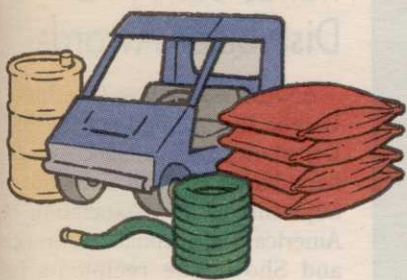


BRIEFS



**CHILDERS HEADS FERTILIZER INSTITUTE**

NEW ORLEANS — Chuck Childers, chairman/president and CEO of the Potash Corporation of Saskatchewan, Saskatchewan, Canada, is the new chairman of The Fertilizer Institute. At the association's recent annual meeting here, which drew more than 800 industry representatives, Robert W. Honse, executive vice president, agricultural operations, Farmland Industries, was elected TFI vice chairman, and Gary D. Myers was re-elected TFI president and chief staff officer.

**SEED RESEARCH PAYS OFF FOR DR. FUNK**

Mike Robinson, president of Seed Research of Oregon, recently presented Dr. Reed Funk with a royalty check worth \$182,000. The payment was based upon sales of the following turfgrass varieties developed by Seed Research in conjunction with Dr. Funk: SR 4000, SR 4100 and SR 4200 perennial ryegrasses; SR 3000 and SR 3100 hard fescues; SR 5000 Chewings fescue; Titan and SR 8200 tall fescues; and SR 2000 Kentucky bluegrass.

**RIPP SIGNS ON WITH MOYER & SON**

SOUDERTON, Pa. — Moyer & Son, Inc. has announced the addition of John Ripp to its sales force. Ripp will be responsible for golf course sales in the Mid-Atlantic states. He will be marketing fertigation technology and custom blend fertilizers to new and established courses. Ripp brings with him 10 years of green industry experience. He has worked as an assistant superintendent and most recently as a distributor representative in the Chicago Metro area. He has a bachelor's degree in natural resource management.



John Ripp

**BERAULT JOINS HYUNDAI**

SANTA ANA, Calif. — Hyundai Golf Cars, U.S.A. has named Joe Berault regional sales manager for the central United States. Based in South Haven, Mich., Berault's responsibilities include the supervision and expansion of Hyundai Golf Cars' central U.S. sales division and coordination of manufacturing and distributing efforts to ensure that Hyundai fleets are promptly delivered and property serviced and maintained. Berault has operated Network Golf Cars, Inc. for the past three years, previously served as interim president to Michigan-based Chi Industries and has many years of sales management experience with Taylor Dunn and E.Z. Go.

# High tech tools aren't coming — they're here

By TOM LAVERTY

According to a study from the University of Oklahoma College of Architecture, about 75 percent of the golf course architects surveyed indicated they use computers for traditional tasks such as accounting or office automation.

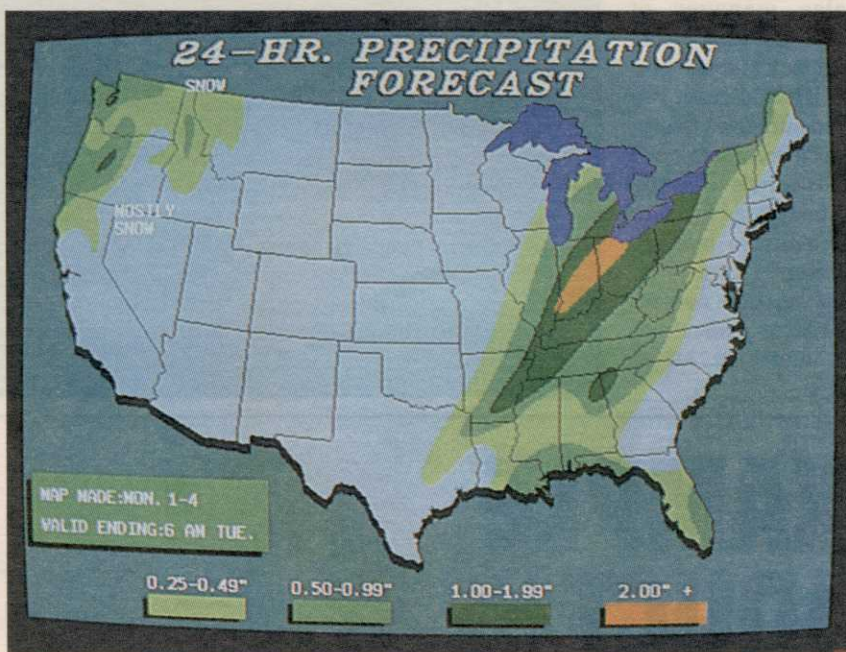
Only 17 percent, however, said they use computers for technical tasks such as design and drawing. Landscape architects are tough, elusive customers for computer graphics vendors and software application developers trying to provide solutions to make their life easier. The canvas is literally as big as the all outdoors, and the infinitely variable landscape seldom deals with straight lines or standard parts. Still, in this age of information, it is inevitable that the computer will play an ever increasing role in the architect's job.

There are currently two areas of focus that should interest the golf course architect. Geographic Information Systems (GIS) are computer solutions targeted at the site planning professional who needs an understanding of the landscape within which a project will be designed. Site identification, watershed and ecosystem analysis, or earth-shaping work are tasks where GIS is of service.

Computer Aided Design and Drafting (CADD) tools are for the architect who needs more accuracy and efficiency in landscape design and drafting, cost estimation, and many other areas. The line between GIS and CADD is blurring, though, as vendors provide seamless ability to move from GIS-oriented aspects of a project into more specific course design and engineering with

Continued on page 56

*Tom Laverty is a freelance writer and a senior software engineer with Meta Software Corp. in Cambridge, Mass.*



WeatherWare 5.0 can generate this type of map on any IBM-compatible computer.

## Individual weather forecasts a reality

By HAL PHILLIPS

SALT LAKE CITY — WeatherWare 5.0 isn't rain gear. It's an on-line personal computer weather display program from Salt Lake City-based WeatherVector Corp., and another example of how the golf industry has been affected by high tech innovation.

Through the company's WeatherBank data feed, WeatherWare provides coverage of meteorological activity as well as graphic capabilities that display weather occurrences on TV-broadcast quality maps — international, national, regional and state.

WeatherWare sells for about \$300 and runs on any IBM compatible PC. It requires a Hayes compatible modem, hard disk and EGA or VGA color graphic monitor and card. Connection to the WeatherBank data feed is made with a 300-9600 baud modem via two networks which can handle calls from anywhere in North America, 24 hours a day, 365 days a year.

If that last paragraph left you fumbling through your computer dictionary, you're not alone. Many superintendents are just becoming familiar with their

Continued on page 56

## Barebo head to step down

By PETER BLAIS

ANAHEIM, Calif. — Otterbine Barebo Inc. President Charles "Chuck" Barebo, 58, will soon relinquish that title and more of the day-to-day responsibility of running the aerator manufacturing company to his oldest son, Charlie.

Beginning Jan. 1, 1994, the elder Barebo will become chief executive officer and chairman of the board of the Emmaus, Pa.-based firm he founded 14 years ago. He made the announcement at a distributor breakfast held during January's Golf Course Superintendents Association of America Annual Conference and Show.

While he will cut back on much of his travel and dealings with distributors, Chuck will still be actively involved in the company,

Continued on page 54



Chuck Barebo

## Chestnut joins Smithco

WAYNE, Pa. — Ted Smith, chairman of Smithco, has announced the appointment of William R. (Bill) Chestnut as manager of engineering & product development.

In his new position, Chestnut will be responsible for the creation and development of new Smithco products and further engineering advancement of the current product line. Chestnut joins Smithco following 20 years with the John Deere Company, where he played a key role in the development of its Golf & Turf Division and the marketing of resulting products. Chestnut, who shares patent rights with Deere and has been widely published in golf and turf business journals, will be based in Smithco's manufacturing facility in Cameron, Wis.

"We welcome Bill Chestnut to our company with much enthusiasm," said Smith. "We are highly confident that his considerable knowledge and experience will bring new dimensions to Smithco's product innovations and engineering operations."



Bill Chestnut

## Ciba-Geigy and Rain Bird honor industry's Environmental Stewards

ANAHEIM, Calif. — Ciba-Geigy and Rain Bird have announced the winners of the first annual Environmental Steward Awards. The companies also announced a donation of more than \$12,000 to Golf Course Superintendents Association of America Scholarship & Research.

The award program was created to recognize golf course superintendents and golf courses for their work to protect or enhance their local environment. Entries were reviewed by an independent panel of judges selected for their expertise in environmental issues, turfgrass management and other areas.

Awards were given in three categories: public, private and resort golf courses. One national winner was selected in each category:

- Don Tolson, CGCS, Fox Hollow at Lakewood (public/Lakewood, Colo.);

Continued on page 58

## Super Stewards

Continued from page 53

- Bruce Cadenelli, Caves Valley Golf Club (private/Owings Mills, Md.);
- Tim Long, Barton Creek Resort (resort/Austin, Texas).

In addition, there may be as many as 21 regional winners: one public, private and resort winner each in all seven U.S. Golf Association regions. Eleven regional winners were selected this year:

- Harold Wade, Jr., Cherry Valley Club (private/Northeast region/Garden City, N.Y.);
- Thomas Schlick, Marriott's Golf Club at Wind Watch (resort/Northeast region/Hauppauge, N.Y.);
- Richard Boehm, Wright Patterson AFB Golf Club (private/Mid-Atlantic region/Wright Patterson Air Force Base, Ohio);

Continued on next page

## P&N standard?

Continued from page 1

fungicides.

"We've done our homework. What are we afraid of?" asked Fister. "What we do now is very inefficient. We go from one state to the next and each has its own way of doing things. States are asking, 'What are the guidelines?' No one knows, so they make their own."

"We don't think posting is necessary from a health standpoint, but that's not real in today's world. We could spend millions and never win that war. But if we came to everyone with a national standard, people would get on board."

Not everyone in the chemical industry agrees with Fister — not even close. The Professional Lawn Care Association of America is the only green industry association to endorse nationwide P&N standards, including similar measures for homeowners.

In short, many in the chemical industry feel posting and notification delivers the wrong message and fuels the fire of environmental activism.

"Our basic position is, there is no scientific reason for posting and notification," said Allen James, RISE executive director. "The call for it is purely an emotional response. RISE continually evaluates the posting and notification standards across the country to assess whether our position is valid. And we believe it is. There is simply no sound scientific basis for posting and notification standards."

Fred Langley, government relations manager for DowElanco and chairman of the RISE Government Issues Committee, believes it is too late to pursue a national standard.

"The window of opportunity has passed because 23 states have already implemented different versions of one," Langley explained. "Some folks believe that applying a national posting and notification law would provide uniformity, but that would assume that those 23 states would go back to the federal statute. I don't think that would happen."

"Typically, a federal statute provides the floor, the minimum. State can certainly go beyond that minimum, and I expect they would. In essence, a national standard would open the law for additional regulations."

Fister sees industry support for a national standard as more than a regulation issue. It's public relations, he said.

"I really think we have to take a proactive position," said Fister. "It's going to happen anyway. I don't think it will damage the integrity of our industry. It will help it. We may as well guide the market, instead of letting the legislators do it."

# Golf Course Marketplace

To reserve space in this section, call Simone Marstiller at 813-576-7077

## ADVERTISING INFO.

### 1993 Advertising Rates

	2X	6X	12X
Per col. inch:	\$60.00	\$55.00	\$40.00
Add-on per 1/4":	\$15.00	\$13.75	\$10.00
Logo incl. in ad:	\$30.00	\$30.00	\$30.00

- Rates are per insertion.
- Minimum 2-time insertion.
- Prepayment is required.

Send prepayment & ad copy to:  
**GOLF COURSE NEWS**  
7901 4th St. N., #311  
St. Petersburg, FL 33702  
813/576-7077, Fax 813/579-9788

## EMPLOYMENT

### HEAD GREENSKEEPER

Recently built Southwest 18-hole RV resort golf course looking for head greenskeeper. Must have overseeding experience. Bilingual. Able to work & supervise Native American & Hispanic employees. Send resume to: **Ott-Knott, Inc., P.O. Box 327, Fairfield, WA 99012.**

## EDUCATION

**GRAYSON COLLEGE**, Dennison, TX. 2-year technical program in golf course & turf grass management. 18-hole golf course on campus. Dormitories, placement assistance, financial aid & scholarships available. Contact: **GCC, 6101 Grayson Dr., Dennison, TX 75020. (903) 463-8653.**

## REAL ESTATE

### WANTED: GOLF COURSES

We are always looking for courses to offer our many qualified buyers. If you would like to sell or acquire a course, please call **Richard M. Farrell**, Licenced Real Estate Broker TODAY!

**GOLF PROPERTIES REAL ESTATE**  
5325 140th Avenue North  
Clearwater, FL 34620  
(800) 447-1044  
Fax (813) 530-7994

### GOLF COURSES WANTED

Southwest Golf is interested in purchasing or leasing golf courses.

Call **Dick Campbell** at  
(702) 362-4497

### TEXAS GOLF COURSES

9 & 18 holes — Statewide.  
Some with extra land, dev. lots.  
Descriptive list available.

**TEXAS GOLF PROPERTIES**  
1603 Lightsey — Austin, TX 78704  
512/442-7105 • Fax 512/442-1812

## NEW JERSEY GOLF REALTY SPECIALIST

**JARED MARCH**  
PROPERTIES • INC

(908) 741-4888  
FAX (908) 741-7885  
Confidential real estate services.  
List — Sell — Develop

## BUSINESS SERVICES



## Mid Tenn Turf, Inc.

Golf course, athletic field renovations & new construction. Sodding, sprigging, row planting, fairway renovations. Complete turn key operations. Products include: Vamont Bermuda; Tif & Tif II Bermudas; Meyer Z-52 Zoysia; Blended Fescue.

**Mid Tenn Turf, Inc.**  
Rt. 3, Box 3199  
Manchester, TN 37355  
Phone (615) 728-0583

## FOR SALE

### POND LINERS

Buy direct from fabricator 20 & 30 mil. P.V.C. Made to order. Under 20 cents per sq. ft. Installation or supervision available. Call...

**COLORADO LINING COMPANY**  
(303) 841-2022

### NEW VIDEOS

"Introduction to Golf Course Maintenance" (Spanish or English). It covers green cutting, cup changing, cart maintenance, & sand trap raking. \$39.95 + \$4.00 shipping & handling. Now being shown in 32 states.

"Unwritten Rules of Golf"  
Designed to speed up play. It covers etiquette & cart usage for beginning golfers. It's for use in golf Pro Shops & Locker Rooms. \$19.95 + \$4.00 shipping & handling.

**MACH IV PRODUCTIONS**  
P.O. Box 543  
Wauconda, IL 60084

### 850 ACRES CERTIFIED SOD AND SPRIGS

(Zoysia, TIF Bermudas, Centipede)  
Big Roll Sod, Row Planting, Sprigging, Sodding, Renovations. 18 yrs. experience in golf course work. Many references. 24 hour sod delivery.

**DOUBLE SPRINGS GRASS FARM**  
1-800-458-4756  
Searcy, Arkansas

**MAY ISSUE CLASSIFIED  
DEADLINE: APRIL 12, 1993  
CALL TO PLACE YOUR AD  
TODAY!**

## STEEL BUILDINGS

Save up to 50% on Arch Style Buildings. Factory Clearance. 25x30; 40x40; 50x100 & others. Factory Direct.  
**UNIVERSAL STEEL**  
1-800-548-6871

## POND LINER FOR SALE

Brand new, in orig. packaging. Rectangular, 137' x 185'. 25,000 s.f.. 30 mil. plastic. Cost over \$6,000 new; selling for \$3,200. Contact **Mike Scesny, Northeast Turf & Irrigation, (518) 237-7700.**

## LASER MEASURING

### LASER MEASURING and SPRINKLER YARDAGE MARKERS

We do it all. Laser measure & installation (same day) of **custom metal yardage markers** for all types of sprinkler heads. Warranty included. Also tee to green measurements, granite fairway markers. Sprinkler yardage markers may be purchased separately. Contact Nick for samples & references. **Fairway Designs of Florida, 800-36-TAGIT.**

## GOLF COURSE ACCESSORIES

### SAVE 40% OR MORE!

Buy personalized flags factory direct & save 40% or more. Flagpoles, tee markers, etc. also available. Fast personalized service guaranteed. Call toll free.

1-800-476-7005.



**FOUR SEASONS  
GOLF COMPANY**

P.O. Box 78011  
Greensboro, NC 27427

## WHY HASSLE WITH SEVERAL VENDORS?

- Scorecards
- Sprinkler Tagging
- Yardage Books
- Fairway Markers
- Laser Measuring
- Tee Signs (wood or granite)

Call **FORE BETTER GOLF, INC.**  
1-800-468-8672

## CUSTOMIZED YARDAGE MARKERS

- ✓ **Highest quality bronze** markers for tees, 100, 150 & 200; & cart paths
  - ✓ Sprinkler head **yardage tags** to fit all automatic systems
  - ✓ **Yardage books** — 1 & 4 color
  - ✓ **Laser measure** per USGA standards
- For more information, references or samples, contact:

**From Tee to Green, Inc.**  
1707 Brandywine Trail  
Ft. Wayne, IN 46845  
(800) 932-5223

# Golf Course Marketplace

To reserve space in this section, call Simone Marsteller at 813-576-7077

## BRIDGES AND WALLS



- On-Site Construction • Consulting and Design Capabilities
- Certified Engineered Drawings Available



3203 W. Waters Ave., Suite A  
Tampa, FL 33614  
(800) 226-4178

CIRCLE #157

## TerraBond Geotextiles TerraFlow Drainage Systems

Modern Turf Management

TerraBond geotextile fabric permanently separates soils, sand, and stone. Promotes drainage. Ideal as bunker liner and for putting green construction.

TerraFlow replaces perforated pipes and gravel drains. Up to 75% less trenching without heavy equipment. Fast, inexpensive installation. Less turf disruption.

Free information pack available. Call toll-free: 1-800-338-1122 (in Ohio: 1-800-752-8899). CONTECH CONSTRUCTION PRODUCTS INC. - Innovative Products for over 75 Years.

CIRCLE #158

### PROBLEM:

"Because of the shade trees, I'm spending too much time feeding & reseeding my greens."

### SOLUTION:

No, don't cut down the trees. TurfTemp will furnish balanced warmth to the roots of your green even better than the sun. With warmer roots, you'll have hardier and healthier turfgrass requiring less maintenance.



**TURFTEMP**  
HEATING/COOLING SYSTEMS

BioTherm 1-800-GET-HEAT Fax:707-762-9628 Ph:707-762-8425

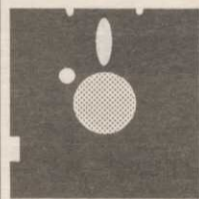
CIRCLE #159

**TRIMS**  
Grounds Management Software

Dedicated to Technology in  
Turfgrass Management

Experience what TRIMS can do for you!

- Budget & Expenses
- Equipment Service Records
- Spare Parts Inventory
- Personnel & Labor Records
- Chemical Application Logs and more!



Call or write today to receive free literature and a demo disk (3 1/2, 5 1/4).

LABB Systems/Software  
6018 East Osborn Road  
Scottsdale, AZ 85251  
(800)733-9710

CIRCLE #160

## ACCU-GAGE™

NEW!

LIFETIME WARRANTY  
ON BARS WITH  
DURA-COAT™



ACCU-GAGE is a precision tool for making highly accurate height-of-cut measurements on greens-mowers or other precision mowers. AVAILABLE IN 15", 18", and 24" bars.

Our LIGHTWEIGHT and RIGID aluminum bars are now treated with DURA-COAT. DURA-COAT wears better than tool steel and enables us to offer this unique LIFETIME WARRANTY. In addition, all replacement bars are treated with DURA-COAT, and have a LIFETIME WARRANTY.

To order call 1-800-253-2112 or fax 1-313-429-3985.

PRECISION TOOL PRODUCTS CO.  
7836 Bethel Church Rd. • Saline, MI 48176

CIRCLE #161



**QUAIL VALLEY FARM, INC.**

"Growers of Quality Turf Grasses"

- Meyer Z-52 Zoysia
- El Toro Zoysia
- Tall Fescue
- Sprigs
- Tifway II
- Tifdwarf
- Tifgreen II
- Big Rolls

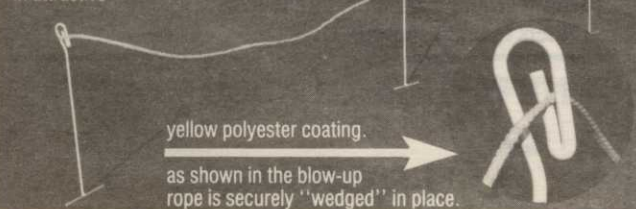
(800) 666-0007

7501 Kanis Road  
Little Rock, AR 72204  
(501) 224-8873

CIRCLE #162

## NEW ROPE-LOC™

Finally, a rope and stake system that works! Simple but unique, the ROPE-LOC system eliminates annoying or unsightly rope failures. Simple, clean, durable — ROPE-LOC stakes are made of 3/8" steel and finished in attractive



Call for a special introductory offer.

1-313-429-9571, 1-800-253-2112 or FAX: 313-429-3985

PRECISION TOOL PRODUCTS CO. • 7836 Bethel Church Rd. • Saline, MI 48176

CIRCLE #163



**PAVELEC BROTHERS  
GOLF COURSE CONSTRUCTION CO., INC.**

- ✓ New Construction
- ✓ Renovation
- ✓ Field Drainage Systems

TONY PAVELEC  
(201) 667-1643  
EMIL PAVELEC  
(201) 939-6182

98 Evergreen Ave.  
Nutley, NJ 07110

CIRCLE #164

## Super Stewards

Continued from previous Page

- Charles V. Benton, PhD and Gary Grigg, CGCS Naples National Golf Club (private/Florida region/Naples, Fla.);
- Paul Hickman, CGCS, Grenelefe Golf & Tennis Resort (resort/Florida region/Grenelefe, Fla.);
- Tony Rzadzki, Cantigny Golf Club (public/Great Lakes region/Wheaton, Ill.);
- Bruce Wolfrom, CGCS, Treetops/Sylvan Resort (resort/Great Lakes region/Gaylord/Mich.);
- John Miller, Jr., Hindman Park Golf Course (public/Mid-Continent region/Little Rock, Ark.);
- Philip George, CGCS, Prairie Dunes Country Club (private/Mid-Continent region/Hutchinson, Kan.);
- Thomas Janning, Rosewood Lakes Golf Course (public/West region/Reno, Nev.);
- James Ferrin, CGCS, Brookside Country Club (private/West region/Stockton, Calif.).

Donations are made by Ciba-Geigy and Rain Bird to GCSAA S&R in the names of each national and regional winner: \$500 for national and \$50 for regional.

## Kroeger comment

Continued from page 13

increase the maintenance staff (with attendant increasing costs) or accept lower standards of playability and risk loss of income.

### IRRIGATION

The demand for water is directly influenced by soil texture, soil salinity, monthly rainfall, irrigation water quality, the total irrigated turf and landscaped area, air temperature, relative humidity and grass species. The architect of the course must competently consider all of the above factors, as well as the source and availability of water at all times of the year, when designing the total watered area.

The engineering involved in designing an irrigation system includes every square meter of irrigated area on the property. It starts at the water source and does not end until the water leaving the sprinklers lands on the ground, uniformly distributed so as to eliminate wet and dry areas. The quality of the installed system is often gauged by its ability to:

- Operate efficiently using locally available skill levels of labor and supervision
- Evenly distribute water over the wide range of golf course conditions
- Accept additional sprinklers in the future
- Allow individual control for sprinklers in a specialized situation
- Operate over a given season with few repairs or maintenance costs

State-of-the-art irrigation equipment which is appropriate for the specific region may appear expensive, but it has the ability to repay the additional costs from savings generated. One such component is the fertilizer injector, which is used to inject liquid nutrients into the pipeline at the pumping station, eliminating the need for frequent trips across the course with tractors and spreaders. At US \$10,000-20,000, they pay for themselves within a few years through labor savings, reduction of equipment-related damage and the shorter time period from seeding/stolonizing to opening of the course.

Typically, dollar driven reductions in the irrigation, drainage and soil systems erode future operational profits. The new golf course entrepreneur in the process of a pre-construction cost control review would do well to utilize the experience of the architect's staff agronomist, or an experienced golf course superintendent, before finalizing the construction budget.