



Light on Fairways. Heavy on Productivity.

Jacobsen® LF-3400™

The Jacobsen LF-3400 lightweight offers the best of both worlds. For a manicured finish, the LF-3400 features 7-blade, 5-inch diameter reels that lightly follow the contours of your fairways. The patented Jacobsen Turf Groomer™ turf conditioner provides proven thatch control. And for maximum productivity, the LF-3400 delivers 34-hp, a 100 inch mowing swath and the patented FlashAttach® reel-mounting system for quick changeovers and maintenance without tools. If you want the finish of a lightweight and the productivity of a heavyweight, come in or call today.



JACOBSEN

TEXTRON
TURF CARE AND SPECIALTY PRODUCTS



www.ttcsp.textron.com
ASJA-LF3400-0599 © 1999 Textron Turf Care And Specialty Products.
All rights reserved. Printed in the U.S.A.



2000 BOARD OF DIRECTORS

MARCH 2000
Volume 53, No.10

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: 708-957-6652

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

Mike Bavier, pictured here at Inverness C.C. with assistant Roger McDuffa amidst the splendor of a flower bed in full bloom, received the GCSAA's Distinguished Service Award last month in New Orleans. Mike was also recognized as one of the most influential superintendents of the 1900s by *Golf Course News* in its February issue. (For more information on Mike, see page 15; for more on the *Golf Course News* article, see *the Bull Sheet*.)

4 ON COURSE WITH THE PRESIDENT

Donald Ferreri

7 DIRECTOR'S COLUMN

Fred Behnke

8 FEATURE ARTICLE:

Turf 2000: Looking Out, Looking In

Frank S. Rossi, Ph.D.

15 Michael Bavier Receives GCSAA's Distinguished Service Award

16 ASK THE "EXPERT":

Longing to Be A "Great Communicator?"

Erwin McKone

20 FEATURE ARTICLE:

Cantigny Experimental Green Update: Variety Trial Summary, Diseases and Other Notes

Randy Kane, Ph.D.

30 Midwest Voices

34 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.

RIVERWALLS LTD.

Specializing In Golf Course Enhancement

P.O. Box 562
Barrington, Illinois 60011
Toll Free: 888-254-4155
Fax: 847-516-0116
Office: 847-382-9696



**#3 Hole
Woodside
Cantigny
Wheaton**



#3 Hole, Wynstone, North Barrington



**Shoreline Stabilization
Creek Crossings
Stream and Spillway Re-Construction
Pump House Intake Line Reinforcement**

**S
P
R
I
N
G

L
A
K
E

S
A
N
D

C
O
M
P
A
N
Y**

It's Spring, and the busy golf season is fast approaching! We have many different types of sand and gravel for any of your course needs:

Bunker Sand
Root Sand
Torpedo Sand
3/8" Pea Gravel
3/4" Wash Stone
1 1/2" Wash Stone
Limestone Screenings
Gravel Screenings
CA6 Grade 8
3" Limestone

Give our office a call at (815) 385-0856 and we would be glad to Give you a quote on any of these materials. If you would like, material samples can be arranged.

MARK TENUTA mobile: 847-287-2555

"Specializing In Golf Course Aggregates"

***For a healthy waterway,
make one call.***

We manage aquatic plants, control algae, conduct water quality testing, stock game fish, and install aeration systems and nuisance geese deterrents, all with an environmentally sensitive approach.

Look to us for product equipment and sales as well.



**For A Professional Consultation,
Call Rich Rollins at (630) 893-0810**

email: richrollins@aquaticweed.com or www.aquaticweed.com
A Division of Clarke Environmental Mosquito Management Co. Inc.

Nels J. Johnson Tree Experts, Inc.

A Tradition — More Than 60 Years
Of Complete, Dependable, Economical Tree Service
For Private Estates, Municipalities, Schools, Industrial Areas,
Parks and Golf Courses
(847) 475-1877
912 Pitner Ave., Evanston, IL 60202

Since 1930

RapidTurf®

NATURAL GRASS GROWN ON PLASTIC

Exclusively Grown in Illinois By

CENTRAL

Sod Farms, Inc.

1-800-310-0402

What do a superintendents think
about *RapidTurf*. ?

"We've used RediPlay/RapidTurf on four different courses. Sodding 19 greens over a 2½ week period. Each of these greens was playable inside of two weeks. RediPlay/RapidTurf does not float like washed sod. And since there's no damage in cutting, it roots faster after installation. I highly recommend it!"

Tom Jauch

Vice-President GolfVision LLC

"It roots faster than any grass I've seen before. In fact, it began rooting withing two days of installation. We opened in half the normal time. It's great stuff!"

Lawrence Flament,
Stonewall Orchard Golf Club

Delivered throughout the Midwest by refrigerated truck



ON COURSE WITH THE PRESIDENT

Donald S. Ferreri, CGCS *Seven Bridges G.C.*

What is a mission statement? Everyone should have one; it is truly what gives us purpose for our actions. If you do have one, what is it? We have a mission that simply reads, "Seven Bridges Golf Club will be one of the top-rated public golf courses in the country, to create and provide a 'your club' experience through innovation, commitment to excellence and diligent attention to detail." This is our continued goal as a golf facility.

As an Association, we have adopted *"to provide affordable and environmentally sound golf course conditioning that results in the highest quality and playability possible."* It is very important to remember your mission and, from time to time, evaluate your progress in achieving and sustaining your goal.

An interesting statistic I learned is that only 60 percent of the nation's golf courses employ a superintendent who is a member of the GCSAA. We actually stand in better numbers than the PGA, but we have a lot of work ahead of us.

In January, Luke Strojny and I attended the Chapter Strategic Planning Conference in Lawrence, KS. We opened the meeting by defining a new mission statement for the GCSAA. It now reads: "GCSAA is dedicated to serving its members, advancing their profession and enhancing the enjoyment, growth and vitality of the game of golf." Along with the new mission statement, we discussed and agreed upon a vision. The vision should focus on the direction where an association is heading and the desired long- and short-term results. Some of the highlighted visions to be completed by 2005 include:

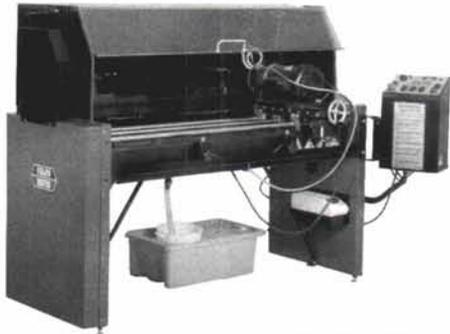
- Employers will recognize golf course superintendents as the key to the economic vitality of the facility.
- Golfers will recognize golf course superintendents as the key to their enjoyment of the game.
- The general golf public will recognize and view GCSAA as among the top organizations in American golf in terms of importance to and influence on the game of golf.
- The golf community, environmental community, public-policy makers and society will recognize GCSAA as leading the golf community's commitment to a positive environmental impact.

Some of these visions may seem a bit lofty, but in considering the vast advances of our industry in the past decade, they might not be. There is a document entitled *Association Plan 2005*. If you are interested, contact GCSAA for your copy.

(continued on page 28)

**FOLEY
UNITED**

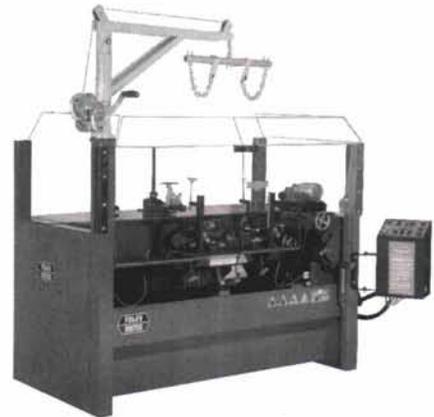
Accu-Pro Grinders



Bedknife Grinder- magnetic bed bar system for the straightest, most accurate grind possible.

630-773-5555
FAX 630-773-4273

Spin Relief Grinder - automatic indexing and a patent pending relief grinding mechanism provide dependable, accurate and fast unattended grind cycles.

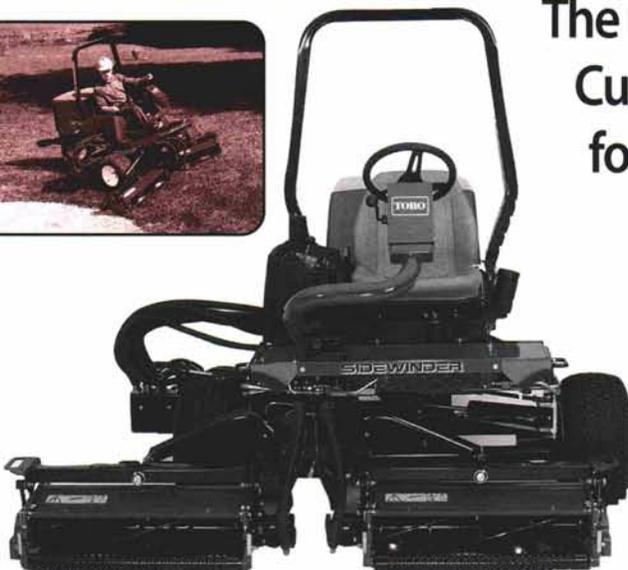


**Chicago
Turf & Irrigation Inc.**

1170 W. Ardmore • Itasca, Illinois 60143

TORO

Reelmaster[®] 3100-D with Sidewinder Cutting Units



The next generation Reelmaster!
Cutting units slide left to right
for greater cutting capability
and maneuverability.

630-773-5555
FAX 630-773-4273

**Chicago
Turf & Irrigation Inc.**

1170 W. Ardmore • Itasca, Illinois 60143

A Successful Season... Starts with Century Golf Course Services



Century offers the complete line of Hunter Golf products to help you control water, labor and energy costs. Featuring Hunter rotors, valves, Genesis central satellite and Viking decoder control systems.



Hunter Golf System



SyncroFlo, Inc.

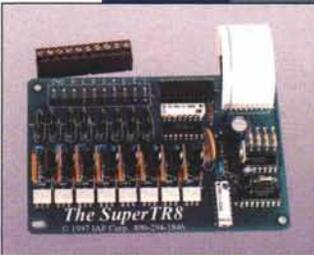
Efficient and economical, SyncroFlo pumping stations are the solution to many golf course irrigation problems.



SyncroFlo Eagle Pumps

BoardTronics™

Repair or upgrade your Rain Bird or Toro golf controllers. Replacement boards can be shipped from the Century National Service Center within 24 hours. Call 888-855-9132.



Controller Board Repairs

CENTURY RAIN AID



Improve water quality with an aerating fountain, or create water features from existing golf course streams and ponds.



Aqua Master Fountains

Sprinklers • Valves • Controllers • Pump Stations Controller Board Repairs • Fountains

An inviting, well-maintained course means challenging play...and a profitable season. As a golf superintendent, you can achieve this success with Century Golf Course Services. Century's team of professionals can help you solve irrigation or drainage problems and show you what's new in clubhouse lighting, water features and more. Call today for a free catalog and on-site consultation.

800-347-4272

www.rainaid.com



Bob Williams, retired superintendent of Bob'O'Link Golf Club, was the 1997 recipient of ITF's Distinguished Service Award. When he reached the speaker's podium following an introduction that included a lengthy, but by no means complete, recitation of his many accomplishments, he looked directly at his audience and said, "I guess the older we get, the better we were."

GCSAA is growing in size and influence. Its reach spans the globe, and its mission is to represent the profession of the golf course superintendent. The MAGCS's mission is to represent and assist you, and is your voice to the GCSAA.

Those of us who were fortunate enough to have worked for Bob can remember a man who was never satisfied with the way things were. He made us think about how we could do the job better. You learned the meaning of words like "innovative," "meticulous" and "productive" when you worked on Bob'O'Link's maintenance staff. But mostly you had a wonderful model of how to conduct yourself as a professional in the person of Mr. Williams. Knowing the man as I do, I'm pretty sure that Bob would agree that when he said, "The older we get, the better we were" he actually meant, "The older we get, the better we should be."

I have been a golf course superintendent for almost 15 years, and in that 'brief' span of time I've seen our industry grow and evolve at the same breakneck pace that drives the economy in general as we race past the year 2000. Our 'royal and ancient' game of golf is deeply rooted in tradition, but on our end there is no future in saying, "But we've always done it that way." Research and development in biological control tactics, techniques in environmental enhancement and technological innovations like high-speed Internet access, global positioning systems and digital imaging have positioned themselves firmly in our workplace. Our employers rightfully rely on us to evaluate these new techniques and ideas on a continual basis with the objective being to find a better, faster, more efficient, more professional way of doing our job.

The GCSAA is in the process of formulating the Professional Development Initiative (PDI), a program using a self-assessment of proficiency in several professional categories to design a personal curriculum of continuing education. The methodology is still being worked out, but this program will have wide-ranging effects on your status regarding membership classification, educational opportunities and career development. The PDI is probably GCSAA's most ambitious venture since the Certification Program was introduced a generation ago.

You owe your employer your best effort in keeping up with the times; don't you owe yourself the same effort? Educate yourself

(continued on page 32)

Turf 2000: Looking Out, Looking In

Perspective

Anticipation of the turning of the calendar was an anxious time for many throughout the world. When the new millennium finally officially begins in 2001, we will have experienced a phenomenal amount of change in the turfgrass industry. Much of this change has been the result of scientific research that underpins technological developments. Therefore, it is an interesting time to look outward to the year 2000 and wonder about what scientific research may provide us from a biological, chemical, equipment and human resource perspective.



Biotech Tsunami

The results of biological research have produced an enormous amount of innovations in our daily lives . . . everything from new drugs that help us recover or avoid physical and mental illness to the preservation of embryos of endangered species so that we can reintroduce them if they become extinct. Now the biological research community has turned its attention on mapping the genes of every biological organism.

A tsunami is an underwater earthquake that starts out slowly in the depths of the ocean and over a short period of time can create tidal waves more than 200 feet high. The result is a complete destruction of what once was, for what will be. This natural disaster is the best analogy of how biotechnology will change the world we currently live in. The results over the next ten years will be felt widely, ranging from how we are treated medically, to how we are insured and possibly how much we have to mow our turf areas.

Researchers at the Salk Institute in San Diego, CA recently identified a gene that can be manipulated to produce a chemical that stunts plant growth. Immediately, the speculation began about insertion of this gene into grass plants that would eliminate the need for mowing. Unfortunately, there are several important steps between the Salk researchers finding a gene and having a turfgrass that doesn't need mowing. The most critical step is, simply, getting the gene into and expressed in the turfgrass plant. The research was initially conducted on tobacco (a dicot plant).

Unfortunately, many factors could prevent insertion and then expression of that stunting trait in grasses (monocots).

Next is the bigger question: do we really want a turfgrass that doesn't grow? Certainly, areas exist where we would plant acres with a "stunted" turfgrass; however, how much would actually be used on golf courses, sports turf or other heavily-trafficked areas? The fact that turf grows is fundamental to the benefits it provides from a wear tolerance and recuperative perspective. In addition, if the turfgrass blades do not expand, will they be more likely to become infected with disease or vulnerable to other forms of attack? What about competition from aggressively growing weeds? How could a turfgrass that doesn't grow colonize empty space before a weed?

Nevertheless, the trend of biotechnology will impact us in 2000 as the Scotts Company begins the process of bringing the Round-up Ready Bentgrass to the golf turf market. Within the breeding community, questions are already being raised regarding "escape" of the herbicide-resistant gene into the wild bentgrass population. In addition, focus groups are revealing some reluctance from golf turf managers, who may not understand the science behind genetic engineering. This is similar to the uneasiness that the European Community has expressed over genetically engineered food. In any event, the year 2000 will see this discussion raised to another level.

Old Dogs and New Tricks

It seems ironic that just as we are on the precipice of genetically engineered plants, we begin to look more closely at grasses that have been found on golf courses for the last 100 years. For example, many breeders are collecting

and developing velvet and colonial bentgrasses for golf courses. These grasses, when established and managed correctly, can provide superior turfgrass quality and performance. In addition, Bill Meyer's research at Rutgers University has suggested incredible diversity in the velvet bentgrasses collected around the world for wear tolerance.

The most isolated landmass on the planet, Hawaii, is home to another grass that has been found on golf courses for decades. Seashore paspalum will likely receive increased attention in the year 2000 as Ronny Duncan inches closer to the release of a commercial variety. Seashore paspalum offers many benefits to the golf turf industry, including an almost unbelievable degree of salt tolerance.

Synthetic "Natural" Products

It seems odd that one of the most important pharmaceutical developments in the last century, penicillin, is derived from a microorganism. In addition, many of the most toxic compounds known to science are not synthetic, but rather are the by-products of a naturally occurring organism. Interestingly, an important debate is raging about the destruction of the rainforest, not because of the potential impact on global warming, but because of the loss of natural products that could provide important human benefits. Many pharmaceutical companies are sending "Indiana Jones"-type scientists into the rainforest to uncover the chemical mysteries these plants possess.

This approach to using natural products also has some history in the turf and landscape industry. For example, the black walnut tree (*Juglans nigra*) has been reported for centuries to

A tsunami is an underwater earthquake that starts out slowly in the depths of the ocean and over a short period of time can create tidal waves more than 200 feet high. The result is a complete destruction of what once was, for what will be. This natural disaster is the best analogy of how biotechnology will change the world we currently live in.

inhibit plant growth through the production of a potent natural herbicide or allelochemical, juglone. Juglone is a chemical produced in the bark and living root system of the black walnut tree and can persist in the soil for several months after the removal of the tree.

More recently, the turfgrass industry has been impacted by the development of new pesticide chemistries derived from naturally occurring products. Active ingredients in products such as Heritage from Zeneca and Conserve from Dow Agrosiences are derived from fungal organisms. These are highly active products

(continued on page 10)

that are receiving increased attention because of their ability to fast-track through the EPA registration process. At least one company, Zeneca (as it once was known), is continuing this pursuit by developing a new chemistry of herbicides from extracts of the Australian bottlebrush plant.

The next logical step to this process is to elucidate the genetic control of natural product chemistry. Once a gene that is responsible for chemical production is identified in a plant, similar to the growth-stunting gene described above, it can then be inserted into turfgrass plants so that it can be produced for protection from pests. This process is underway in various stages at the University of Illinois and here at Cornell University with the fine-leaf fescues. Identifying this process in a turfgrass already suspected of producing weed-suppressive chemicals will allow the process of insertion and expression to proceed more quickly.

Direct Injection

Concern over the impact of turfgrass management on environmental quality reached a fever pitch in the last two decades of the 20th century. While the volatility of the debate has been reduced by a combination of industry sensitivity, scientific research and mutual awareness and understanding, much work remains. For example, under the leadership of Greg Lyman, the environmental education specialist at Michigan State University, the focus is turned to water quality and the point-source contamination issues that exist on golf courses. Point-source problems occur when there is direct contamination of a water source at the beginning or end of the pipe, such as a wellhead, or discharge into a pipe that empties into a stream.

The Michigan Environmental Stewardship Program has been working in partnership with golf turf managers, environmental advocacy groups and state regulators to improve point-source awareness and remedy potential problems. Of course, the issues range from fuel storage to equipment washing. However, one that might be easily fixed is the mixing and loading of pesticide sprayers.

Many golf turf maintenance facilities have added pesticide management areas that include completely contained storage and mixing areas. However, some researchers in Europe and now at Cornell University have been working to develop a system that eliminates the need to mix large (100 gallons or greater) amounts of water and pesticide and drive around the course. Instead of mixing concentrated pesticides and

(continued on page 12)

Concern over the impact of turfgrass management on environmental quality reached a fever pitch in the last two decades of the 20th century. While the volatility of the debate has been reduced by a combination of industry sensitivity, scientific research and mutual awareness and understanding, much work remains.

From hydroseeding to prairie seeding to wetlands...

McGinty is covering Metro Chicago. If your land parcel is 1/2 acre or more, hydroseeding is the practical and economical installation method. We can spray on a customized mixture of grass seed, fertilizer and wood fibre mulch for a quick lush lawn. Perhaps your client desires the natural look of prairie or wetlands. McGinty's expert installation crews can provide these options. You want planned growth or natural growth? Call the professionals.

McGinty
BROS., INC. est. 1959

847.438.5161