

PRODUCT SHOWCASE

AerWay Turf Aerators



AerWay turf aerators give grounds managers more options for treating sports field compaction. A typical playing field can be

treated in less than 2 hours, ideal for working within a narrow "window of opportunity" on heavily used fields.

AerWay relieves soil compaction 7" and deeper. Patented AerWay Shattertines twist in the soil, cracking it sideways, and gently lifting it, to relieve even the most severe compaction. Play or practice can resume following a mowing pass.

Starting under \$3,000, AerWay units are extremely rugged, need very little maintenance, and minimize labor requirements.

"AerWay and Play Right Away"

For more information, a free video or a demonstration, call

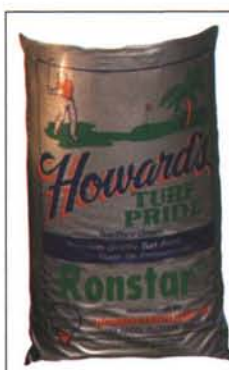
1-800-457-8310

(Pacific Coast 1-800-663-8196)

E-mail: aerway@oxford.net

Circle 111 on Postage Free Card

TURF PRIDE with RONSTAR®



Better Than DNAs for Pre-emergence Weed Control.

Ronstar's unique chemistry provides longer-lasting weed control without impairing turf root development. Instead of root entry like DNAs, Ronstar is absorbed into weed shoots, killing germinating weed seedlings as they move upward through the soil surface. New root growth

from existing plants is never affected.

- Quicker turf comeback from winter stress, pest damage or traffic-injured spots
- Safe to use with sprigs
- Better control on DNA-resistant goosegrasses
- Allows faster recovery following nematode damage

Contact your Howard Fertilizer representative for a sample to test on your turf.

407-855-1841 • 800-899-3141

Circle 112 on Postage Free Card

Jaydee Drive Liner



The Jaydee Drive Liner is a self-propelled riding line marker. The 35-gallon paint tank carries enough marking material for a complete game field, or several practice fields. The 2-gallon flush tank cleans the discharge lines for work breaks, travel, or overnight. The center or side-mark spray shields are always operator-visible. A nearly zero turning radius reduces or eliminates back-and-turn maneuvers.

Jaydee Equipment Company

202 East Joliet Highway, Box 278

New Lenox, IL 60451-0278

800-443-3268

Circle 113 on Postage Free Card

Play Ball!



"The Best Infield Conditioner I've Ever Used."

Turf managers love new Play Ball! Infield Conditioner because it's made from lightweight, highly porous diatomaceous earth that absorbs more water than clay conditioners, and keeps infields playable in wetter conditions. Play Ball! stays absorbent through repeated wet/dry cycles without breaking down into mud and dust. Grounds crews love the way it mixes in, and players appreciate the improved playing conditions. Don't get rained out – Play Ball!

Distributed worldwide by

Agro-Tech 2000

Call today for your nearest Play Ball! Dealer

1-800-270-TURF

Circle 114 on Postage Free Card

New Turf Problem Solvers

- ♦ Reduced turf clippings
- ♦ Aggressive tillering & fill in
- ♦ Improved mowing quality
- ♦ Very dark green color
- ♦ Better versus brown patch
- ♦ Durable under traffic
- ♦ Establishes new performance standards

WIZARD
Turf Type
Perennial
Ryegrass

EXCEL
TURF TYPE
PERENNIAL RYEGRASS

PENNANT II
TURF TYPE PERENNIAL RYEGRASS

CELEBRATION
DWARF PERENNIAL
RYEGRASS BLEND



"Seeds for the 21st Century"
Burlingham Seeds

E. F. Burlingham & Sons
P.O. Box 217
Forest Grove, Oregon 97116
800-221-7333 503-357-2141
Fax 503-359-9223

Quality Seed since 1914



The Baltusrol practice tee was worn to the ground by the end of the practice rounds of the U.S. Open, then was replaced with fresh turf for the opening round. Photos courtesy: Henry Indyk.

sand/organic profile was compacted and sodded with rolls of Kentucky bluegrass shipped from Jade Run Sod Farm of Delaware. Crews were able to complete 500 to 600 modules a day. Before the project concluded, more than 6,100 modules would be needed.

When it became obvious that the sod in the ITM modules would not be rooted deeply enough in time for the MetroStars' opening game on April 10, a temporary grass field was installed in the stadium. With the root system in the modules sufficiently developed, the temporary field was removed and the ITM field installed following the MetroStars' game on May 4 and prior to their game May 9.

Once the changeover began, the modules were separated and wheeled into the stadium on forklifts and flatbed trucks — which took about 80 hours. Like a tiled floor, the modules were installed on top of a 40-mil plastic liner and plywood layer that covered the stadium's synthetic playing surface. The sides of the modules were then folded down to allow a soil-to-soil compression joint with adjacent modules. Finally, the modules were aligned and locked into place with a foot loca-



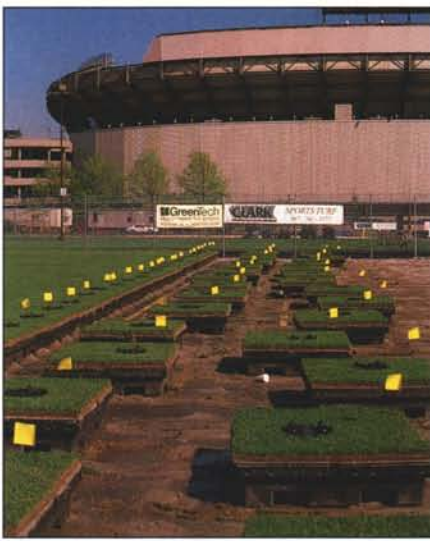
tor pad, designed to create a safe, solid natural-turfgrass field without seams or modules separating during play.

Come summer when concerts are scheduled, the Grass Squares will be removed from the area of the field where stages will be constructed, while the rest of the field will be covered with the Terraplas protection system.

For NFL football games this fall, the entire field will be dismantled and stored in a lot outside the stadium. Both the New York Giants and the Jets will evaluate the performance of the Grass Squares this year for a possible permanent conversion to natural grass for next year's home games.

The Next Level

In addition to serving the MetroStars in Giants Stadium, the ITM system is being tested at the Sports Turf Research Institute in Bingley, England, to develop standards and specifications for the system's various applications. For football, those include quickly repairing worn sections of a field with fresh, mature turf or replacing entire end zones to save repainting them. For golf, tees can be rotated or changed. Greens can be constructed from concrete pads topped off with the ITM system, allowing for drainage and aeration of the turfgrass as well as a way to control or re-use chemical run-off so it doesn't affect the environment. □



Over 6,100 modules were prepared for Giants Stadium's conversion last May. Photo courtesy: Chris Scott.

ROOKIES



Multi-Material Handling

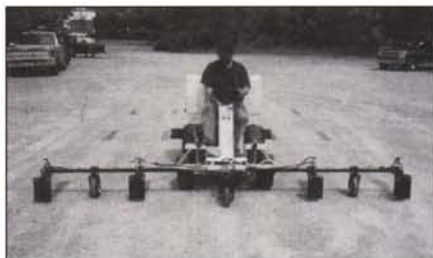
The Turf Tender 420 can haul sand to traps, fill topdressers, spread grass seed or fertilizer, topdress, and lay down and level cart path materials. Standard features include:

- hopper capacity of two tons;
- side unloading, hydraulic swing-away conveyor;
- front unloading hopper conveyor;
- rear discharge spreader;
- belly mount box scraper;
- Ultra-Trac turf tires;
- electric vibrator;
- remote hydraulic drive system.

The unit can be ground-driven for

fertilizer/grass applications.

Available options include a rear-mount rake assembly and electric brakes. **Dakota Peat & Equipment**
Circle Number **131** on Postage-Free Card



Football Striping Made Easy

Kromer Co. offers an innovative boom for football line striping. The unit stripes the five-yard lines and four hash marks in one pass. Five-yard lines are double-covered with two angled nozzles.

Kromer Co.

Circle Number **132** on Postage-Free Card



Drag Breaks Hard-Pack

Newstripe's Drag Lite, an infield maintaining drag mat, has an adjustable scarifier blade that breaks up hard-packed surfaces. The attached mat then grooms the surface to a "ready to play" condition. Offered in three- and six-inch models, the mats:

- are made from recycled rubber for durability;
- will not rust or kink;
- are backed by an 18-month warranty.

Newstripe, Inc.

Circle Number **133** on Postage-Free Card

PRODUCT SHOWCASE

Estate Master®



The Estate Master® from Parker Sweeper is designed for sweeping athletic fields, golf courses, parks and other large turf areas. This sweeper cleans a swath of more than 8 ft. with every pass. Designed with four rows of polypropylene brushes to ensure efficient pickup of grass clippings, leaves and other lawn debris.

Collects up to 51 cu. ft. For more information on the Estate Master or any Parker product, contact us at:

Parker Sweeper

111 South Rohlwing Rd, Addison, IL 60101

(630) 627-6900

Fax: (630) 627-1130

Circle **124** on Postage Free Card

Grasshopper AERA-vator™



Designed for 700 and 900 Series power units, Grasshopper's 40- and 60-inch AERA-vator™ attachments aerate turf and relieve surface compaction without irrigation, leaving

no cores to clean up. Turf is available immediately after treatment. Oscillating, forged-steel tines penetrate and fracture hard, dry soils, encouraging root development and providing a resilient surface for playing fields.



The Grasshopper Company

One Grasshopper Trail • P.O. Box 637

Moundridge, KS 67107

(316) 345-8621

Circle **122** on Postage Free Card

PRODUCT SHOWCASE

12-Volt Field Markers



The Tru Mark Athletic Field Marker is designed for convenience, safety and economy. Uses efficient 12-volt Shurflo pump to deliver field paint at 45 p.s.i. Folding or removable handles for transport or storage. Powder coated finish, zinc plating, and stainless steel fasteners provide maintenance free life.

TRU MARK

Atheletic Field Markers

P.O. Box 1662 • Norfolk, NE 68702-1662

Phone: 1-800-553-6275

Circle 115 on Postage Free Card

Fence Guards™



Protect against chain link fence injuries with **Fence Guard™**. Now made from heavy-duty poly in high-visibility safety yellow. **Fence Guard™** attaches every 2' with plastic ties provided for secure and safe chain link fence with the distinctive, high-visibility, neat look that only **Fence Guard™** provides. One of the over 200 sports products available from "Your **One-Stop Source** for America's leading baseball surfaces and supplies."

PARTAC/BEAM CLAY®

Kelsey Park, Great Meadows, NJ 07838
800-247-BEAM • 908-637-4191

Call 1(800) 817-1889 use **Fast Fax #1160697** and/or
Circle 116 on Postage Free Card

Affordable Topdresser



For about 1/3 the price of a typical large-area topdresser, the Millcreek Topdresser/Spreaders will spread 2 cu. yds. in 7 minutes and topdress a football field in 2 to 3 hours.

- Rugged construction, built to last.
- Adjustable spread pattern, 3 ft. to 10 ft. wide.
- Unsurpassed for compost, clippings and more.
- More versatility - simple, safe operation.

The Millcreek Topdresser/Spreaders will let you do more kinds of spreading jobs with less labor than ever before. Plus, you never pay too much for quality turf equipment from Millcreek.

Millcreek Manufacturing Company

2616 Stumptown Road, Bird-in-Hand, PA 17505

1 (800) 879-6507

Circle 117 on Postage Free Card

Water Reels



Kifco has introduced two models to their popular line of Water-Reels. The new B110 and B180 extend the product line to ensure there is a Water-Reel to fit your needs. Machines are compact, easy to use, operate unattended, and shut off automatically. They are suitable for all types of sports turf and are easily transported from one area to another. Water-Reels combine outstanding features that come from more than 25 years of traveling sprinkler engineering.

Kifco, Inc., P.O. Box 290

600 S. Schrader Ave., Havana, IL 62644

(309) 543-4425 Fax (309) 543-4945

Circle 118 on Postage Free Card

APPLICATOR'S LOG

Microbes Debut at Carolina Panthers' Field

By Carol Allison

Although the expansion Carolina Panthers have quickly gained respect from other NFL teams, they can't seem to leave their "mark" on the turf at recently completed Ericsson Stadium in Charlotte, North Carolina. The reason they're having a tough time making a lasting impression is that groundskeeper Spin Martin, an 18-year veteran in the turf industry, has adopted a management program designed to minimize the impact of physical stress on the turf and optimize plant recovery. The best part is that he's done it with an environmentally "friendly" approach.

Instrumental in the approach are formulations of beneficial root-colonizing microbes that facilitate plant growth. Upon application, the live microbes move rapidly into the rhizosphere and quickly establish a mutually beneficial relationship with plant roots by contributing to organic matter degradation and uptake of water and nutrients.

In many modern turf management programs, natural microbial activity is either eliminated or severely curtailed through certain fungicides, herbicides, pesticides and inorganic fertilizers. Plus, nutrient leaching has become a significant management challenge in many of the newly constructed stadiums across the United States.

"Sand is easier on a player's body," Martin says. "It's more forgiving than clay- or soil-based fields, and most of the newer stadiums will have playing surfaces with a sand base."

But maintaining vigorous green turf atop a sandy foundation is challenging. "Before we started using the biological program everything leached out of the soil after a rain or an irrigation," Martin says.

Indeed, it's not unusual for the Charlotte area to receive a 3- to 5-inch onslaught of precipitation in a matter of hours. Hurricanes in the nearby Atlantic Ocean add to the unsettled atmospheric conditions. When it does rain, sand only multiplies the problems for Martin.

"The percolation rate on a clay-based

playing field is minimal," Martin says, "perhaps less than 1/4 of an inch per hour. Clay-type soils tend to retain nutrients much longer than sandy soils. The rate of percolation through virgin sand is approximately 14 inches per hour. In an average situation with an established turf, the percolation rate drops to about 8 inches per hour, which is still considerably faster than a clay-type soil."

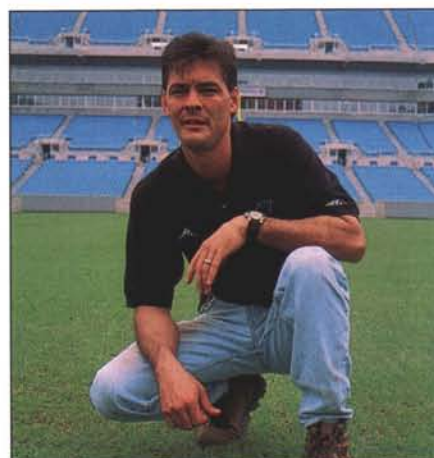
With rapid percolation rates, maintaining nutrients in a sand-based soil profile is a complex challenge — one that Martin has been able to meet and overcome with the help of microbial inoculation. The microbes perform a myriad of functions, including the attraction, capture and processing of water-soluble nutrients from fertilizer applications for various plant functions.

"We have a very intense turf management program that includes aggressive soil nutrient monitoring," Martin says. "We pull samples at least every two weeks to determine what nutrients are present and which ones we need to supplement. Since we've begun using the microbes, we've had much more efficient utilization of applied fertilizers — which has enabled us to reduce rates. We still fertilize on a weekly schedule because it keeps a more uniform supply of nutrients available, but we're definitely using lower rates — about half of what we normally had applied."

Visually, there have been advantages as well. "The turf stays greener longer," Martin says. "We see fewer divots. Structurally, the turf just seems to withstand the physical stress much better. Even when we have damage, it rebounds faster than it did before we started using the biological program."

In a relatively short playing season, Martin has managed to establish some very tough turf. Not even 70,000 worshippers at a Billy Graham crusade could totally trample what Martin has achieved.

"After that concert, which took place in the spring of '96, we decided to replace the turf that sat beneath the stage for seven days," he says. "We actually ran into a problem when we started



In a relatively short time, Spin Martin has established some very tough turf at Ericsson Stadium. Photo courtesy: Green Releaf.

taking it out because the root system was so much deeper than we expected. The roots were down 14 inches into the rock bed of the drainage system, and so thick you couldn't drag a rake across them. That's a nice problem to have." □

sportsTURF Category Blast Service

Use this new Category Blast Service to get FREE information on the products or service categories listed below which you are planning to purchase within the coming nine months. You will receive information, and possibly other follow up contact, from appropriate companies advertised not just in this issue, but throughout the year in *Sports Turf*. Just circle the number(s) on the reader service card (opposite) corresponding to the product or service categories below and drop the card in the mail!

- 9001 Aerifiers
- 9002 Baseball field grooming equipment
- 9003 Drainage
- 9004 Fertilizer/soil amendments
- 9005 Field covers
- 9006 Field marking paint/equipment
- 9007 Infield mixes
- 9008 Irrigation supplies
- 9009 Mowers
- 9010 Seed
- 9011 Site amenities
- 9012 Sod
- 9013 Turf equipment

PRODUCT SHOWCASE

The Right Tool for Clay & Turf



On grass sports fields aeration is possible without tearing the established turf. Guaranteed penetration in your hardest areas. (Play can resume immediately.) The AERA-VATOR® provides excellent results by reconditioning skinned areas or mixing top dressing. Penetration is controlled by varying PTO & ground speed. (Total infield reconditioning or scarify only.)

Creates much softer playing area increasing absorption and reducing run off. The quality of a highly maintained playing field significantly reduces the potential for injury to players.

First in Performance, Versatility & Reliability

First Products

800-363-8780 Outside GA.
GA 912-382-4768

Circle 119 on Postage Free Card

Athletic Field Marking Paint



BEFORE

AFTER

"Temp-Stripe" is specifically designed for multi-purpose fields where immediate changeover is needed. Used by stadiums throughout the MLB, NFL, NCAA and World Cup Soccer. Available in white and team colors. Also available: "Pro-Stripe" (permanent marking paint), stencils, aerosol paints and marking equipment. Made in the U.S.A. For more information, contact:

J.C. Whitlam Manufacturing Co.

200 W. Walnut St., P.O. Box 380
Wadsworth, OH 44282-0380

Phone: (800) 321-8358

Contact: Steve Carey

Circle 120 on Postage Free Card

InvisibleTurf

InvisibleTurf is a new and improved way to achieve fast draining, durable sports turf surfaces with the ability to store and recycle nutrient-laden irrigation water back through a sand based root zone. InvisibleTurf has a high-void drainage layer below every square foot of the field, moving water away faster than the old perforated pipe method.



Invisible Structures, Inc.

1-800-233-1510

www.invisiblestructures.com

Circle 121 on Postage Free Card

Hustler Range Wing™

The Hustler Range Wing™ features over 12 feet of cutting power and true zero-degree turning, making it possible to mow a whopping 60 acres in an 8-hour day.

The Hustler Range Wing is ideal for schools, athletic fields, parks and golf course roughs. The Range Wing is also the least expensive wind mower on the market.



Excel Industries, Inc.

P.O. Box 7000

Hesston, Kansas, 67062-2097

(316) 327-4911

Circle 125 on Postage Free Card

SCOREBOARD

CLASSIFIEDS

• Display Rates: (Per Column Inch)

1x: \$140 6x: \$115
3x: \$130 12x: \$100

• By The Word Rate:

\$55 per inch, per insertion.
Minimum charge \$55.

• Business Card Rates:

1x: \$300 6x: \$275 12x: \$250

• Deadline:

The 10th of the month prior to publication date.

• Note:

Classifieds are payable in advance. Ads using cuts or special borders will be charged at display rates. Ads are non-commissionable. Blind ads will be charged an additional \$10.

• For Space Reservation Contact:

Mindy Covey, Classified Sales
2101 S. Arlington Heights Road
Arlington Heights, IL 60005-4142
(847) 427-2044 • FAX (847) 427-2037

POND AND LAKE LINERS

Buy direct from fabricator
20, 30, 40 mil PVC, Hypalon, HDPE
& Polypropylene.
Custom fabricated panels. Material only,
Material & Supervision or
Complete Installation Service available.



Colorado Lining
COMPANY

(800) 524-8672
1062 Singing Hills Rd.
Parker, CO 80134
(303) 841-2022 FAX: (303) 841-5780

**FOR CLASSIFIED
ADVERTISING
Call Mindy Covey
today.
(847) 427-2044**

HELP WANTED

TECHNICAL GROUNDS PRODUCTS REP

Opti-Gro, a division of a world-wide manufacturing corporation, is looking for a motivated individual with a life-science background. We manufacture and market a complete line of technical grounds care products. Our sales representatives enjoy financial growth and the opportunity to advance. Customers include municipalities, institutions, industry and many others. We offer:

- Thorough Training
- Local Territory
- Repeat Sales

If you have a successful background and are willing to make a commitment, please send resume to:

John Hawkins
Opti-Gro
One Mack Centre Drive
Paramus, NJ 07652

or fax resume to 201-261-7882
Positions available in the North East

ADVERTISING SALES

Catherine Upton

Group Sales Manager
P.O. Box 3207
Huntington Beach, CA 92605
(714) 377-7735
Fax: (714) 377-9115

Marsha Dover

National Sales (Midwest)
402 Riverview Drive
Marietta, GA 30067
(770) 850-9142
Fax: (770) 951-5662

Liz Richards

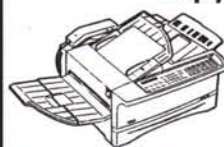
National Sales (West)
20331 Bluffside Circle, Suite 212
Huntington Beach, CA 92646
(714) 969-3726
Fax: (714) 969-8227

Deanna Morgan

Advertising Sales
68-860 Perez Road, Suite J
Cathedral City, CA 92234
(760) 770-4370
Fax: (760) 770-8019

DO YOU NEED PRODUCT INFO FAXED TO YOU NOW?

USE THE ADAMS FASTFAX SYSTEM*
BY CALLING: 1 (800) 817-1889



Simply dial our 1(800)
number, and
follow the
simple
instructions;

when you hang up, the information
you requested will be faxed
immediately and directly to the fax
number you entered.

*Product information can only be
received from those advertisers with a FASTFAX #.

**Just another important service
to our readers brought to you
by your friends at Adams.**

ADVERTISER INDEX

AerWay/Holland Equipment Ltd.	21
Agro-Tech 2000, Inc.	21
Burlingham Seeds	22
Covermaster, Inc.	15
Cygnat Turf & Equipment	13
Delta Bluegrass Company	3
Diamond Demon	16
Emrex, Inc. / Verti-Drain	19
Excel	28
First Products, Inc.	28
Grasshopper	23
Gordon Bannerman LTD.	2
Howard Fertilizer Co., Inc.	21
Invisible Structures	28
Jaydee Equipment Company	21
J.C. Whitlam Mfg. Co.	28
Kifco, Inc.	24
Millcreek Mfg. Co.	24
Parker Sweeper	23
Partac / Beam Clay	24
Roots, Inc.	32
Spartan Ind. / Tru-Mark Line Marker	24
Thomas Bros. Grass	20
West Coast Turf	12
World Class Athletic Surfaces	20

THE FRONT LINES

Don't Get This Guy Started

By Dave Ashman

I have a friend who has the gift of gab. He can talk to anyone about anything and be extremely engaging in the process. Nothing fazes him — a trait in him I've always admired. My friend also loves baseball — no, he lives for baseball. He is a student of the game, he still plays the game, and he talks a good game. If he could, this guy would be the oldest bat boy in the Major Leagues.

Every year this friend of mine goes to spring training in Arizona and prays to the baseball gods. If you talk the talk, you have to walk the walk....

Mr. Baseball

It is a great day in Arizona. My friend and I are going to visit four of our colleagues at various training facilities in the area and take in a couple of games later in the day. We tour the Angels facility first and talk a little "baseball." As the conversation concludes, I look over at my friend, who is beginning to change. He has the sunglasses on, got the "pinch" working, has the baseball player "stance" going — he is beginning some kind of metamorphosis.

The next stop is the Oakland A's training facility. A colleague of mine, Bob Alejo, is a coach there. We catch up with Bob, and he walks us over to where the team is taking batting practice. Bob

introduces us to the batting coach. My friend walks up to the batting cage and starts talking baseball with the coaches. I watch as the metamorphosis continues. He stands next to the batting coach and looks like a mirror image. He has the batting-cage stance working (one foot on the lowest rail and the arms fold-

ed over the top rail in the rear, off to the side); he has the vocabulary working ("quick hands, slow bat"); he has the moves (he shows a few rookies the stroke); this guy is smooth. The younger players think he is a coach he is so convincing.

The next stop is the Padres training facility. We tour the facility and stay for the game. We watch batting practice, then sit on the field and watch the game with the grounds crew.

I look around and see my friend talking to Tony Gwynn. They are laughing and having a wonderful time. They look like two old college

roommates catching up on lost time. When my friend comes over, he has a ball Tony autographed for him. It says, "To Chris, my best friend who I don't even know." I am impressed as my friend continues to chat with other players.

During the game, my friend is throwing foul balls into the stands like the base coaches do. I can't believe this guy. I'd have bet someone would ask him for an autograph, figuring he's an ex-big leaguer visiting the boys.

The metamorphosis is now complete. My friend has turned into Mr. Baseball. He has it all working — the swagger, the talk and the stance. He now begins to talk about the greats of the game and how they fit into the lore of baseball. I am beginning to wonder about some kind of rehab program.

The last stop is Scottsdale Stadium to see the Giants play. My friend is now using terms like



Ken Griffey has the "stroke."



Jeff Bagwell has the "stance."

"Gratis Apparatus" and "He can't hit the deuce." He tells me stories of the great San Francisco players like Mays, et al. My friend, Mr. Baseball, is holding court.

As we tour the facilities, I see Willie Mays standing by the batting cage talking to a group of players. I tell my friend, "Willie Mays is standing by the cage. Why don't you ask him to sign a ball?" I look over at my friend expecting to see Mr. Baseball swagger out and get it done. Instead, I see a deer standing in the middle of a road transfixed by the headlights of an oncoming



Brett Saberhagen has the "vocabulary."

truck. Where did Mr. Baseball go?

Without thinking, I grab a ball from his hands, walk up to Willie and ask for his autograph. Willie, gracious and accommodating, signs the ball and asks me which team I like this year. Suddenly, I am overcome with a strange feeling kinda like a deer standing in a road transfixed by the headlights of an oncoming truck. Mr. Baseball, help!

I would like to thank Jon Arnold and Bill Murphy for the great tour. If you have a story or anecdote you would like to share, call (562) 425-2449 or write it down (include your name and phone number) and mail it to Ashman & Associates, 3164 North Greenbrier Road, Long Beach, CA 90808. □



An arrow points to Mr. Baseball — the complete package. Photos courtesy: Dave Ashman.