

# Scotts – ParEx – Knox – Lebanon Custom Fertilizer Applications Gypsum – Lime

*2 Spreader Trucks!  
2 Locations!*

Call now to reserve your  
custom application dates



543 Diens Dr.  
Wheeling, IL 60090  
ph: 847-537-2177  
fax: 847-537-2210



**ARTHUR CLESEN INC.**

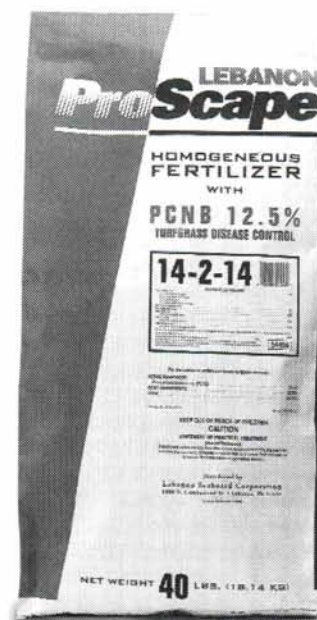
[www.aclesen.com](http://www.aclesen.com)

8050 W. 186th St.  
Tinley Park, IL 60477  
ph: 708-444-2177  
fax: 708-444-2199



# BLOWS AWAY SNOW MOLD WITHOUT BLOWING AWAY.

Proscape 14-2-14 Fertilizer with PCNB (Pentachloronitrobenzene) not only gives you incredible protection against snow mold, it also provides a healthy dose of the two best sources of slow-release nitrogen available, Meth-Ex® 40 methylene urea and IBDU® slow-release nitrogen, in a balanced N-K package. Best of all, the light-colored SGN 100 microgreens granules provide even coverage and exceptional distribution of PCNB and they won't blow away like the competition. So get Proscape 14-2-14 for great snow mold control and excellent nutrition in a spreadable granule that you can see. For a copy of the most current university research on ProScape 14-2-14, call Lebanon Turf Products 1-800-233-0628.



 **Lebanon**  
TURF PRODUCTS  
[lebturf.com](http://lebturf.com)



## 2000 BOARD OF DIRECTORS

### PRESIDENT

**Donald Ferreri (Geri)**  
Seven Bridges G.C.  
Home: 630-357-7964, Office: 630-852-1746

### VICE PRESIDENT

**Brian Bossert (Pam)**  
Bryn Mawr C.C.  
Home: 847-492-1138, Office: 847-677-4112

### SECRETARY / TREASURER

**Luke Strojny (Debbie)**  
Poplar Creek G.C.  
Home: 630-830-7370, Office: 847-310-3618

### EXECUTIVE SECRETARY

**George Minnis**  
MAGCS P.O. Box 760  
Batavia, IL 60510  
Office: 630-406-5356, Fax: 630-406-5456

### BOARD

**Fred Behnke (Nancy)**  
Mount Prospect G.C.  
Home: 773-774-1486, Office: 847-632-9331

**Kevin DeRoo (Cheryl)**  
Bartlett Hills G.C.  
Home: 847-697-0595, Office: 630-483-4991

**Thomas Fahey (Bridget)**  
Marquette Park & Columbus Park G.C.  
Home: 630-920-9935, Office: 312-747-6493

**John Gurke**  
Aurora C.C.  
Home: 630-801-0786, Office: 630-892-3600

**Michael Mumper (Donna)**  
Park Ridge C.C.  
Home: 312-248-8683, Office: 847-823-8682

**Greg Thalmann (Trudi)**  
Fox Run Golf Links  
Home: 847-394-5410, Office: 847-823-8682

### PRESIDENT EMERITUS

**Robert Maibusch (Cheryl)**  
Hinsdale G.C.  
Home: 630-789-1651, Office: 630-986-1323

### COMMERCIAL REPRESENTATIVE

**Paul Yerkes**  
LESCO Inc.  
Office: 630-904-5255

### TURFGRASS ADVISOR

**Dr. Randy T. Kane**  
University of Illinois & CDGA  
630-954-2753

### EDITOR

**Cathy Miles Ralston**  
276 Lincoln Terrace  
Buffalo Grove, IL 60089  
Phone & Fax: 847-537-7883  
E-mail: on\_course@hotmail.com

### CONTRIBUTING EDITOR

**John Gurke**  
E-mail: Boomding@aol.com

### 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.

### FRONT COVER

Hole #18, a 615-yard par 5, at Stonewall Orchard Golf Club.  
(Photo courtesy of Larry Flament)

- 2 **ON COURSE WITH THE PRESIDENT**  
**We Interrupt This Broadcast for a Membership Drive . . .**  
Donald Ferreri
- 7 **FEATURE ARTICLE:**  
**To Blend or Not to Blend . . .**  
Darin W. Lickfeldt, Andy M. Hamblin, Ph.D. and Tom B. Voigt, Ph.D.
- 11 **DIRECTOR'S COLUMN**  
**A Look at GCSAA's Limited Budget Outreach Program**  
Bob Maibusch
- 14 **SUPER -N- SITE:**  
**Larry Flament -N- Stonewall Orchard Golf Club**  
Bradley Anderson
- 20 **ASK THE "EXPERT":**  
**Overgrooming Is Overspending, Revisited**  
Bradley Anderson
- 24 **2000 U.S. WOMEN'S OPEN:**  
**Triumph!**  
Cathy Ralston
- 31 **INNOVATIONS:**  
**Put Away All Papers and Reading Materials and Take Out Your #2 Pencils . . .**  
Jay Druhan
- 38 **THE BULL SHEET**  
John Gurke

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.



## We Interrupt This Broadcast for a Membership Drive . . .

*If you like what you have been watching, then now is the time to subscribe. We can only provide this type of entertainment and education to you at a cost. And, if you subscribe in the next five minutes, along with all the benefits we provide you through our programming we will also include a very nice totebag. Sound familiar? We grew up watching PBS for free. Did anyone honestly subscribe? I always thought those names that scrolled along the bottom of the screen were made up by a creative producer. But now, at almost 40 years of age, I am realizing that it takes money to achieve anything of value.*

*We are regarded throughout the country as a strong, committed Association that is on the cutting edge. We have earned that reputation, and I believe we should strive at maintaining it.*

Let me preface this message by stating that the market needs a correction. We have been operating over the past 10 years with a membership dues structure that has increased only once. And to be quite honest, that increase took us from ridiculously low to a situation that is a remarkably good deal. I am bringing you this information as someone who has been very close to the operations of this Association over the past nine years. For the last three years, I have been analyzing the cost of doing business. Please keep in mind, throughout this entire proposal, that I will make the best interests of you, the members, my priority.

Financially, right now we are strong. We are not, however, covering current expenses. Having a strong foundation is wonderful; however, biting into our reserve with no opportunity of return for the future is not. What the Association and its Board of Directors have accomplished in the past 10 years is remarkable. The future will be limited only by our imagination. We are regarded throughout the country as a strong, committed Association that is on the cutting edge. We have earned that reputation, and I believe we should strive at maintaining it. I am very encouraged by the survey response to many questions pertaining to the cost issues of our Association. There is a clear-cut direction that the majority of our Association wants to travel. The general feeling I received from the survey is that you, the members, want to progress forward and enhance the value and opportunities of being a member of MAGCS.

I do not want to get into actual numbers or the details of the new proposal at this time. The Finance Committee will crunch the numbers, work on balancing the budget and apply foresight to the next three years. I promise you that neither I nor the Board would try to sell some-

*(continued on page 34)*

# There's No Mistaking an Original.



The outstanding performance of a reliable,  
economical, multi-site fungicide.

The only broad-spectrum  
systemic strobilurin fungicide.

## The two top selling fungicides in golf, HERITAGE® and DACONIL®

[www.zenecaprofprod.com](http://www.zenecaprofprod.com)

Contact: [Jim.Shone@agna.zeneca.com](mailto:Jim.Shone@agna.zeneca.com)



**ZENECA** Professional Products

Always read and follow label directions carefully.

DACONIL® and HERITAGE® are registered trademarks of a Zeneca company.

© 2000 Zeneca Ag Products Inc. Zeneca Professional Products is a business of Zeneca Ag Products Inc.

ZPP-TRF-020

# ONE WAY TO IMPROVE YOUR WELL EFFICIENCY



*The normal operation of any water pumping system inevitably lead to less efficient well production due to pump wear and well plugging.*

*At Layne-Western we have the resources and expertise to provide you with innovative solutions to keep your water pumping system operating at peak efficiency. Our complete repair and maintenance services help guard against costly breakdowns and quickly solve problems that arise.*

*Call the Layne professionals with over 100 years of experience in the water supply industry.*



**Layne-Western Company**

721 West Illinois Avenue • Aurora, Illinois 60506 • 630/897-6941  
229 West Indiana Avenue • Beecher, Illinois 60401 • 708/946-2244

## The new advantage in irrigation repair, replacement and upgrade.

From LESCO® and Bear™ Irrigation comes the advantage you've been looking for in golf course irrigation. Improved performance from a new line of components designed to upgrade your Toro® and Rainbird® systems.

Ask your LESCO Sales Representative for information or call 800-321-5325.

# LESCO®

LESCO is a registered trademark of LESCO, Inc.  
Bear is a trademark of Bear Irrigation.  
Toro is a registered trademark of The Toro Company.  
Rainbird is a registered trademark of the Rainbird Sprinkler Mfg. Corp.



## You can get the job done if you... Apply the right pressure.

When you need a powerful pressure washer that's tough on clean-ups and easy on your budget, check out the AaLadin 1000 series washers. Filled with outstanding standard features, these units really put on the pressure and make things shine! Every AaLadin unit is built to highest quality specifications in the industry. Stop in today for a complete demonstration.



### HIGH PSI LTD.

25 South Park Street, Roselle, IL 60172  
(630) 893-0777 Fax(630) 893-1045  
**(800) 666-3900**



A Distributor of



CETA CERTIFIED

TR

**TORO**<sup>®</sup>

## Reelmaster<sup>®</sup> 5200D/5400D



Variable speed fairway mower provides a superb quality of cut with two powerful diesel engine choices - 28hp or 35hp.

**630-773-5555**  
FAX 630-773-4273

**Chicago**  
**Turf & Irrigation** Inc.

1170 W. Ardmore • Itasca, Illinois 60143

**TORO**<sup>®</sup>

## Multi Pro 1100

Precision liquid application systems that set the pace in sprayer technology.

**708-773-5555**  
FAX 708-773-4273



**Chicago**  
**Turf & Irrigation** Inc.

1170 W. Ardmore • Itasca, Illinois 60143

# A NEW BEGINNING...

**Simplot** *Acquires*  *from ECO Soil System*

*Our New Name is:*

**Simplot**  
PARTNERS



***Our Mission Statement***  
*To Provide the Highest Quality Products and Services to our Customers*

***Added to our product line is:***



**JACKLIN**  
S E E D

**Simplot Partners**  
525 N. Enterprise Street • Aurora, IL 60504 • Office: (630) 499-1966 • Fax: (630) 499-1971

# To Blend or Not to Blend . . . Questioning the Common Practice of Using Turfgrass Mixes

*How often do we question the management practices that have been used over the years? Are the original data supporting these practices still valid, considering the use of more modern equipment and improved plant varieties? Maybe some common practices deserve a second look. One issue is the use of blends and mixes for turfgrass stands. Do they really provide the benefits we expect compared to newer, superior-performing varieties planted in monoculture? In the past, distinguishing between turfgrass varieties has been fairly subjective. Today, with the aid of modern biotechnological tools, we are able to differentiate varieties based on DNA fingerprints. Using these tools may allow us to revisit the usefulness of management practices of the past.*

*We blend out  
of habit and  
in support of  
an untested theory  
that blending  
provides a sense  
of security.*

## **Why blend?**

Grass species, such as perennial ryegrass, are often mixed with Kentucky bluegrass to provide faster stand establishment and soil stabilization during the long bluegrass germination period. Fine fescues are mixed with Kentucky bluegrass to improve shade tolerance. But what about limiting a stand to one species and blending three to five varieties? Do grass varieties differ that greatly in their characteristics to gain any benefit from blending?

- Research being conducted at the University of Illinois will soon determine if blending still makes sense.
- The usefulness of blending several varieties together in a turfgrass stand is largely an untested theory.
- If one out of three varieties originally seeded into a blend predominates time and time again, why don't we use that single variety by itself?
- Varieties differ greatly in their performance from one environment to the next, and not knowing the composition of a blended stand is a handicap preventing optimal turf performance.

*(continued on page 8)*



Our parents told us “not to put all of your eggs in one basket.” Our financial advisors stress the importance of diversification of our investments. The diversification of grasses included in a blend is largely an untested theory. Turfgrass breeding efforts have been accelerated in the last 25 years to bring varieties that are resistant to disease and tolerant of stress while also improving aesthetic quality. Why not use the NTEP (National Turfgrass Evaluation Program) data for our region and select one “improved” variety with all of the characteristics we desire? Many superintendents established monostands of ‘Merion’ Kentucky bluegrass when this “leaf-spot-resistant” variety was released, only to find susceptibility to summer patch (*Magnaporthe poae*).

We blend out of habit and in support of an untested theory that blending provides a sense of security. Many people include bonds in a portfolio of investments to provide protection and security against drastic downturns in the stock market. After all, it is better to lose a little than lose everything. Including a variety that is resistant to disease in a blend with other susceptible varieties may protect against complete loss of a stand after a major disease outbreak. Alternatively, not all turfgrass stands are created equal and they are usually not uniform. Therefore, including varieties in a blend that are more disease-, heat-, cold-, shade- and traffic-tolerant suggests we will cover all of our bases. The shady areas will see the shade-tolerant variety excel, while the heavily trafficked areas will see the traffic-tolerant species excel. Again, this practice is largely untested.

### **DNA fingerprinting**

You may ask why this theory is untested. Quite simply, the identification of grass varieties in a blended stand after the stand has

matured is very difficult. Yes, turfgrass varieties differ in color, density and leaf texture, but how confident would you be in distinguishing between varieties in a blended stand using these subjective traits? Early research used proteins to distinguish between varieties because most varieties usually produced slightly different proteins from one another. The problem with this method was consistency. Proteins are the products of gene expression and expression can vary from one day to the next and from one environment to the next.



At the University of Illinois, we are using DNA to identify the variety of individual bluegrass plants. Essentially, DNA can be extracted and manipulated in such a way as to create a fingerprint, which is unique for each bluegrass variety. Humans can be identified from one another not only by the unique ink prints made by their fingers, but also by DNA analysis. You had to be unconscious in 1994 and 1995 to not be bombarded with the hype surrounding the O.J. Simpson trial. Remember how DNA from blood samples was used to determine that O.J.’s blood was spread throughout the crime scene? The investigators used DNA technology. Here in Illinois, DNA is being used to determine whether prisoners on death row are indeed guilty of their alleged crimes. The great value in DNA fingerprinting is

*At the University of Illinois, we are using DNA to identify the variety of individual bluegrass plants. . . . Once the DNA fingerprint for a Kentucky bluegrass variety has been determined, individual bluegrass plants can be identified in blended stands. The development of this method allows for the tracking of shifts in the population over time.*

reproducibility. DNA does not change with time or environment unless it has been mutated in one form or another and the DNA from any particular Kentucky bluegrass variety does not change drastically over time or from one environment to another.

Once the DNA fingerprint for a Kentucky bluegrass variety has been determined, individual bluegrass plants can be identified in blended stands. The development of this method allows for the tracking of shifts in the population over time. We can also determine if, after several years of growth, a given variety is distributed evenly in a blend or if certain varieties are clumped together in patches. If one out of three varieties originally seeded into a blend predominates time and time again, the next question is, “Why use the weaker varieties in the first

*(continued on page 12)*



SINCE 1956

## Meadow Equipment Sales & Service, Inc.

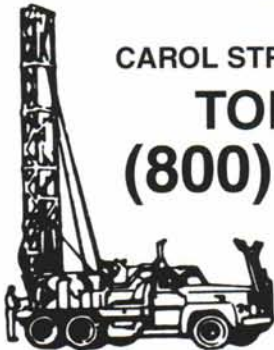
Well Drilling/Pump Service  
27 W. 021 St. Charles Road  
Carol Stream, IL 60188

- Water Well Drilling / Rehabilitation
- Pump Sales and Service
- Large Selection of Pumps  
Line Shaft / Submersible
- Booster Pumps
- Servicing all Makes and Models
- Complete Water Well Systems
- Design and Consulting
- Maintenance Programs
- Special Rates on Winter Servicing
- 24 Hour Emergency Service

**Authorized Sales and Service  
for Leading Pump Manufacturers**

CAROL STREAM: (630) 231-6250

**TOLL FREE  
(800) 704-2415**



*"Where Meadow Goes,  
the Water Flows"*

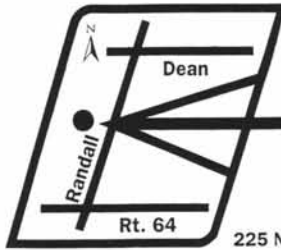
## *Introducing Landpride Multi Injection Systems*



The Only Unit On The Market  
To Inject Dry Or Liquids  
To The Root Of The Problem.  
And Introducing The Star Of  
The 1998 Masters - **SubAir**  
**Control The Root Zone  
Through Science**



Give Your Roots Some Air  
With SubAir Precision  
Injection Of Dry Or Liquid  
Amendments With LandPride  
Exclusively Distributed  
By: Lewis Equipment  
55 E. Palatine Rd.  
Prospect Heights Il 60070  
(847)537-6110 fax:(847)537-5736  
Represented By: John Berarducci  
Call The Bear:(847)367-7728  
mobile:(847)347-5105



# Payline West, Inc.

"Complete Parts &  
Service Dept  
We Service What  
We Sell"

225 N. Randall Rd. (just north of North Ave.) • St. Charles, IL 60174

## INDUSTRIAL LANDSCAPE COMMERCIAL & TURF EQUIPMENT



NEW HOLLAND SKID LOADERS, TRACTORS AND ATTACHMENTS  
KUBOTA TRACTORS, WHEEL LOADERS, MINI EXCAVATORS  
SCAG, KUBOTA, BEFCO, HOWARD PRICE COMMERCIAL MOWERS  
STIHL, ECHO, HOMELITE POWER PRODUCTS  
DYNAWELD TRAILERS



PARTS SALES SERVICE  
RENTALS

### 630-584-8700

VISIT US ON THE WEB

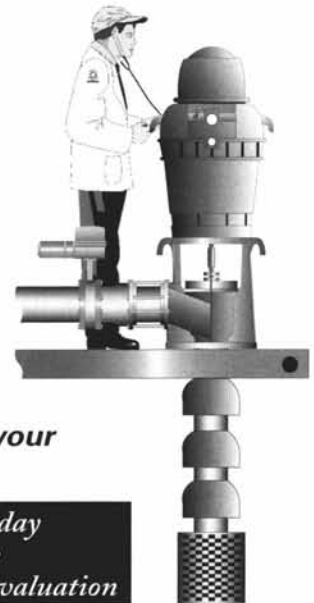
[www.paylinewest.com](http://www.paylinewest.com)



## WATERTRONICS® ELECTRONICALLY CONTROLLED PUMPING SYSTEMS

**Watertronics offers the industry's finest pumping systems and expert service for ALL BRANDS of irrigation pumping equipment.**

- *New pump station design, manufacturing and sales*
- *Complete pump station installation services*
- *VFD and EBV pressure regulation upgrades*
- *Troubleshooting, repair and replacement of motors, pumps, valves, controls, and control panels*
- *Extensive parts inventory available from our manufacturing facility in Hartland, Wisconsin*
- *Complete lightning/surge protection packages*
- *Remote pump station monitoring packages*
- *Preventive maintenance programs tailored to your needs*
- *Complete retrofit of existing pump station controls to replace your old technology Cla-Valve and pressure surge tank*



For sales contact Jay Stellmacher **800-356-6686**  
For service contact Jerry Schaffer

Check out our website at: [www.watertronics.com](http://www.watertronics.com)

Call Us Today  
For A Free  
On-Site Evaluation