Sodium chloride (common salt), in particular, is harmful to plants, either directly through the leaves' follicles or, even more important, indirectly through its accumulation in soil. High salt concentrations in the soil environment create osmotic pressures that decrease the amount of water and, indirectly, nutrients for plant growth. The culprit is soluble salts that restrict uptake of essential nutrients for plant growth by occupying nutrient absorption sites on plants' roots. Turf plants growing under these conditions are susceptible to wilt and drought. Frequent light irrigation with poor quality water results in reduced rooting, impaired top growth, and poor turf density.

Water quality for turf irrigation in the U.S. has deteriorated, significantly, over the past 40 years. Many superintendents in the greater Chicagoland area, as well as elsewhere, have to deal with irrigation waters that are mediocre in quality. The harmful effect of poor quality water on the turf becomes even greater during extreme droughts, like the one we have just experienced. Furthermore, the repercussions of irrigation with the sodium-contaminated water are long-lasting and extend far beyond one season. The detrimental impact of the 2005 drought, in terms of sodium accumulation in the soil, at some of the Chicagoland golf courses, will reverberate in the coming years, unless appropriate corrective steps are taken.

Sodium Accumulation

An example of the danger of sodium accumulation, and speed at which it can accumulate in the root zone under extremely dry weather conditions, can be seen by comparing of two real-life data sets. Tables 1 and 2 below depict potassium and sodium soil contents in the root zones of sampled tees and greens. It should be noted that respective changes, showing the sharp increase of sodium in soils, have taken place over a very short period of time—less than one season. Similar levels of sodium accumulation have been detected in the

(continued on page 10)

soils of fairways, depending on water quality, the degree of water contamination, and frequency of irrigation. Although the ratios of calcium to magnesium and potassium in comparison with sodium also are important, the tables have been selected to show the more critical relationship between potassium and sodium in this context.

In general, the problem of sodium accumulation in the soil can be viewed in two different ways: on the relative, base saturation percentage, or in absolute terms (lb/acre). The soil test comparisons are presented below in both formats.

As the soil analysis results above indicate, sodium accumulation in the topsoils doubled, tripled, or even quadrupled in terms of total lb/acre soil content during last season. It is worth noting that in the case of analyzed soils of greens, sodium soil content skyrocketed in spite of superintendents' genuine effort to push potash soil contents up. In both instances, these golf courses had no other option but to irrigate with the sodium-contaminated water.

Research has shown that when sodium begins to occupy more than 3 percent of total base saturation, degradation of the soil structure

begins. Also, it should be understood that when the sodium content in the soil exceeds that of potash, the turfgrass will not respond to fertilization as expected.

Conclusion

Sodium's harmful effect on the turf quality might go undetected for some time if the soil analysis is not performed on a regular basis. The tests are especially useful after a drought like the one experienced in the Midwest in 2005. The initial stealth character of creeping sodium in the soil is rather deceiving. However, when its excessive accumulation

Table 1
TEES
Potassium and Sodium Soil Test Results Comparison
Chicagoland "ABC C.C."

TEE #	BASE SATURATION % BASIS				ABSOLUTE LB/ACRE BASIS			
	4/25/05		11/22/05		4/25/05		11/22/05	
	K POTASH	NaCl SODIUM	K POTASH	NaCl SODIUM	K POTASH	NaCl SODIUM	K POTASH	NaCl SODIUM
1	3.66	1.84	3.51	4.97	438	130	378	316
3	2.80	2.17	2.50	4.29	458	162	416	422
7	3.81	1.68	3.19	4.93	438	114	320	292
10	1.98	2.57	1.69	4.03	290	111	236	332
12	1.39	1.69	1.56	4.38	214	154	254	420
17	2.44	2.11	2.48	5.88	290	148	266	372

COMPOST

- 15 Yard Loads
- 30 Yard Loads
- Screened ½ inch
- Screened ¼ inch

COMPOST MIXES

- Compost/Soil Mixes
- Compost/Sand Mixes

For more information and pricing, call Caroline
At 847-441-6606



GreenCycle Incorporated
400 Central Avenue, Suite 115
Northfield, Illinois 60093
847-441-6606
www.greencycle.net