Searing heat. Drought. Year-round traffic. For Fred Biggers, it's all part of the job.

The Stoney Creek course at Virginia's Wintergreen Resort delivers one of the top resort golf experiences in the country. As well as serious challenges for Fred, Wintergreen superintendent and a 2003 Keeper of the Green.

To battle summertime temperatures that exceed 100 degrees, Fred turns to Floratine to help his greens come through in top condition year after year. His program includes biostimulants Astron, Knife, Per "4" Max, Perk-Up and ProteSyn™ as well as soil amendments Maxiplex, CalpHlex, Phlex-Mag and Phlex-Man. "Floratine products have delivered results as advertised," says Fred.

It seems that extreme circumstances call for a solution with one name — Floratine.

Floratine and its associates are dedicated to the success of turfgrass managers. We strive to provide environmentally conscientious, integrated turfgrass solutions through uncompromising quality and value in products, technical assistance, and customer focus.

We are invested in the success of the Keepers of the Green.
Is Your Course Accessible?

Without Wires
Can wireless irrigation systems and all their digital doodads transform the industry?
By Larry Aylward

On the Mark
Mark Mungeam, the man behind the renovation at Olympia Fields CC, talks about what it took to ready the course for the U.S. Open.
By Geoff Shackelford

Inside the Fringe
SPECIAL SECTION: THE PUTTING SURFACE
Golfdom reports on matters from moss control to "massaging" greens.

Make Mine (a Walk-Behind) Mower
The Big Three manufacturers discuss the time and effort they spend to build new walk-behind machines.
By Frank H. Andorka Jr.
This month, *Golfdom*'s practical research digest for turf managers discusses irrigation sensors and more. Pages 49-64.

**Real-Life Solutions**

74 Bring on the Baking Soda
Two Ohio superintendents discovered an innovative solution to moss problems on their greens.
By Frank H. Anderka Jr.

78 Just Greens
Superintendent says he's up to the peculiar turf task presented to him at a new Las Vegas putting complex.
By Doug Cantor

84 Gone, But Not Forgotten
Canton Public GC will live on — literally — through its donated greens.
By Anthony Pioppi

**Real-Life Solutions**

88 Subtle Approach Ensures Subtle Changes
Architect "massages" greens to regain lost cupping areas.
By Anthony Pioppi

90 Goods for the Green
These products can help you maintain better putting surfaces.

**cover story**

*BY BRUCE ALLAR*

Golf courses face new demands to comply with the Americans with Disabilities Act.

**About the cover**
Lisa Lehman and Kim Traum designed our vivid cover. Image by Artville.

**Focusing on the “Little Guy”**
The positive reaction to our March cover story, "Down and Dirty," inspired us to launch a new column that focuses on superintendents at low-budget courses who are doing more with less. Check out the debut entry on page 100.

**columns**

14 Flagstick
Davids Help With Goliath Problem

32 Pin High
Give Doak Credit for Giving Back

37 Shades of Green
Going Beyond Your Job Description

92 Designs On Golf
What Does the Future Hold? The USGA

100 Down and Dirty
Protecting Nature Is Family Affair

110 Mechanically Inclined
Taking Care of Topdressers

112 It's Academic
Genetic Resistance Aids Fight Against Dollar Spot

114 Out of Bounds
Boats, etc.

**departments**

8 Events
10 We've Got Mail
16 The Big Picture
21 Off the Fringe
34 Hole of the Month
113 Classifieds

**TurfGrass Trends**
This month, *Golfdom*'s practical research digest for turf managers discusses irrigation sensors and more. Pages 49-64.
SMOOTHES OVER A BUNKER LIKE ROSES SMOOTH OVER A MISSED ANNIVERSARY.

Short tines for raking and a special surface for smoothing make this the preferred rake among top superintendents. To learn more call 1-888-893-2433 or visit www.paraide.com
PROFESSIONAL Pendulum herbicide consistently controls crabgrass better than other preemergent herbicides.* What more can we say? How about Pendulum controls a broader spectrum of weeds than any other preemergent—more than 40 grassy and broadleaf weeds, such as oxalis and spurge. It also controls costs, to offer you greater value. But Pendulum puts no limits on application flexibility. It’s available as Pendulum AquaCap™—an encapsulated, water-based formulation—as well as granular and liquid formulations. BASF pendimethalin is also offered on fertilizer. Visit www.turffacts.com for a list of approved fertilizer formulators. With Pendulum, there’s just so much more to talk about than crabgrass.

To learn more about why everyone’s talking about Pendulum, call 1-800-545-9525 or visit us at www.turffacts.com.

Always read and follow label directions.

WE DON’T MAKE THE TURF. WE MAKE IT BETTER.
BLUEGRASS BETTER THAN MIDNIGHT?
Low growing, less fertilizer, drought and disease resistant

Turf-Seed's Premium
Kentucky Bluegrass

Midnight has been our top selling variety for over 20 years with many companies attempting to duplicate it. At Turf-Seed, we concentrate on the development of different varieties that complement Midnight such as North Star, Moonlight and Brilliant. Strengthen your turf blends with varieties that offer mildew resistance, salt tolerance, rust resistance and are adapted to low mowing heights.

North Star, Moonlight and Brilliant should be your first choice when looking for a suitable companion with Midnight.

<table>
<thead>
<tr>
<th>Mildew Resistant</th>
<th>Salt Resistant</th>
<th>Rust Resistant</th>
<th>Dark Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Shatterline®
Sportstine®
Finetine®

AerWay® offers low cost, low maintenance, long lasting options for all your turf aeration needs!

A Full Family of Tines - AerWay® offers you customized aeration options for your greens, tees, fairways and roughs.

Effective Deep Tine Action - goes to the heart of soil problems by relieving compaction. This results in strong root growth and outstanding drought resistance.

AerWay® - Effective Aeration
When You Need It - Where You Need It!

for further information call 1-800-457-8310

Advanced Aeration Systems
www.aerway.com    aerway@thehollandgroupinc.com
The Intelligent Use of Water™

Water. It's what keeps the world alive. As the world's largest manufacturer of irrigation products, we believe it is our responsibility to develop technologies that use water efficiently. Over the past seven decades, our pioneering efforts have resulted in more than 130 patents. From central control systems and automatic shut-off devices to pressure regulating components and low volume drip irrigation, Rain Bird designs products that use water wisely. And our commitment extends beyond products to education, training and services for our industry and our communities.

The need to conserve water has never been greater. We want to do even more, and with your help, we can. Visit www.rainbird.com for more information about The Intelligent Use of Water™.

www.rainbird.com

© 2003 Rain Bird Corporation
Pebble Beach Golf Links and distinctive images of the course are trademarks, service marks and trade dress of Pebble Beach Company. Used by permission. Rain Bird is the official irrigation supplier of Pebble Beach Resorts.
Prevent damage from Canada geese. A new visual bird repeller that uses UV light to scare geese.

Uniquely painted blades scare geese with UV light. Wind driven blades repel geese in ponds. Covers up to one acre area.

$69 each

JWB Marketing
Call: (800) 555-9634
www.scarewindmill.com

CIRCLE NO. 107

Get to the root of your salt problem!

NaEx™
Reduces sodium and chloride levels 40-60%!

NaEx™ contains ingredients that sequesters salts and renders them unavailable to plants. Improves turf color and vigor, while protecting the roots from salts.

Just the Facts!
Results where it counts, in the plant tissue!
Certified plant tissue analysis of recent research results after just one application of NaEx.

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Treated with NaEx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium</td>
<td>0.20%</td>
<td>0.11%</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>3.08%</td>
<td>4.22%</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>0.31%</td>
<td>0.29%</td>
</tr>
<tr>
<td>Potassium</td>
<td>1.80%</td>
<td>1.70%</td>
</tr>
<tr>
<td>Calcium</td>
<td>0.75%</td>
<td>0.77%</td>
</tr>
<tr>
<td>Chlorides</td>
<td>16010ppm</td>
<td>8900ppm</td>
</tr>
<tr>
<td>Iron</td>
<td>92ppm</td>
<td>116ppm</td>
</tr>
</tbody>
</table>

POULENGER USA, Inc.
Science in Sync with Nature
1-866-709-8102 or 863-709-8102
www.poulengerusa.com

More Information at
www.NaEx.us

CIRCLE NO. 108

Events

SEMINARS & CONFERENCES

JUNE

15-19 American Society of Agronomy’s Western Chapter Soil Science Meeting
San Francisco
www.agronomy.org

15-16 Midwest Golf Course Owners Association Summer Getaway
Breezy Point, Minn.
www.rgcsa.org

16 Alabama GCUSA Monthly Meeting
Birmingham, Ala.
www.agcsa.org

16 Central Illinois GCUSA Vendors Day
Pontiac, Ill.
www.ci-gcsa.com

16 Central Florida GCUSA Monthly Meeting
Deland, Fla.
www.cflgcsa.com

17 Cornell University Turfgrass and Ornamentals Field Day
Ithaca, N.Y.
www.hort.cornell.edu

17 Golf Course Managers of Cape Cod Monthly Meeting
Kingston, Miss.
www.gcmaocc.com

18 Golf Coast GCUSA Turfgrass Field Day and Expo
Jay, Fla.
www.gcusa.org

18 University of Massachusetts Turf Research Field Day
South Deerfield, Mass.
www.umasssturf.org

18 Everglades GCUSA Chapter Meeting
Estero, Fla.
www.floridagcsa.com

19 Piedmont GCUSA Monthly Meeting
Cumberland, Maine
www.mgcsa.com

20 July 1 Alabama GCUSA Monthly Meeting
West Point, Miss.
www.agcsa.org

JULY

7 Central Illinois GCUSA Monthly Meeting
Danville, Ill.
www.ci-gcsa.com

9 Central Florida GCUSA Monthly Meeting
DeBary, Fla.
www.cflgcsa.com

10 Kansas GCUSA Monthly Meeting
Wichita, Kan.
www.kgcsa.org

11 Calusa GCUSA Chapter Meeting
Fort Myers, Fla.
www.floridagcsa.com

15 Rocky Mountain GCUSA Monthly Meeting
Larkspur, Colo.
www.rmgsa.org

23-25 TPI Summer Convention and Field Days
Dayton, Ohio
www.turfgrasssod.org

23 Treasure Coast GCUSA Annual Meeting
North Palm Beach, Fla.
www.floridagcsa.com

24 Metropolitan GCUSA Educational Seminar
Scarsdale, N.Y.
www.metgcsa.org

24 Minnesota GCUSA Field Day
St. Paul, Minn.
www.mgcsa.org

Let us know about your events. Send information to Frank Andorka at 7500 Old Oak Blvd., Cleveland, 44130. Fax information to 440-891-2675 or e-mail to fandorka@advanstar.com.
Independence Creeping Bentgrass is a completely new, cutting edge creeping bentgrass developed by LebanonTurf. It has been bred for improved overall turf quality and disease resistance, specifically to exhibit improved dollar spot resistance. Its medium density and upright aggressive growth habit make it the perfect choice for fairways, greens, and tees. Independence is the top performing commercially available creeping bentgrass in recent university trials. Declare your Independence. Call your LebanonTurf distributor, or call 1-800-233-0628, or visit www.LebanonTurf.com, and find out more about Independence, the next generation in creeping bentgrass.
We’ve Got Mail

**LETTERS FROM THE FIELD**

**Good Nutrition Fuels Good Health**

Joel Jackson wrote of his concern for the health of the many dedicated people in this profession (Shades of Green, February). I wholeheartedly agree with his statements regarding our propensity to place our health second to our jobs.

Last year, I sought help for what I thought was acid reflux disease. When I got into bed, my food and stomach acid would come back up. I had to sleep in a chair for two hours to three hours each night so my food could digest before I could go to bed without problems.

This worked for a while, but the problem worsened. I really didn’t want to be put on medication. I contacted a family friend who had developed a line of nutritional products. I knew that I could trust him, and I asked him if he could help me.

He asked some questions about my diet. He explained that the high amounts of sugar and soft drinks I consumed were detrimental to the natural digestive process. How often in turf do we emphasize that we should treat the problem rather than the symptom? The medications that doctors would have prescribed would have treated the symptom rather than the cause.

After changing my diet and adding some of his all-natural products to my daily routine, I totally eliminated my problem in less than a week and have not even had heartburn or reflux in more than a year. The products have also allowed me to lose 50 pounds. I now look and feel the way I should for a man my age.

Why did I share this information with you? I believe our industry has people that can understand the problems we have by using information that is available. I hope that you will help educate them so we can start using some preventative maintenance on ourselves.

Brian Sarvis
River Hills Golf & CC
Myrtle Beach, S.C.

**Golfer Education Starts on TV**

To Anthony Ploppi’s “A License to Drive . . . and Pitch and Putt” (March), we say, “Amen.” Something as simple as the PGA showing (and commenting on) the caddies repairing divots during major tournaments or a brief mention of the hours, days and months of work necessary to keep a course looking picture perfect will alert the general public that a beautiful course doesn’t just happen.

Golfers, especially our young people, see damage from divots and think it’s OK to walk away. The suggested commercials are great, but all of us usually tune them out. A professional or commentator discussing or mentioning something would have more impact. A cooperative effort between superintendents, the PGA and the LPGA to introduce a rule every segment would be far more effective than a commercial presenting the same information. If a professional faced the camera and explained that a golf car should never be near a green, golfers would listen.

Face it, owners, superintendents or their respective associations have the attention of the golfing public. Let’s find a way to capitalize on that attention to promote our superintendents, their credibility and care of the courses.

Ken & Elizabeth Hobbs
Owners/Greenspersons/Shop
Owners/Maintenance Personnel/Tree Trimmers/Hole Diggers/Plumbers/General Flunkies
The Eccentric Duffer
Ada, Okla.

**Keep Fighting the Good Fight**

March’s Flagstick (A Witch’s Brew of Misinformation) was right on target. I noted that the message was effectively supplemented by Joel Jackson (“Be Part of the Vocal Majority,” March).

We, through The Lawn Institute, were in the midst of this from 1982 to 1992. During these years, I lectured throughout the United States and Canada on the theme of the politics of landscape horticulture.

It’s never too late for a vocal majority groundswell to smother this brew of misinformation that’s out there. Golfdom is helping to get the word out and the process started.

Eliot Roberts
Director, Rosehall Associates
Sparta, Tenn.

Get a view you’d like to share? We want to hear from you. You can e-mail your letters to Frank Andorka at fandorka@advanstar.com, fax to 440-691-2675 or send them via snail-mail to: 7500 Old Oak Blvd., Cleveland, OH 44130. Make sure to include your name and phone number for verification. Letters may be edited for length or relevance.