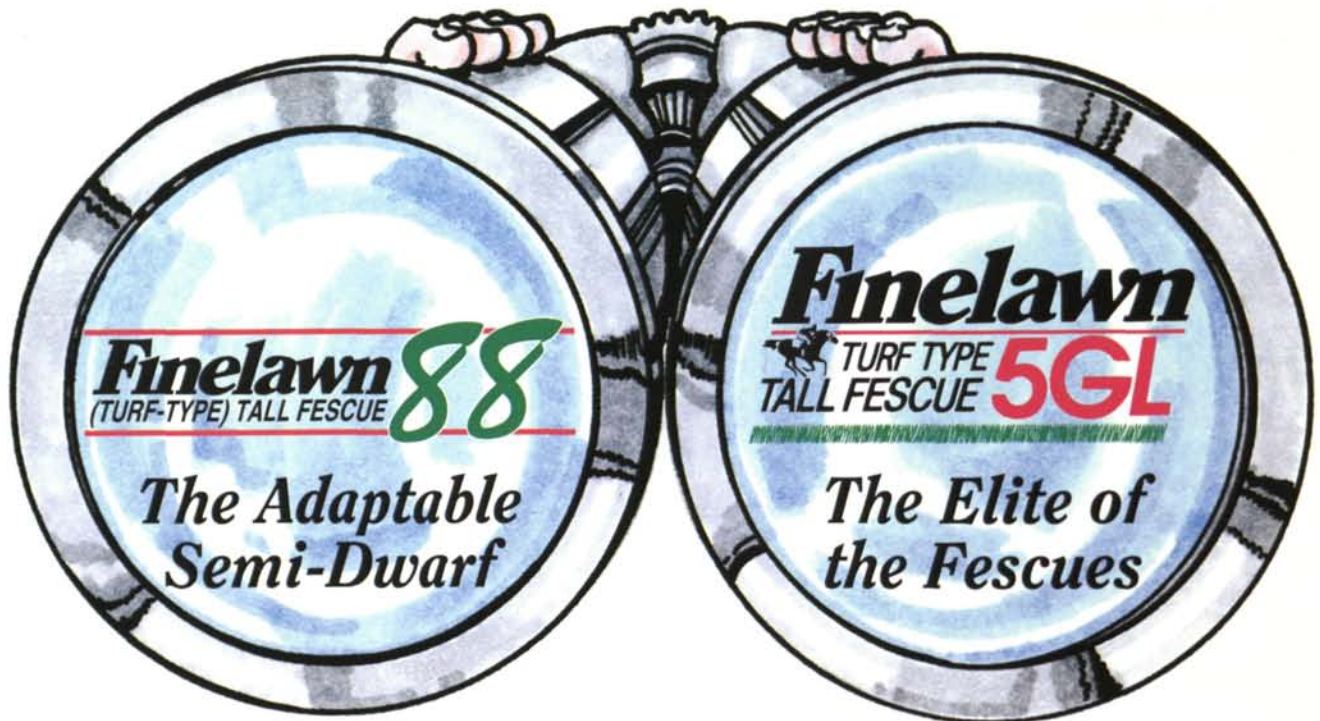


Set Your Sights On These High Powered Performers From Fine Lawn Research.



Finelawn 88 Semi-Dwarf.

- True semi-dwarf low growth habit
- Tight dense turf
- Establishes quickly
- Extensive, deep root system
- Attractive dark green color
- Moderately fine leaf surface
- Excellent heat and drought tolerance
- Good disease resistance

Finelawn 5GL Tall Fescue.

- Outstanding heat and drought tolerance
- Excellent resistance to frost and winter freezes
- Grows well in shade
- Very good wear tolerance
- Exceptionally high summer density
- Low growth habit
- Superior resistance to leaf spot and brown patch
- Performs well under low maintenance conditions



Fine Lawn
RESEARCH, INC.

P. O. Box 1051 • Lake Oswego, OR 97034 • TEL: 503/636-2600 • FAX: 503/636-7020

Circle 101 on Postage Free Card

**NO
INTEREST
FINANCING 'TIL APRIL 1**
On all new John Deere Golf & Turf Equipment. Or, finance today
at rates as low as 6.75% APR. An impressive lease package
is also available. Offer expires April 30, 1994.



Power, speed and great range in the field

Every team needs a good utility player. That's why you see more and more John Deere 1200 Bunker & Field Rakes on well-kept ballfields every season.

A host of options and attachments make the 1200 perfectly suited for this application. Attachments that include a wide front blade, two mid-mounted scarifiers and a rear-mounted field finisher. There's even a hydraulic package that allows you to pull an aerator.

Efficient drivetrain compo-

nents are key to the 1200's success. The 1200 is powered by a high-torque 10-hp engine. A gear-driven transaxle then puts that power to work with an



Attachments like spreaders, seeders, rollers, brushes, scarifiers, a wide blade, and field finisher help the 1200 shine on the field.

impressive gear reduction of 164:1. Translation—tremendous pulling power.

For the name of your nearest distributor, or free literature call 1-800-544-2122. Or write John Deere, Dept. 956, Moline, IL 61265.

**NOTHING RUNS
LIKE A DEERE®**



sportsTURF

PROGRAM



THE OFFICIAL PUBLICATION OF THE
SPORTS TURF MANAGERS ASSOCIATION

STMA OFFICERS

PRESIDENT **GREG PETRY**
PAST PRESIDENT **DR. GIL LANDRY, JR.**
PRESIDENT-ELECT **MIKE SCHILLER**
COMMERCIAL VICE PRESIDENT **EUGENE MAYER**
SECRETARY **DR. DAVID MINNER**
TREASURER **KEN MROCK**
STMA BOARD MEMBERS **STEPHEN GUISE,**
JOSEPH ARDOLINO, DR. HENRY INDYK,
JESSE CUEVAS, ROBERT MILANO
EXECUTIVE DIRECTOR **BRET KELSEY**

STMA OFFICE

401 N. MICHIGAN AVE., CHICAGO, IL 60611 (312) 644-6610

MAGAZINE STAFF

PRESIDENT **MARK ADAMS**
PUBLISHER **BRUCE F. SHANK**
EDITOR **MATTHEW TRULIO**
ASSISTANT EDITOR **DANIEL INGHAM**
VICE PRESIDENT SALES/OPERATIONS **COLLEEN LONG**
ADVERTISING SALES **WILLIAM RYAN**
PRODUCTION MANAGER **SUSANNE K. NOBLE**
ART DIRECTOR **DEBORAH A. BELLE**
ASSISTANT ART DIRECTOR **COLLEEN D. SWIATEK**
DIRECTOR/CIRCULATION **DENISE ALLEN**
CONTROLLER **MARSHA J. WASSER**
BUSINESS MANAGER **PAUL L. D'ENTREMONT JR.**
ACCOUNTING **JODI TROUP, CHERI MARTIN**
ADVERTISING COORDINATOR **YVONNE ADAMSON**
ADVISORY BOARD **ED BIRCH, TOM COOK, WILLIAM DANIEL, VIC GIBEAULT, DON HOGAN, HENRY INDYK, WILLIAM KNOOP, JOHN LIBURDI, DAVID MINNER, KEN MROCK, MIKE SCHILLER.**

ADVERTISING, EDITORIAL AND CIRCULATION OFFICES
68-860 PEREZ RD., SUITE J, CATHEDRAL CITY, CA 92234



AN ADAMS PUBLISHING COMPANY

68-860 PEREZ RD., SUITE J, CATHEDRAL CITY, CA 92234
(619) 770-4370; Fax (619) 770-8019

sportsTURF Magazine (ISSN 1061-687X) is published monthly except by-monthly October/November by Gold Trade Publications, Inc. Material in this publication may not be reproduced or photocopied in any form without the written permission of the publisher.

Copyright © 1994. Member of the
Business Publications Audit of Circulation, Inc.



SUBSCRIPTION RATES

ONE YEAR \$33 TWO YEARS \$50
FOREIGN (ONE YEAR) \$55 SINGLE COPY \$5

SUBSCRIPTION INFORMATION

P.O. BOX 2180, CATHEDRAL CITY, CA 92235-2180.

SECOND CLASS POSTAGE PAID at Cathedral City, CA and at additional mailing offices.

Postmaster: Please send change of address to sportsTURF, P.O. Box 2180, Cathedral City, CA 92235-2180.

VOLUME TEN, NUMBER THREE

MARCH 1994

MAIN EVENTS

8 1993 PROFESSIONAL DIAMOND OF THE YEAR: THE REBIRTH OF MCKECHNIE FIELD

Spring training home of the Pittsburgh Pirates, McKechnie Field in Bradenton, FL, was once dreaded by those who had to play on it. The combined efforts of 26-year-old Mike Hurd and his crew, the city and county, and the Pirates organization turned the once-tired field into a winner.

16 MODIFIED ROOTZONES: GOING UNDERGROUND

Few native soils, especially those subjected to heavy traffic, make an adequate rootzone that will allow the turfgrass to thrive. That means almost all native soils subjected to intense traffic require some modification or amendment. Steve Wightman of San Diego's Jack Murphy stadium presents an overview of modified rootzone design and maintenance.

20 SPRING SEEDING AND TOPDRESSING: SPREADING SUCCESS

When it comes to getting a field ready for play after winter, the value of spring seeding and topdressing can't be overestimated. There is no "catch-all" program for topdressing and seeding — each must be tailor-made to meet the conditions of the specific field and the goals of the sports turf manager.

24 PREVENTION CURES IRRIGATION HEADACHES

You wouldn't you let a top-notch mower, aerator or any piece of equipment you depend upon frequently to fall into disrepair — ongoing maintenance prevents that. The same preventative service approach should be applied to sports turf irrigation systems, explains irrigation consultant Robert Healey, ASIC-CID.

LINE-UP

6	FRONT OFFICE	14	STMA IN ACTION
6	EVENTS	29	ROOKIES
12	CHEMICAL LOG	31	SCOREBOARD
13	EXPLORING EQUIPMENT		

ON THE COVER: Irrigation in action at Port Charlotte Stadium, FL. Photo Courtesy: Hunter Industries

**FOR MORE INFORMATION on advertisements
circle READER SERVICE NUMBERS located on the
COVER WRAPPER OF THIS ISSUE.**

KUBOTA'S VIP TURF EQUIPMENT



M4030SU with 5-gang Verti-Reel for high production mowing.

Kubota's precision-cutting turf equipment cuts through your turf chores in less time, with less fuel, while delivering more power and versatility.

The heavy-duty, 2WD M4030SU turf/utility tractor is powered by a Kubota 51 horsepower liquid-cooled diesel engine. With standard features such as "creep speed" transmission (16 forward/16 reverse), hydrostatic power steering, wet disc brakes and an independent hydraulic system, this powerful special turf tractor can lift and move heavier loads and quickly attach/detach a variety of implements.

For the ultimate in maneuverability and versatility, the Kubota diesel front mower F-Series offers you hydrostatic transmission for quick, smooth operation. The 24HP F2400 and 20HP F2100 come with four-wheel drive and a front differential lock. The fuel-efficient, 2WD 20HP F2100E offers excellent visibility and power. And, the FZ2100 and FZ2400 with 20HP and 24HP offer the exclusive combination of Zero Diameter Turn (ZDT) and Auto Assist Differential (AAD) 4-wheel drive. Kubota has a wide

selection of Kubota performance-matched implements such as rotary, flail and rear discharge mulching mowers.

Cut through your turf chores with a Kubota.



For more information on Kubota's versatile turf equipment that can increase your productivity, write to:

KUBOTA TRACTOR CORPORATION
P.O. Box 2992, Dept. ST, Torrance, CA 90509-2992

Financing available through Kubota Credit Corporation



F2400 with Kubota 3-gang TriPlex for an even cut on uneven terrain.

THE FRONT OFFICE

OPINION PAGE

On Management



The Second Edition of *Webster's New Universal Unabridged Dictionary* defines management as "skillful managing; careful, tactful treatment." Seems simple and straight-ahead, right? Not exactly a huge concept to grasp. Why then is "skillful managing; careful, tactful treatment" absolutely foreign to so many managers?

I once worked for woman who was known as the "Dragon Lady," not because she was strong and assertive, but because she was abusive and arrogant with just about everyone she managed. In the management "food chain," I was next in line, so whatever irrational mandate

or vile criticism she'd shoot my way, I had to translate into something productive for the rest of the employees.

It was not, to be sure, a seamless working relationship.

Asked one day by a short-time employee (at least he quickly became short-time), why she constantly criticized but never praised, she offered the following: "I'm not here to be your Mommy."

I left that job a number of years ago, but for some reason, her answer to the ill-fated employee that day still bothers me. Why criticism without praise? Because, *I'm not your Mommy*. Following her rationale, then, criticism is an adult management activity, while only children need praise.

Seems we have a slight flaw in logic here, seems like something's a touch out of balance. And it would be nothing more than one woman's unpleasant personality quirk, if the criticism-without-praise "style" of management were not so common. Unfortunately, it's everywhere.

If that particular management style was truly effective, it could be supported through an "ends justify the means" type of argument, assuming you could ignore issues of basic fairness, respect, and courtesy, for those you manage. But it simply doesn't work, particularly in the long-term. An employee verbally whipped into action today will make an extra special effort to slack off the moment you're gone. An employee who goes out of his or her way to surpass expectations, without acknowledgement of that effort by management, won't go the "extra mile" the next time around.

Like criticism, praise doesn't have to be constant. In fact, the more either is applied the less effective each becomes — the expression, "Less is More" certainly applies to both. But one without the other is an unbalanced and ultimately unproductive approach.

The truth is, the "criticism without praise" school of management isn't "tough" or "hard-nosed" or "adult" — it's just lazy. For some reason, call it human nature, it's easier to identify a mistake than it is to recognize good work.

The Dragon Lady used to tell me that people will always find something to be unhappy about in the workplace. She was both right and wrong — and very lazy. What she didn't say (or know) was the best managers can distinguish between simple employee griping and real problems — problems that can often be solved through listening and, now and then, a few kind words.

Matthew Trulio

EVENTS

CALENDAR

APRIL

11-12 48th Annual Southeastern Turfgrass Conference. Spring Hill Country Club, Tifton, GA. Contact: Waldene Barnhill (912) 386-3353 or Brenda Poston (404) 229-8125.

JULY

13-16 International Lawn Garden and Power Equipment Expo. Louisville, KY. Contact: (502) 473-1992.

19-21 3rd Annual Midwest Grounds Management Conference. Illinois State University, Normal, Illinois. Contact: Chuck Scott (309) 438-2032 or fax (309) 438-7955.

SEPTEMBER

18-21 Florida Turfgrass Conference. Ft. Lauderdale, FL. Contact: (407) 898-6721.

OCTOBER

5-6 Southern California Turfgrass Expo. Orange County Fairgrounds, Costa Mesa, CA. Contact: (619) 723-0947.

10-13 Northwest Turf Conference. Seaside, OR. Contact: (206) 754-0825.

NOVEMBER

6-9 International Irrigation Exposition. Atlanta GA. Contact: the Irrigation Association (703) 573-3551.

8-11 New York Turf & Grounds Exposition. Rochester, NY. Contact: (518) 783-1229.

Send announcements on your events
two months in advance to:
Editor, **sportsTURF** magazine,
68-860 Perez Road, Suite J,
Cathedral City, CA, 92234.
Fax (619) 770-8019.



TOUGH.

Let's face it: some turfgrasses are tougher than others. Like **Arid** Turf-Type Tall Fescue from Jacklin Seed.

Arid is bred to be tough. Tough in extreme cold. Tough in the blazing sun. Tough in high-use situations like athletic fields, public parks and private

backyards. It is resistant to disease and needs less fertilizer and pesticide.

The only thing about **Arid** that isn't tough is the decision to use it. That's easy. Just call your Jacklin Seed marketing representative at 800-688-SEED.



Jacklin Seed Company

5300 W. Riverbend Avenue • Post Falls, Idaho 83854-9499
208/773-7581 • 800/688-SEED • TWX 5107760582 Jacklin PFLS



The Green Seal marks Arid as a world premium turfgrass variety.

1993 Professional Diamond Of The Year

Photo ©1992 Bryn Alan Studios



By Bob Tracinski

In the heart of Florida, amid the cluster of professional baseball's spring training camps, another star emerges. This one doesn't hold a batting crown or a multi-million-dollar contract, yet it promises to provide at least 20 years of top-notch play. This shooting star is McKechnie Field in Bradenton, game field of the Pittsburgh Pirates spring training facility and 1993 Professional Diamond of the Year.

As is the story of so many stars, success at McKechnie Field was snatched from the jaws of defeat. The field and stadium were built originally in 1923 and has served as the Pirates' spring training home from 1969. The facility and the urban section of Bradenton in which it is located gradually declined. The field itself was deemed "one of the worst playing surfaces in Major League Baseball." Visiting teams often declined to work out on the field, and some players even refused to travel to Bradenton to play.

Realizing the desperate need for change, Manatee County, the City of Bradenton, and the Pittsburgh Pirates joined in a renovation project that has sparked life back into the surrounding community, as well as generating a valuable asset to the area. The program was laid out in a two-year, two-phase format to avoid disrupting the Pirates' training schedule.

Of course, once the decision to renovate was made, the field needed a hands-on supervisor with the background to know what the process required to produce a high-quality ballfield that could

withstand heavy play — McKechnie Field needed someone with the drive to make sure the work would meet and exceed expectations.

Enter Mike Hurd, an energetic, forward-thinking groundskeeper with a down-to-earth attitude — a man who loves a challenge.

Young Talent Evolves

Hurd was working part-time as a landscaper at Circus World when development of Baseball and Boardwalk, now called Baseball City, began. Baseball and Boardwalk company officials named him head groundskeeper and encouraged him to research other fields and training facilities in the area to help determine the needs of the new complex, "from the ground up."

Armed with a drive to learn, a camera, questions, and determination, He put together a small book of photos and reports of fields in the area, which he still carries with him. He was 18 years old at the time, and he balanced working 40-plus-hour weeks on the project with finishing his last year of high school. During the process, he had the opportunity to work with some of the top sports turf managers in the industry.

Hurd eventually moved on to take a positions as head groundskeeper at the Cincinnati Reds spring training camp in Plant City, FL. The position was equally challenging, he says, since it involved an established field with a number of problems that needed to be solved. He stayed there for nearly four years.

Yet his most significant challenge to date began on December 15, 1991, when he was hired as grounds superinten-

dent by the Pirates for the job in Bradenton.

"The Pirates signed a 20-year lease here," 26-year-old Hurd explains. "Part of the agreement, along with the new field and stadium, was that they take over the grounds care. My goal is to make this the best stadium in baseball."

Team Efforts

The stadium field is in downtown Bradenton. The 4-1/2-field, cloverleaf-style practice complex is located about 3-1/2 miles away. In addition, Hurd and his crew manage a 72-room dormitory, inside and out.

Hurd views the success of the facilities as a cooperative team effort. He is quick to credit county and city interests, the Pirates' administration, the general manager and staff, his boss director Jeff Podobnik, and business manager Sandra Dengler with being supportive of the grounds crew and their goals. Hurd has a six-person crew including himself — one person assigned specifically to McKechnie Field and four people at the practice fields.

"This was a 'we' effort — certainly not a 'me' effort," he insists. "I can't say enough about our grounds crew. Gary Lackey, assistant superintendent, grounds maintenance, has been terrific. The entire group is great. Throughout this whole project, they've really delivered. Whenever new 'challenges' came up, they'd all pull a little harder and make sure whatever was needed got done."

"Photographer Marty Morrow of Bryn-Alan Studios followed the project all the way through for us, documenting each stage," he contin-

The Rebirth Of McKechnie Field



ues. "That's been a great help."

Hurd also credits his "personal" support staff, his wife Melinda. "She's both my cheerleader and biggest critic," he says. "She loves pro ball, understands the importance of groundskeeping, and helps keep me focused on my goals."

That "focus" must be working. Hurd was recently named Gulf Coast League Groundskeeper of the Year.

Rebuilding Process

Phase I — the new playing field, outfield fences, and the scoreboard — began in January 1992. Facilities needed to be ready for play by March 3 of that year.

The city helped strip everything from the existing field. The clay and dirt on the entire surface were excavated. Pirates' Manager Jim Leyland didn't want the "Georgia Red" surface typical of Florida-area fields. He had his sights set on a dark brown clay soil located "behind a church in Lakeland."

When Hurd first saw the proposed materials, he thought it looked like "rock." He even double-checked to make sure it was what the Pirates wanted. They did, and Hurd recalled a quote from George Toma, one that has stuck with him, which bolstered his spirit: "It's not the dirt; it's the man who works it."

"Actually, this native Florida material has a good sand content and is working out very well," he says. "Sixty tons of it have been shipped to Pittsburgh for the pits and the mound."

"If you do the research and ground work properly, you can get what you need in field renovation," he adds. "You have to know what you want to achieve, what the budget is, and make it work."

The new infield mix consisted of 80 percent of the clay-like soil and 20 percent sand, with the standard fall of one-inch per 100 feet. There isn't an underground drainage or tile system. An automatic irrigation system was installed with Hunter I-25 sprinklers, Rain Bird valves, and a Rain Bird RC12 controllers. The skinned area is topdressed with Pro's Choice soil conditioner and crushed brick dust, and this material is worked into the existing soil.

The basic infield and outfield grass is Tifway II, which was planted by Tifton Turf Farms of Tifton, GA. The padded outfield walls was constructed and the its signage placed in the for the March 3 deadline.

Phase II took place the following year. An intimate park was designed with new grounds, wide access ramps, concession stands and kiosks, and better sight lines. The park was ringed with palm trees and traditional Florida baseball materials were used including masonry, stucco, structural steel, and aluminum. Outside, McKechnie Field was pulled back from the street, creating a public plaza around the park. Inside, fans were moved closer to the field and the seating was expanded 50 percent — from 4,200 to 6,500 seats.

The ballpark's architects designed it to mirror the Spanish Mission-style architecture that is so prevalent on the Florida Gulf Coast. They also felt it was important to retain one of McKechnie Field's finest qualities—a quality embodied by many of the nation's older ballparks—intimacy.

"We see McKechnie Field as an inte-

gral part of reaching out to and upgrading the entire community," says Hurd. "For example, there is a Boy's Club right behind the stadium. Before the renovation, there were problems with kids climbing the fence and throwing things at the players. During the renovation, we knocked out a section of fence and put in a set of bleachers to provide free seats for the kids that make use of the Boy's Club. We call them the 'Knot-Hole Gang.'"

The 1993 season wasn't exactly "easy going" for Hurd and his crew. During Phase II, portions of the field area were disturbed and required reworking. The weather was both cold and unusually wet, and they don't as yet have a tarp.

"But we didn't have any rain-outs," says Hurd. "Because of the way the field was constructed during the renovation program, and our maintenance program, we were able to play when surrounding facilities weren't."

Maintenance Program

A daily maintenance program is followed to keep the McKechnie Field in top shape. Baselines, homeplate, the pitcher's mound, and all clay edges are hand-raked, packed, and dragged to keep down lips. The infield skinned area is nailed and watered to keep consistency. The fine, crushed brick warning track is dragged.

The bermudagrass infield and outfield are kept at 5/8 inch. The entire field is mowed daily and the infield is mowed twice on game days.

The infield grass is hand-watered at night before home games to ensure con-

continued on page 10

Diamond Of The Year

continued from page 9

sistent moisture levels in the clay areas where sprinklers overlap. Three sets of freshly painted bases are used during every home game. Foul lines on the outfield grass are painted for every home game.

The field is inspected daily for turf problems. All field maintenance equipment is cleaned and checked daily before use. Field is overseeded in mid-November with Ph.D. perennial ryegrass at 12 pounds per 1,000 square feet. The field's fertilization program includes applications of high potassium fertilizer (10-20-20) from October to December to ensure hardness prior to winter. From January to June, and 18-2-14 formula is used, with iron added periodically to improve color. The June to September fertilization uses a 14-1-14 formula.

The field is aerated four times a year; once with a drill system to 12 inches, and three times with a 4-1/2-inch quadra-tine coring unit. Cores were picked up once and dragged in twice. The field is verticut twice a year and topdressed. The sand portion of the topdressing mix has been adjusted to improve quality and drainage.



Mike Hurd: "My goal is to make this the best stadium in baseball."

"We want superior drainage and turf, but we don't want the field too loose," says Hurd. "We want a solid, consistent surface for better footing."

Hurd applies Ronstar for preemergence weed control and uses MSMA and Trimec for post-emergence weed control as needed. Weeds that attempt to invade the warning track and fence lines are treated with Roundup. Fungicides are applied only as necessary.

Hurd stages an on-going battle against mole crickets, which seem determined to

invade the fields. He's winning the war by rotating control products, never making back-to-back applications of the same material. An initial nematode problem on the practice complex was easier to eliminate. All fertilization and chemical applications are done in-house, with detailed records of each application kept on-site.

The practice complex is "built on a dump." It has no drainage system, and natural drainage is not as good as that of the McKechnie Field, but according to Hurd it is adequate. Irrigation at the practice facility is done manually, which adds another challenge to the maintenance program.

Even at the Major League level, funds can be limited, so Hurd has learned to improvise. "You can trade, borrow, swap — whatever it takes to cover the field needs," he notes.

The facility has a busy schedule year-round. "The Pirates hold a one-week 'Fantasy Camp' in January," says Hurd. "A Korean professional baseball team, the Pacific Dolphins, move in for their spring training starting the last week in January and ending March 2. In mid-February, when the Pirates come in for spring

YOUR ONE-STOP SOURCE FOR AMERICA'S LEADING BASEBALL SURFACES & SUPPLIES!



**USED BY OVER 75 PRO TEAMS, PLUS
7 OF THE LAST 8 WORLD SERIES CHAMPS!**

**800-247-BEAM
908-637-4191**

FAX: 908-637-8421 GSA #GS-07F-6143A

PARTAC PEAT CORPORATION

KELSEY PARK, GREAT MEADOWS, NJ 07838

**WITH OVER 20 DISTRIBUTION CENTERS
& BULK PLANTS ACROSS THE COUNTRY!**

BEACON SPORTS PRODUCTS™

OUTSTANDING ON ANY FIELD

BEACON SPORTS HAS IT ALL!

**Bases & Plates – Large Selection
Backstops • Bat/Ball Holders • Drag Mats
Batter's Box Mats • Diamond-Dry
Flexible Fencing • Flexible Harrows
Line Paint & Markers • Custom Netting
Pitcher/Infield Screens
Turf & Stabilizer Soil Additives
Stencils • Water Removers • More!**

**CALL FOR OUR
COMPLETE
CATALOG!
800-747-5985**

**BOX 44115
MADISON, WI
53744**



BEACON SPORTS PRODUCTS™