

SB
433
.G4
v. 2
no. 8

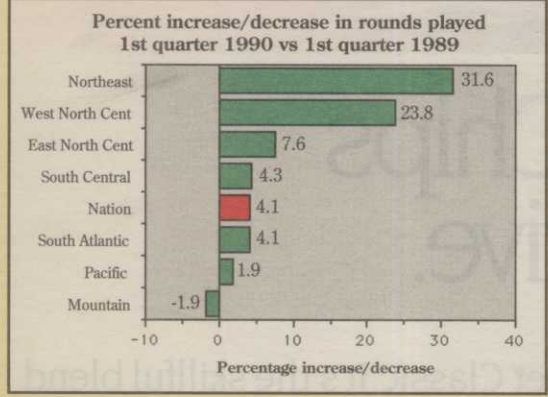
GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

VOLUME 2 NUMBER 4 [8]
AUGUST 1990
A United publication

INSIDE

- 17 FIELD-BURNING** referenda fail
- 19 NATURE** more important to research
- 20 ZOYSIA SOD** popular, expensive
- 29 HANDICAPPED** course takes shape



- ### News
- Japanese firm reneges on Bay Hill buy 3
 - Talks proceed on \$500M Grand Lair plan 3
 - USDA honors Dr. C. Reed Funk 4
 - LPGA complex gains approval 5
 - Americans featured at Golf Course Europe 6
 - NCA announces environmental insurance 7

- ### Departments
- Comment**
- Researchers take no rest 8
- Letters**
- Turf industry must plan ahead 9
- Super Focus**
- Dick Bator tackles Merion challenge 12
- New Courses**
- U.S. Open win spurs business for Irwin 14-15
- Government Update**
- Clubs lose millions in High Court decision ... 16-18
- Association News**
- ASTA names executive vice president 24-25
- On the Move**
- Murphy sales manager at Jacobsen 30
- Business News**
- Continental buys bridge line 32
- New Literature**
- 'A Tribute to Golf' scores an ace 33
- New Products**
- New equipment hits the marketplace 34-35
- On the Green**
- Future Golf removes boredom from range 38



A worker at Sweetwater Country Club in Sugarland, Texas removes bermudagrass sod from a green damaged by this winter's record cold. The facility was among numerous Southern courses that suffered extensive winter kill requiring greens to be torn up and replanted. The extent of the damage wasn't known in many areas until the bermudagrass emerged from dormancy this spring.

Kill costs courses millions

BY PETER BLAIS
The winter freeze cost Southern courses millions of dollars, forcing many to reseed greens and some to close for as long as two months. The cold temperatures that struck in early December killed much of the Bermudagrass on courses from Texas to South Carolina. Unfortunately the problem went undetected until spring when the overseeded ryegrass began to die out and the Bermuda traditionally starts to grow. Only this time the Ber-

muda never greened up. "It just stayed dirt brown once the rye died off," said Gilbert Medrano, head superintendent at First Colony's new public course in Houston. The damage was so bad First Colony closed its doors May 29 and wasn't scheduled to re-open until July 26. It cost \$25,000 to reseed all 18 greens. Assistant pro Scott Rethlake pegged lost business at another \$180,000. Most courses were able to remain open, but had to resort to temporary

greens. Nearby Sweetwater Country Club in Sugarland was "pretty severely" damaged but continued play on temporaries, according to superintendent Todd Stevens. "We lost enough grass that we decided to replant all 27 greens to keep them consistent later on. We stripped the sod, tilled them up, fumigated, contoured and re-sprigged. We planted June 22 and they look good. They are about 80 percent covered." *Continued on page 31*

S&L crisis hits golf

Let's make a deal goes nationwide...

BY PETER BLAIS
Golf courses nationwide are available at bargain-basement prices thanks to a savings and loan crisis that has left several courses in the hands of the Resolution Trust Corporation. In the Phoenix, Ariz., area alone, two courses are for sale. Superstition Springs in Mesa and Happy Trails Resort in Surprise were the property of Western Savings, which was placed into

receivership May 31, according to Western Savings Vice President of Real Estate Investment and Sales Paul Timm. They are being marketed by the RTC, which was established to sell off closed savings and loan properties. Superstition Springs is a 646-acre project undertaken by Western Savings and Loan Association in the early 1970s. The 18-hole Greg Nash-designed *Continued on page 27*

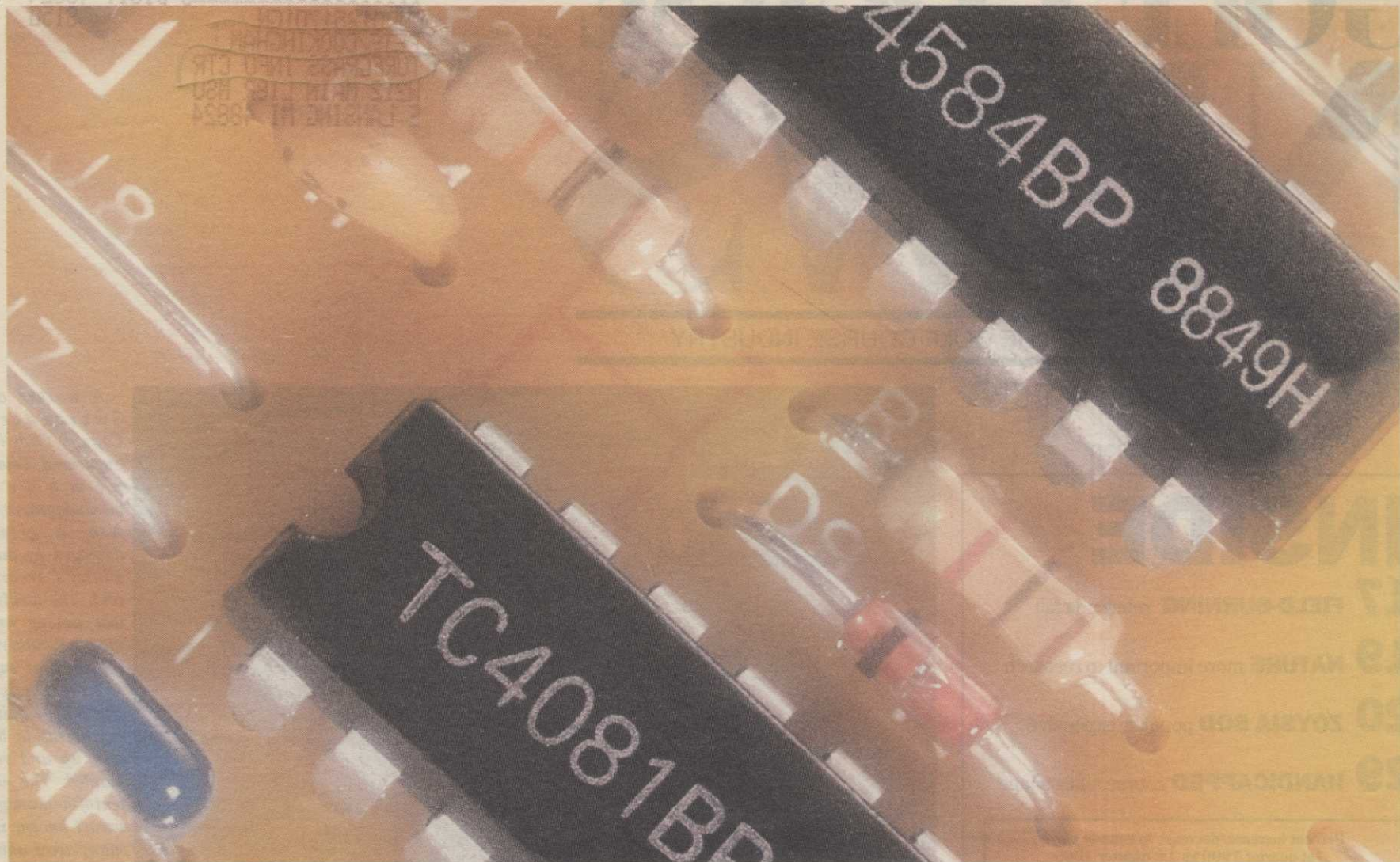
...as foreigners, pensions pick up slack

BY PETER BLAIS
Foreign investors and pension funds are replacing beleaguered savings and loans and commercial banks as major funding sources for existing courses and new course construction. "With the S&L crisis, those institutions are basically out of the golf course business. A lot of money used to come from the S&Ls. Now they're history," said Stanton Abrams, president of Senior Tour Players Inc., a Boston-based

company involved in golf course communities and representing many famous Senior players. "Commercial banks have had a lot of problems with bad loans. So that money has basically dried up, too." **Foreign investment**
Led by the Japanese, foreign investors are now filling a large part of the funding void. The Japanese have bought *Continued on page 26*

Seed harvest excellent

BY MARK LESLIE
A bumper crop looms this month, creating good and bad news for people in the turf seed and golf industries. "This is shaping up as the best crop for a number of years," said Scott Patterson, vice president in charge of turf seed at Peterson Seed Co. in Savage, Minn. "There is a lot of acreage. We had good burns last fall. Growing conditions were excellent last winter and good growing this spring. And now they're out and dry like they need to be for harvest." Dennis Hays, executive vice president of the Oregon Seed Trade Association, whose members grow the vast majority of seed used on golf courses, *Continued on page 19*



Discover How A Few Chips Can Perfect Your Drive.

Introducing a triumph of modern electronics. The Fleet Classic. It's the skillful blend of Yamaha's past engineering achievements and new technologies. • For instance, the Fleet Classic's better battery power economy is the result of the Yamaha *PaceSetter* Solid-State Speed Controller that comes standard.

Couple it with our breakthrough *UltraPath* 3-Link Rear Suspension and the Fleet Classic accelerates smoothly and takes to the path with unsurpassed grace. • A larger passenger area leaves more room

for plush comforts like wide cushioned seats and expanded legroom. The Fleet Classic's stylish body is painted and composed of a rugged high-grade *Metton* material. • Need final confirmation you've selected the best? Look no further than the nameplate. Because it says Yamaha and that means your investment will pay off round after round, year after year. • Call 1-800-447-4700 for a dealer near you.



YAMAHA USA
Better in the long run.

For free information circle #101

Japanese firm reneges on Bay Hill purchase

BY PETER BLAIS

The \$46 million sale of The Bay Hill Club near Orlando, Fla., to WDI Systems of Japan has apparently fallen through and the Japanese firm has filed suit to recover its \$3 million down payment from TBHC, Inc. led by controlling shareholder Arnold Palmer.

The closing on the 27-hole, Dick Wilson-designed course, home to the Nestle Invitational each March, was scheduled for May 21. But the closing never took place.

The suit, filed in Orange County Court, claims there are dangerous levels of asbestos, underground fuel tanks in violation of federal regulations and income tax irregularities.

"These claims are false," according to a TBHC news release. "WDI is grasping at straws with which to attempt to escape from the consequences of its own failure to close."

TBHC claims the Japanese firm knew asbestos was present during negotiations and that WDI's own expert said it did not present a significant hazard. The selling shareholders offered to remove the asbestos at their own expense.

"WDI's rejection of this offer was surprising. The club is itself now in the process of eliminating all asbestos," the release states.

TBHC said the underground fuel tanks are being replaced and have never been in violation of government regulations. As for WDI's insistence they be replaced before closing, the club's representative wrote to the Japanese firm's lawyer:

"You and your client knew that TBHC intended to replace the un-

derground tanks at the expense of the selling shareholders and you always knew that the fact of replacement was not planned to occur before the time of closing; rather, it was planned to occur after the time of closing."

Concerning the income tax allegations, WDHC said the club's financial records are audited each year by one of the leading certified public accounting firms in the United States.

No hearing date on WDI's suit had been set as of mid-July, according to Palmer's administrative assistant.

\$500M Grand Lair plan under negotiations

Three Japanese companies are negotiating for the right to develop a \$500 million golf resort on John's Island near Charleston, S.C.

The Grand Lair development will include three 27-hole courses, an 800-room hotel and million-dollar lots for Japanese businessmen.

The three interested backers include three Japanese banks, the Charleston News & Courier quoted Donald Wizeman, president of Dai-ichi Corp., a Japanese real estate company and Grand Lair promoter.

A presentation to investors is expected in late summer.

Groundbreaking could take place this fall with a tentative opening scheduled for the spring of 1993.

Wizeman has compared the proposed development to a Disney World for golfers. Among the amenities are three 27-hole courses, including one billed as the hardest in the world; a "water experience" with a giant pool featuring rocks and caves; and a training center for up-and-coming golfers.

The Japanese are also reportedly interested in two projects in Hilton Head worth a combined \$250 million.

NEWS

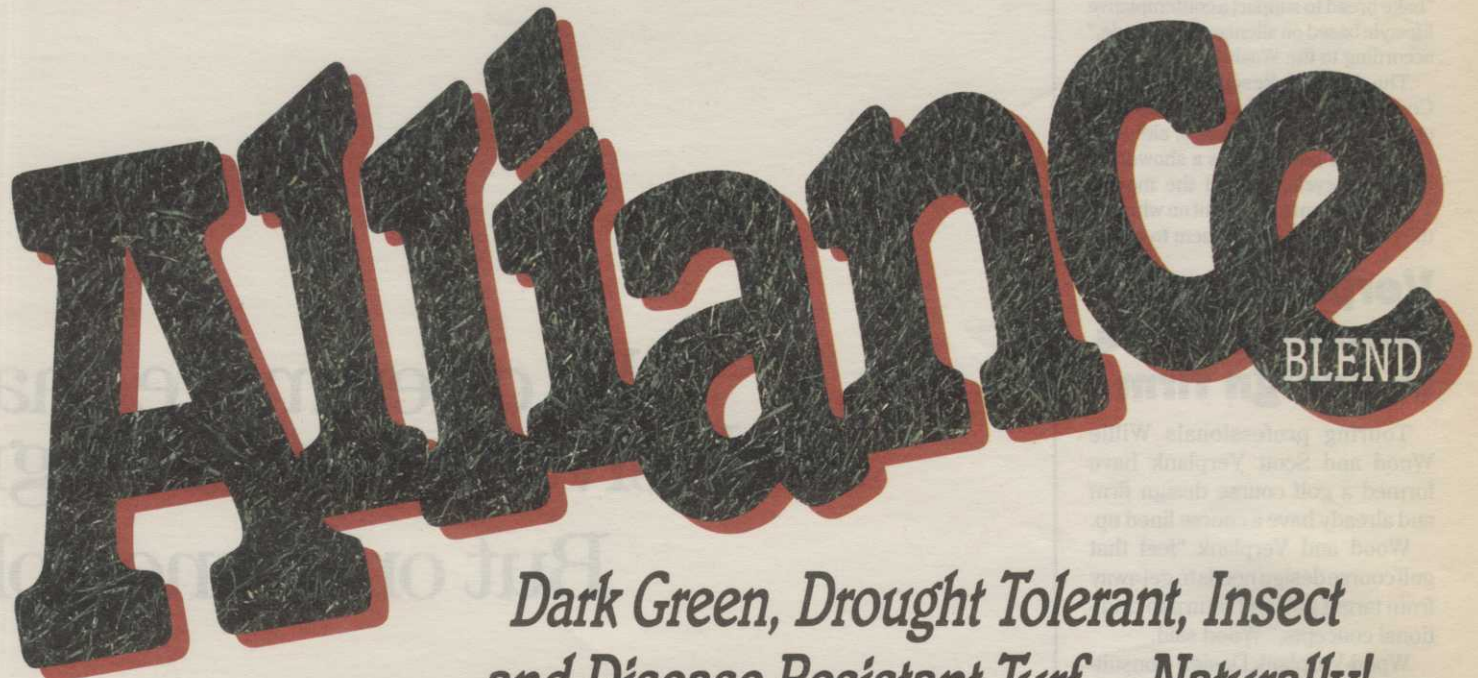
Swope reopens

Kansas City's Swope Memorial Golf Course reopened this spring after a one-year restoration project to the well-known A.W. Tillinghast course.

The \$1.2 million restoration included the addition of 55 sand bunkers, rebuilding of all greens and placement of flowers and a new irrigation system was also updated.

A rededication ceremony and tournament was held for supporters of the 55-year-old Swope Memorial.

A BLEND OF FOUR PREMIUM PERENNIAL RYEGRASSES FROM TURF-SEED, INC. FOR WINTER OVERSEEDING, LAWN RENOVATION, ATHLETIC FIELDS AND PARKS.



Dark Green, Drought Tolerant, Insect and Disease Resistant Turf... Naturally!

Citation II

- Contains a high level of endophyte that enhances insect resistance.
- Very good resistance to leaf spot, brown patch, crown and stem rust, tolerance to red thread.
- Rich dark green color with good mowing quality.
- Excellent heat and wear tolerance.

Saturn

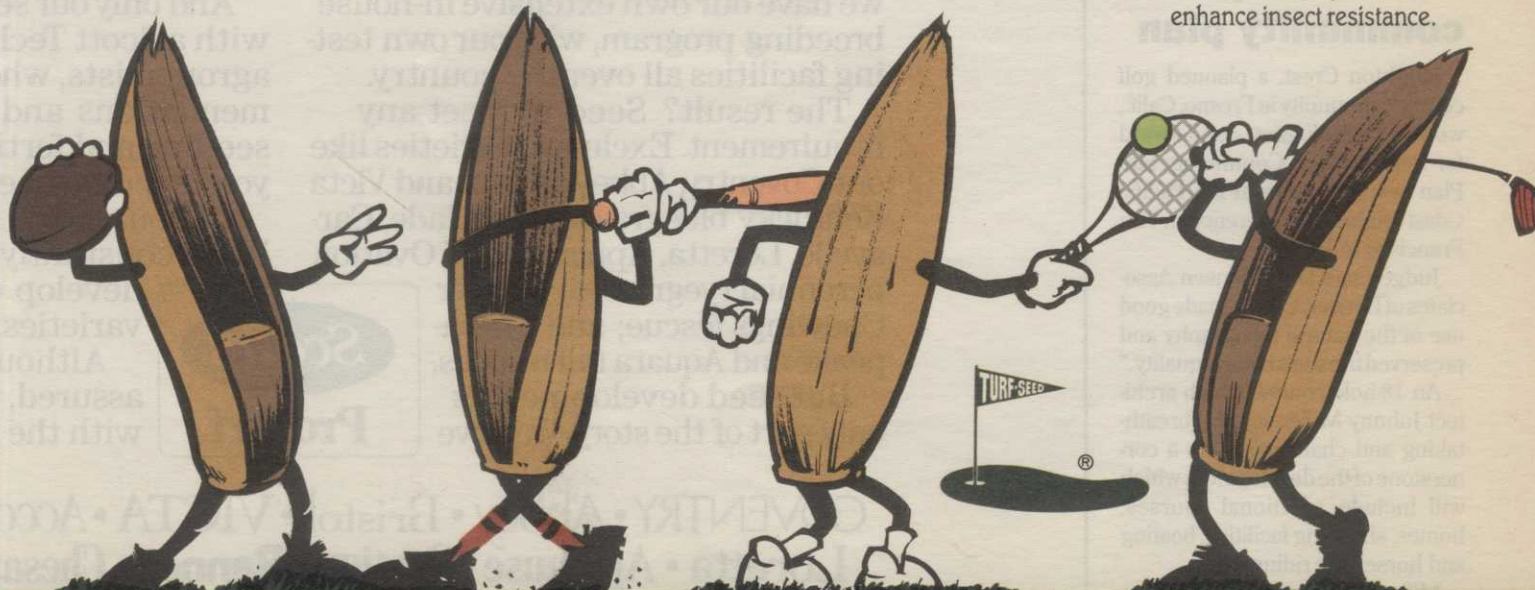
- The number 1 variety in the 1986 National perennial ryegrass trial.
- Dark blue-green colored low growing variety.
- Improved heat tolerance, and resistance to leaf spot, brown patch and stem rust.
- Very good performance in California overseeding trials.

Charger

- Improved resistance to leaf spot, brown patch, stem and crown rust. Tolerance to red thread.
- Good performance under low fertility and improved color and growth under cool weather conditions.
- Early maturity and tested as 2HH.

246 Sunrye

- Very dark blue-green colored turf-type variety.
- Dwarfier growth habit than other varieties in overseeding trials in Palm Springs area.
- Improved resistance to leaf spot, brown patch, and stem rust.
- Contains a moderately high level of endophyte to enhance insect resistance.



Turf-Seed, Inc. PO Box 250 Hubbard, OR 97032 503-981-9571 FAX 503-981-5626 1-800-247-6910

For free information circle #102

Yakima plan wins approval on family's third attempt

It appears the third time is a charm for Yakima, Wash. which will apparently be getting a new course after two failed attempts.

The Yakima Herald recently reported earth is being moved at a site between 86th and 100th Avenues on Occidental for a course financed by the Hull family and local investors.

The Hulls are a local farming family who received county approval for the project in 1986. They were unsuccessful in their original attempt to build the course.

Last fall another group of investors tried to get 1,000 people to put up \$1,000 each to raise \$3.8 million for a new course. That effort also fizzled.

But a third group that includes the Hulls, John and Bill Borton, Glen Groves, Randy Smith and Smith's father have apparently been successful in getting the Apple Tree Golf Course off the ground.

Golf architect John Steidel has made revisions to the original plan which includes an 18-hole course and single-family dwellings.

The par-72 course covers 294 acres of rolling countryside and apple orchards. The public course could be completed next July.

NEWS

Monks lose cause, plan wins approval

The Clark County (Va.) Board of Supervisors has approved a golf course along the Shenandoah River despite the protests of environmentalists and silent opposition of 25 Trappist monks who lived across the river.

The supervisors voted 4-1 in favor of the special-use permit to build the \$2.5 million course scheduled to open in the spring of 1992. Their environmental concerns were largely satisfied by the developer's integrated pest management plan.

The 151-acre course sits opposite the Holy Cross Abbey where the monks "bake bread to support a contemplative lifestyle based on silence and solitude," according to the Washington Post.

The Natural Resources Defense Council and several local groups vigorously fought the proposal, although it was often portrayed as a showdown between developers and the monks. The monks remained silent on whether the course would force them to move.

Verplank and Wood partners in design firm

Touring professionals Willie Wood and Scott Verplank have formed a golf course design firm and already have a course lined up.

Wood and Verplank "feel that golf course design needs to get away from target golf and return to traditional concepts," Wood said.

Wood-Verplank Design Consultants has signed a design consulting agreement with Oxford Development Corp. of Oklahoma City, Okla., and architect Randy Heckencamper of Tulsa, Okla., for a daily fee course in Oklahoma City.

"We are excited about our first design project, which will be ready for play in the fall of 1991, and we are looking forward to future projects," Verplank said.

They are headquartered at 6305 Waterford Blvd. in Oklahoma City.

Brighton Crest cited as top community plan

Brighton Crest, a planned golf course community in Fresno, Calif., won the Gold Nugget Grand Award for Best Planned Community Site Plan over 100 Acres at the Pacific Coast Builders Conference in San Francisco in June.

Judges said David Jensen Associates of Denver, Colo., "made good use of the natural topography and preserved the site's natural quality."

An 18-hole course, which architect Johnny Miller says is "breath-taking and challenging," is a cornerstone of the development which will include additional courses, homes, shopping facilities, boating and horseback riding.

Millerton New Town Development is developer of the project.

USDA honors Dr. Funk for work in turf breeding

The U.S. Department of Agriculture bestowed the Distinguished Service Award in June on Dr. C. Reed Funk, of Rutgers University's State Agricultural Experiment Station.

Secretary of Agriculture Clayton Yeutter presented Funk the award for "distinguished scientific achievements in turf breeding and outstanding contributions to the turf industry and the general public."

At ceremonies in Washington, D.C., Yeutter cited Funk for el-

evating turfgrass breeding to "an appreciated and respected status."

Yeutter said Funk's impact on the turf industry has been unparalleled, and mentioned Funk's development of the perennial ryegrass Manhattan, Rebel tall fescue, and the turf-type cultivar of *Poa trivialis* — three "landmark cultivars."

Funk also developed the first successful method of producing Kentucky blue-

grass cultivars by means of intra-specific hybridization of apomictic parents.

More recently he and his students have been involved in the discovery that endophytic fungi are associated with many instances of enhanced performance in perennial ryegrass, tall fescue, hard fescue and chewings fescue.

With his students, Funk developed a number of turf-type perennial ryegrasses containing high levels of endophyte.

SIUE pursuing proposals

The Southern Illinois University at Edwardsville Planning and Budget Council has recommended that President Earl Lazerson obtain proposals from potential developers for the school's controversial golf course.

Lazerson and university officials have begun putting together stipulations for a proposal request to develop the 300-acre tract that includes the former Mississippi River Festival site.

Preliminary stipulations require no university funds be spent to build or manage the facility, reduced green fees for students and employees and the use of natural fertilizers, according to the *The (Alton) Telegraph*.

Acceptable proposals will be turned over to the chancellor and voted on by the SIU board of trustees.

**We offer more than 10
exclusive varieties of grass seed.
But only one color.**

At Scott we may offer a lot of exclusive seed varieties. But we have only one set of standards. The highest. And those high standards begin with our breeding and varietal development. We not only work closely with universities and other seed developers, we have our own extensive in-house breeding program, with our own testing facilities all over the country. The result? Seed to meet any requirement. Exclusive varieties like our Coventry, Abbey, Bristol and VICTA Kentucky bluegrasses; Accolade, Caravelle, Loretta, Applause and Ovation perennial ryegrasses; Banner Chewings fescue; and Chesapeake and Aquara tall fescues. But seed development is only part of the story. We have the most stringent requirements and controls for clean seed in the industry. From grower selection all the way through cleaning, testing and packaging, our standards are uncompromising. In fact, we pioneered the seed business over 100 years ago. And only our seed comes equipped with a Scott Tech Rep. They're true agronomists, who can make recommendations and develop complete seeding and fertility programs to fit your specific needs and problems. Of course, we still aren't content. We're constantly working harder to develop even better seed varieties. Although you can rest assured, we're going to stick with the same old color.

**COVENTRY • Abbey • Bristol • VICTA • Accolade • Caravelle
Loretta • Applause • Ovation • Banner • Chesapeake • Aquara**

For free information circle #103

Marietta down for one year

The Marietta (Ga.) Country Club will close for up to a year while a \$1.8 million reconstruction takes place after the city takes over the club in September.

The city is purchasing the club for \$6.6 million and will issue a revenue bond for \$9 million to cover the purchase and reconstruction costs.

The course will close Sept. 30 and remain so for the next 10 to 12 months. The city manager sent out requests for proposals to design and/or manage the course. Responses were due back July 25.

Charcoal looms as high-use product

Charcoal could become a growth product in Japan where it is being used to improve soils and absorb chemicals on golf courses.

Japan's charcoal production peaked at 2.22 million tons in 1956, but has declined steadily since, according to The Japan Economic Journal. Today it is used primarily for cookouts by campers and yakitori (grilled chicken) chefs.

Charcoal is a low-tech product

made produced by heating wood (often scrap wood) in the absence of air. Water is driven off, leaving behind innumerable pores and giving it enormous porosity.

The pores trap various kinds of molecules making it an ideal absorbent for golf courses.

According to Japan's Forestry Agency, charcoal could be used to absorb chemical residues from grass that otherwise could pollute ground

water.

It can also improve certain types of acidic soil.

The calcium and potassium in charcoal provide a favorable environment for bacteria that enrich the soil with nutrients used by plants.

Charcoal also improves soil's capacity to retain water. Approximately 17,000 tons of charcoal are used annually to improve poor soil conditions in Japan.

Cleveland votes to remodel Manakiki

The Cleveland Metroparks Board of Park Commissioners has voted to improve 70-year-old Manakiki Golf Course at a cost that could reach \$1 million.

Architect Craig Scheiner of Dublin

is designing a master rehabilitation plan for the Donald Ross course that could include a continuous cart path.

Scheiner said he will concentrate on the course's drainage problems as well as the need for bigger tees and

more hazards.

The analysis should be completed by mid-August with work beginning by October.

The facelift is expected to take two to four years to complete.

NEWS

LPGA complex gains approval in Florida town

The Ladies Professional Golf Association and the city of Daytona Beach, Fla., have finally reached an agreement on the development of a new LPGA headquarters, two new courses and a resort hotel.

The potential economic benefit to the area could reach \$1 billion over the next 20 to 25 years, developers predicted.

The first championship course is tentatively scheduled for completion by Dec. 31, 1992, and the second a year later. The courses, LPGA headquarters, 225-room hotel, mixed residential and commercial development will be located on 3,700 acres located between Interstate 95 and 11th Street.

Consolidated Tomoka and Indigo Development Inc. own the property and donated 350 acres for the courses, LPGA headquarters, practice facilities and clubhouse.

"We're just delighted," LPGA Commissioner Bill Blue told the Daytona Beach News, adding the agreement is "the second step. The first was getting us to come here, and the third will be getting the effort underway."

Plans are to begin work immediately on a concept plan, seek proposals for a possible LPGA Hall of Fame, and select a course architect. The city will select the designer with input from the LPGA.

Cushman grants scholarships

Cushman Inc. has awarded \$250 scholarships to two students in Lake City (Fla.) Community College's School of Golf Course Operations.

Nancy L. Harris and Arthur W. Faris of Lake City received plaques and the scholarships to help them attend the three-year program that prepares students for work as golf course superintendents and assistants.

Cushman service personnel have provided instructional assistance to LCCC for more than 20 years, teaching basic golf course mechanics students the skills to maintain and repair turf maintenance equipment.

Golf Course News is published 12 times a year by United Publications, Inc., P.O. Box 997, 38 Lafayette St., Yarmouth, ME 04096. The newspaper is distributed without charge to qualified golf course superintendents, greens committee chairmen, club presidents and owners, as well as builders, developers and architects.

Second-class postage paid at Yarmouth, ME and additional office. Correspondence should be addressed to *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096.

Postmaster: Send address changes to Circulation Manager, *Golf Course News*, P.O. Box 1648, Riverton, N.J. 08077-9648.

NEWS

Skyline changes due, says AGC

American Golf Corp. plans improvements to one of its newest facilities, Skyline Woods Country Club in Omaha, Neb.

The Santa Monica, Calif.-based company will concentrate on completing the irrigation system. The cost is estimated at \$200,000.

American Golf bought the course, which opened in 1962 as Chapel Hill Country Club, from Dennis and Sebastian Circo in May.

Americans featured speakers at Europe show

American expertise in golf course design and management, master planning, water management and other areas will be evident in the second annual Golf Course Europe exhibition and conference this fall.

Golf Course Europe organizers, Expoconsult of Holland, have signed on American speakers in nearly every session of the conference, which will be held Nov. 28-30 at Le Parc des Expositions du Bourget in Paris, France.

American Society of Golf Course Architects President Dan Maples of Pinehurst, N.C., and ex-President Ed Seay of Ponte Vedra Beach, Fla., will speak at the design and construction session. Maples will dis-

cuss how America can help Europe in its golf development boom, while Seay, of Palmer Course Design Co., will speak on course design.

A session on the environment will feature J. Kollenkark of Ciba-Geigy talking on "The Responsibility of the Chemical Industry"; architect Bradford Benz of Los Gatos, Calif., speaking on "Golf Design and the Environment"; and G.S. Taylor of W.W. Johnson and Son Ltd. talking on "The Importance of Wild Flowers on the Golf Course."

During a session on the future for golf, National Golf Foundation President Joseph Beditz will talk on building courses for the future.

James McLoughlin of The

McLoughlin Group in Pleasantville, N.Y. and Michael C. Rippey, president of Can-Am Golf Enterprises, Inc. in Michigan City, Ind., will speak at a session on golf project management.

McLoughlin, who has consulted on projects the world over, will talk on master planning for golf course hotel and resort developments. Rippey will speak on estimating and controlling course construction costs.

Also, Otterbine Barebo Inc. President Charles Barebo will talk on water quality management, Toro Vice President of Agronomists James Watson on turfgrass management and water conservation

techniques, Larry Rodgers of Larry Rodgers Design Group in Denver, Colo., on types of irrigation systems, and Loft Seed Director of Research Dr. Richard Hurley on choosing the right seed mixture.

Ellen MacGillabry, Expoconsult's organizer of the conference, has also added workshops this year for the European greenkeepers.

A key speaker for the greenkeepers will be Gordon Witteveen, superintendent of two 18-hole golf courses and one nine-hole facility for the Board of Trade in Woodbridge, Ontario, Canada. Witteveen, whose courses are in a climate similar to Europe's and who trains European students to be golf course superintendents, will give a variety of tips of the trade.

Koch forms management, design firm

Professional golfer Gary Koch has formed Gary Koch Golf, a company that will focus on golf course design and ownership, golf facility management and development of golf course residential communities.

Koch, who will serve as president, said the Tampa, Fla., company's primary emphasis will be in Florida, but that golf projects elsewhere in the United States and in Europe are also being discussed.

Tony Mattera, formerly a senior executive with a major Florida bank, will serve as chief operating officer.

"I am really excited about this opportunity to expand my career in golf," said Koch winner of six PGA Tour events. "We have been working towards starting this company for over a year now."

"I will continue to follow my normal playing schedule on the PGA Tour while developing new business opportunities."

Gary Koch Golf also announced a working relationship with Can-Am Golf Enterprises, Inc. and its golf course architecture division, Hurdzan Design Group.

Can-Am Golf, a golf course management company headquartered in Michigan City, Ind., operates four courses in the United States and Canada and is scheduled to open a fifth course in August.

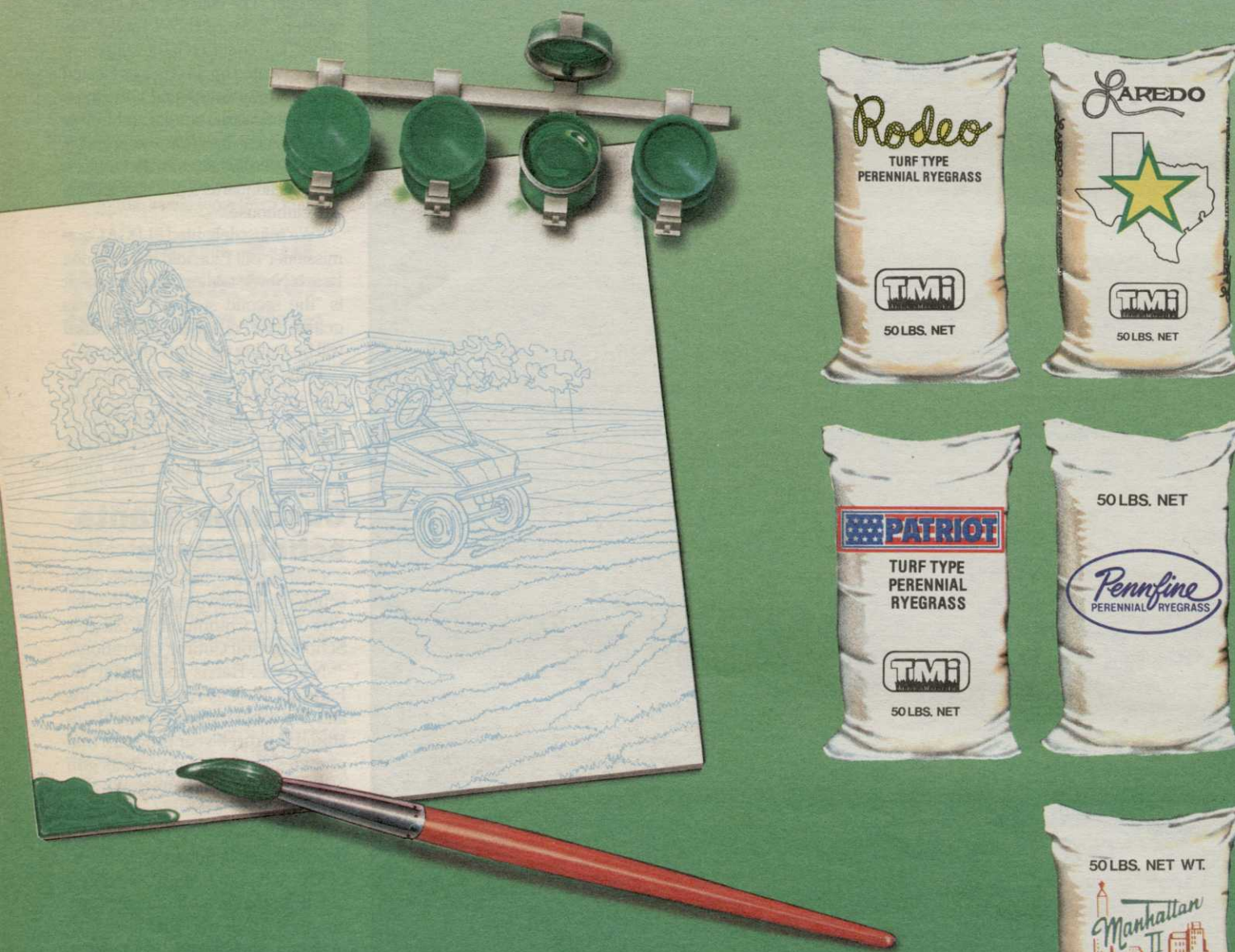
Three more are under development — one in the United States and two in Canada.

Koch said Can-Am will support his company in all areas related to course maintenance and management.

Mattera said: "Our goal has been to assemble the resources necessary to take any golf course project from design through opening day and beyond. Our association with Hurdzan Design and Can-Am will enable us to do that."

The company also is looking to acquire, lease, or enter into management contracts on existing golf facilities in Florida, and will consider joint venture projects with real-estate or resort developers.

Colorize Your Golf Course



Deep, dark, lush, vibrant, greens, the finest texture...TMI has the turf grass varieties that will liven up your golf course. In fact, in a recent national turf trial, TMI had the #1 varieties for both dark color and fine texture.

Years of trials and research have developed turf varieties that require less fertilizer, produce less clippings, have endophytes for insect resistance, and because of extensive root systems, require less water.

On your next project, specify the turf grass varieties that will give your golf course an improved appearance with less care...the top turf grass varieties from Turf Merchants.

For free information circle #104



TURF MERCHANTS

33390 Tangent Loop • Tangent, OR 97389 • (503) 926-8649
 Fax: 503-926-4435 • Outside Oregon: 800-421-1735

NCA announces environmental insurance



The National Club Association has announced availability of a "comprehensive" private club Environmental Impairment Liability insurance package.

Developed with Front Royal Insurance Co., a specialty insurer in Virginia, NCA's EIL program is designed for all types of private clubs. The package, available only to NCA member clubs, covers underground storage tank and off-premise releases as well as director liability for such releases.

According to NCA President George S. Squibb, "NCA has long believed that environmental concerns are the watchwords of the 1990s. Private clubs are challenged to provide state-of-the-art compliance, risk management and risk transfer (insurance) methods to respond to the challenges of environmental liability.

"NCA's EIL policy is a direct response to that challenge. We believe our EIL program will be a distinct contribution to the entire club community."

John Metelski, chairman of Front Royal Group, said: "We have ... developed these path-breaking environmental coverages in partnership with NCA... Based on numer-

One left dead in Mohawk Indian affair

Negotiations were continuing at the end of July between the Canadian government and Mohawk Indians in an uprising that has cost the life of one police officer.

A gun battle broke out on July 11 between Quebec police and Mohawks trying to keep ancestral lands from being turned into a golf course.

Indians barricaded the road into Club Golf Oka in Oka, a small town 20 miles west of Montreal. When about 100 policemen in riot gear stormed the barricade, Cpl. Marcel Lemay, 31, was shot and killed.

The Mohawks claim a treaty with the federal government gave them the land on which a nine-hole addition to Oka is planned.

Government officials say the Province of Quebec, not the federal government, has control over the land.

Barricades remained in place in late July.

Huff at Rutgers

Dr. David R. Huff has joined Rutgers University as the first Post-Doctorate Fellow in Turfgrass Breeding — a fellowship established through a donation from the Cultivated Sod Association of New Jersey.

The association donated \$25,000 and has promised additional support for the fellowship.

Huff's research will focus on the reproductive biology of Kentucky bluegrass and clarifying the identification of fine fescues.

Prior to joining Rutgers, he was director of plant breeding for B Four Corp. in Houston, Texas.

A Michigan native, he earned masters' and PhD degrees from the University of California - Davis, then was a post-doctorate research associate under Dr. Milt Engelke at the Texas A&M Research Station in Dallas.

ous test assessments of private clubs, we have developed what the insurance industry regards as a very comprehensive pollution liability insurance program.

"We believe NCA clubs constitute good environmental risks, and we also believe that the process of qualifying for and purchasing NCA's EIL policy will further reduce risks associated with environmental hazards."

John Cole Gayle, an NCA director and chairman of the association's Programs Committee, said: "We are convinced that private clubs, in the very near future, will consider EIL insurance as important —

maybe even more so — than any other means of protecting club and individual assets. The responsible private club should be a community leader in managing natural resources and protecting public health."

Three policies are available, depending on the type of club and the facilities/risks to be underwritten:

- Underground Storage Tank (UST) policy. If a club has one or more USTs, it will be required by EPA to present "evidence of financial responsibility" by October 1991. In the coming years, a club's UST program will have to comply with certain federal, state and local test-

ing, monitoring and remediation regulations. Club liability for UST releases exists regardless of regulations, beginning with installation of the UST.

- Coverage for off-premise releases. All clubs shoulder liability for pesticide, herbicide, fungicide, rodenticide, and even uses of petroleum and cleaning products. Club employees are probably covered by Worker's Compensation insurance, but clubs are seldom covered under their general liability policies for gradual or sudden and accidental releases affecting the surrounding community. This policy provides that coverage, assuring clubs that

off-premise environmental liabilities are adequately underwritten.

• Directors and Officers (D&O). Club D&O policies normally contain a "pollution exclusion," meaning that D&O policies will not provide defense or indemnity for legal actions resulting from environmental incidents.

NCA Director of Marketing Legare Van Ness has further information at the association headquarters in Washington, D.C.

How to prevent hostile take-overs.

Cushman Sprayers.

Fungi, bacteria, viruses, insects, weeds. Give them an inch and they can take over your course. But with sprayers from Cushman® standing by, they won't have a chance.

Cushman can deliver a lightning punch right on the chin.

State-of-the-art accuracy is provided by the industry's most advanced electronic computer controls. A wide range of nozzles are available for all applications and requirements. Linear

actuated boom lifts and foam markers complete the package, putting you in absolute control over a precise application process.

Nothing is better at meeting your application

requirements. For a single source of outstanding sprayer equipment and service, contact your Cushman dealer today. Or call toll-free 1-800-228-4444 for more information.



CUSHMAN
BUILT TO LAST

8202 Cushman, P.O. Box 82409, Lincoln, NE 68501
©Cushman Inc. 1990. A Ransome Company
All rights reserved.

For free information circle #105

Return to 'traditional' course design

It was exciting to watch the British Open this year.

The nearly flawless play of Nick Faldo was most commendable. However, the more I learn about golf course design, the physical make-up and layout of a golf course attract my attention more than the great play of world-class professionals.

The Old Course at St. Andrews is truly what golf was meant to be played on. I believe a return to the more traditional designs is at hand.

PGA Commissioner Deane Beaman even admitted that he now feels the TPC course at Ponte Vedre, Fla., is too extreme and that, basically, it's time to rethink



golf course design. I couldn't agree more!

I believe most of the architects and designers today agree that a

less extreme, less radical design is the future.

Jack Nicklaus commented recently that many of his designs come as a result of the developer/owner's request. They tell Jack they want a "top 10" golf course. Today, many feel that to be the best it's got to be long and play like U.S. Open conditions.

I disagree. Just play a Donald Ross course and you'll get the feel of what golf was meant to be and, in my opinion, will return to.

This month's editorial feature takes a look at the seed and sod industry, focusing particularly on Zoysiagrass sod.

I recently got a first-hand look at the great Northwest seed and sod business when visiting a few of our good friends in the Willamette Valley of Oregon.

If you've never had the opportunity to visit a seed farm or seed research facility, it's a tremendous learning experience.

My experience came courtesy of Turf-Seed Co. Bill Rose and

company were kind enough to include me in the rehearsal of their field day event. As a result I'm planning a return trip to attend a few of the field days that are held annually in June in the Northwest.

Golf Course News has officially become a member of the BPA — Business Publications Audit. As a reader, this assures you that the editorial and advertising in every issue are targeted specifically to you. We are a proud member of BPA and we will continue to provide you with the best editorial product in the golf course industry.

Sincerely,
Charles E. von Brecht
publisher

Researchers know Solomon was right

BY MARK LESLIE

Pests and diseases, droughts and floods, extreme cold and extreme heat. All could endanger quality turf — the kind that golf courses absolutely need.

But **could** is the operative word here. For as the battle for survival is being waged where our feet tread, the war may be won in far-off laboratories and test fields.

That is where turf scientists at universities and private companies ply their trade, where they strive to breed the best turf available, to conquer whatever might attack their charges.

Sound overstated?

Perhaps. But golf is a mega-industry that makes billions of dollars a year for the courses and the businesses surrounding them, from resorts to restaurants and hotels.

And crucial to the golf industry



is healthy turf.

As environmentalists push to outlaw chemical treatment of turf and field burning

where turf seed is grown, seed producers and others must look ahead. Indeed, they are looking ahead, getting a jump on possible legislation that would imperil them.

King Solomon wrote:

"A little sleep, a little slumber, a little folding of the hands to rest — and poverty will come on you like a bandit and scarcity like an armed man." (Proverbs 6:10-11)

And again in Proverbs 13:24, he wrote:

"Diligent hands will rule, but

laziness ends in slave labor."

As evidenced at field days held this summer in the Northwest, the seed industry is not slumbering.

It is taking a lead position — for survival reasons as much as humanitarian.

Research is paying off.

Jacklin Seed Co. and Turf-Seed Inc. unveiled turf seed varieties that grow well even when the growing fields are burned each year.

Most likely, other companies are doing the same.

Turf Merchants has bred a dwarf fescue that it says produces minuscule amounts of clippings. With many landfills banning grass clippings, this will be a critical advancement for many golf courses.

Other company and university researchers are daily working to

produce grasses that require less water, or that grow more slowly and thus need less mowing, or that are more tolerant of heat or cold.

Whatever problem might exist out there in the Land of Turf, be assured turf experts are advancing the cause of turf survival. It's no little matter — in quality of play for golf courses and in dollars for the turf seed industry.

The bottom line is, he who produces the best of a product lives to produce yet another day. He who dallies, perishes — left behind by his customers as well as his competition.

As American essayist Logan Pearsall Smith wrote early this century:

"How can they say my life isn't a success? Have I not for more than 60 years got enough to eat and escaped being eaten?"

COMMENT

CONCRETE NOW REPLACES ASPHALT!

With the Concrete Path Paver you can install concrete paths, in most cases, for less than the cost of asphalt construction.



- Neater, Cleaner, Faster.
- Custom-built concrete paver designed to pour paths and sidewalks.
- Eliminates form work while reducing labor as much as 80%.
- Capable of placing and finishing 10 yards of concrete in three minutes in paths of 4-12 feet wide.

Call or FAX today for free estimate or more information.

(800) 833-3014

(904) 746-3130 FAX (904) 746-4006

Southern Concrete Pavers, Inc.

3210 W. Woodthrush St. • Lecanto, FL 32661

Patent #4,878,778

For free information circle #110

GOLF COURSE NEWS

Publisher
Charles E. von Brecht

Editorial Director
Brook Taliaferro

Managing Editor
Mark A. Leslie

Associate Editor
Peter Blais

Contributing Editor
Vern Putney

Editorial Advisory Board
William Bengeyfield
Dr. Michael Hurdzan
James McLoughlin
Brent Wadsworth

Production Manager
Joline A. Violette

Circulation Manager
Tori Turpin

Editorial Office
Golf Course News
PO Box 997
38 Lafayette Street
Yarmouth, ME 04096
(207) 846-0600

Advertising Office
National Sales:
Charles E. von Brecht

Marketplace Sales:
Simone M. Lewis

Golf Course News
7901 Fourth St. North
Suite 311
St. Petersburg, FL 33702
(813) 576-7077

West Coast Sales
Wayne Roche
James G. Elliott Co.
714 W. Olympic Blvd.
Suite 1120
Los Angeles, CA 90015
(213) 746-8800

United Publications, Inc.
Publishers of specialized business and consumer magazines

Chairman
Theodore E. Gordon
President
J.G. Taliaferro, Jr.



Charter member



Copyright © 1989 by United Publications, Inc. All rights reserved and reproduction, in whole or in part, without written permission from the publisher is expressly prohibited. POSTMASTER: Send address changes to Circulation Manager, Golf Course News, P.O. Box 1648, Riverton, N.J. 08077-9648.

Construction, renovation seminar topics at SUNY-Delhi

A seminar on golf course construction and renovation, featuring Joseph Hahn, Dr. Norman Hummel and Dr. Michael Hurdzan, will be held Aug. 21 at the State University of New York at Delhi, N.Y.

The New York State Turfgrass Association is coordinating the seminar, proceeds from which will benefit the student golf course internship at SUNY-Delhi.

Hahn, superintendent at Oak Hill Country Club in Rochester, N.Y., will review his road to hosting the 1989 U.S. Open.

Hummel, of Cornell University, will present a session on green construction concepts and sand selection. He will demonstrate water movement in different soil mixtures and working models of greens profiles.

Hurdzan, of Hurdzan Design Group in Columbus, Ohio, has designed more than 100 new golf courses and some 200 renovation projects in the North America and Asia, will discuss an architect's view of design and specifications.

People may register by calling 800-873-TURF.

Mid-Am show endorsed

The Minnesota Nursery and Landscape Association and the Nebraska Association of Nurserymen have officially endorsed the Mid-Am Horticultural Trade Show.

MNLA and NAN joined the Indiana Association of Nurserymen and the Iowa Nurserymen's Association, which also endorse Mid-Am, and the Illinois Nurserymen's Association, Illinois Landscape Contractors Association and Wisconsin Landscape Federation, which are Mid-Am sponsors.

Kathy Siefken, executive director of NAN, said, "With our endorsement of the Mid-Am Trade Show, we hope to introduce more of our members to all that Mid-Am has to offer."

Both associations will help promote the show to their members.

Jones book chosen best

"Golf's Magnificent Challenge" by Robert Trent Jones Sr., with Larry Dennis, has been selected as the winner of the 1990 Golf House International Book Award.

The United States Golf Association presented the award June 13 to Jones and Dennis in recognition of the book's "outstanding literary contributions to the game."

Karen Bednarski, librarian and museum curator at Golf House, said: "This book is a very thorough examination of golf course architecture in the years following the second World War, with excellent illustrations. Besides being interesting reading, it is educational, and considered worthy of the Book Award."

Tony Roberts, of Scottsdale, Ariz., was responsible for the book's photography.

LETTERS

Turf industry must plan ahead

To the Editor:

I read with a great deal of interest your commentary (in June) on recent actions in Japan to ban or prevent use of chemicals on golf courses. I agree with your conclusion that this will become a problem here in the United States (Vermont and Green Point, Fla., for example).

The environmentalist agenda is to not only prevent chemical use in golf course management but to

ban uses in all non-agricultural areas. Their argument is that chemical use is of no value to society, it's cosmetic, not a human benefit, and society would be better off if everything were left to "Nature's Way."

We in the turf industry must plan now to educate the public, our legislators and the news media, that turf and its management have a value in our society and those who use chemicals do so in

a responsible manner.

Our actions in product stewardship, education, and research will be the foundation of our argument. Maybe it's not so much a helmet we need but a plan to address these issues as they occur and not react with flapping arms and shouts of dismay.

Sincerely,
B.R. Liles, director
Turf and Ornamental Dept.
Ciba-Geigy
Greensboro, N.C.

Thank you for book report

To the Editor:

Many, many thanks for Peter Blais' great article on our new book, "The Dictionary of Golf," in

the July edition of *Golf Course News*.

We don't know if you are a golfer or just spend your time writing about it — but if a golfer, our best wishes for many rounds in 1990 about eight strokes below your handicap.

If you are not a golfer, you don't know what you are missing — although at times you might wish you had taken up the game to get rid of frustrations (or does the game increase them?).

Best wishes, and many thanks to you and to the great *Golf Course News*.

Sincerely,
Spencer H. Davis Jr.
Harwood Associates
North Brunswick, N.J.

For The Golf Course Superintendent Who Has Everything.



RED THREAD:
2 oz./1,000 sq. ft. every 14-21 days.



POWDERY MILDEW:
1-2 oz./1,000 sq. ft. every 14-28 days.



SNOW MOLD:
4 oz./1,000 sq. ft. applied late fall.



RUST:
1-2 oz./1,000 sq. ft. every 14-28 days.



ANTHRACNOSE:
1-2 oz./1,000 sq. ft. every 14-28 days.



BROWN PATCH:
2-4 oz./1,000 sq. ft. every 10-21 days.



STRIPESMUT:
1-2 oz./1,000 sq. ft. applied late fall or early spring.



SUMMER PATCH:
4 oz./1,000 sq. ft. applied April-June, or according to local recommendations.



DOLLAR SPOT:
1 oz./1,000 sq. ft. every 28 days.

Only Banner® lets you prescribe just the right preventive treatment for so broad a spectrum of turfgrass diseases. For even more helpful information, contact your turf products distributor.



TORO IS ABOUT TO BLOW YOUR

Every year the algae returns. And the headaches return. Until now, there has been no permanent, effective solution.

A toxic waste dump.

Chemicals are nothing more than a temporary measure. Copper Sulfate is expensive. And the heavy metal eventually sinks to the bottom, leaving a hazardous and toxic waste.

Downed irrigation systems.

All algae are born with one mission: to shut down your irrigation system as thoroughly as possible. And cost you a fortune in wasted



Before installation



30 days after installation

man-hours attending to clogged filters, valves and screens. Fouled sprinklers. Blown irrigation pipes. And irate club members who can't understand how you could allow brown spots on the fairways. Algae mats on the water. And such a stench in the air!

The Toro AIRE-O₂ aeration system annihilates algae.

Toro, the industry leader in water resources management, brings you the AIRE-O₂ aerator. A totally effective solution based on a scientific, ecological understanding of the problem and its cause.

ALGAE PROBLEMS AWAY.



Toro AIRE-O₂ unit

As ponds age, oxygen is depleted. Algae proliferate simply because their natural enemies suffocate. Fertilizer runoff and effluent water only worsen this anaerobic condition.

Circulation is the key.

By powerfully blowing oxygen horizontally into your pond, the AIRE-O₂ aerator promotes a steady current that breaks up stagnant water, increases the oxygen level, and disperses it throughout the pond. And



AIRE-O₂ system's patented flow linkage process promotes circulation throughout the entire pond

your pond water becomes crystal clear. Naturally. With our patented flow linkage process, the AIRE-O₂ system can oxygenate and circulate any pond—no matter what its configuration—eliminating all places where algae may hide.

And that means we can turn your eyesore into a thing of beauty in no time. For all time.

For more information write: The Toro Company, 5825 Jasmine Street, Riverside, CA 92504. Or call (714) 688-9221.



Excellence in Irrigation®

Not resting on laurels, Bator tackles Merion

BY PETER BLAIS

The resume reads: Superintendent at Oak Hill, Pine Valley and now Merion. Also designed two golf courses.

Pretty impressive for a guy who had no idea what he wanted to do when he was 18.

"I didn't care for school, but I played a lot of sports," remembered Dick Bator of the summer following his senior year of high school. "I was taking golf lessons at Amherst (Mass.) Golf Course when I met (University of Massachusetts Professor) Joe Troll."

The recently retired head of the UMass turf management school encouraged Bator to enroll at UMass. A two-week stint on a local factory assembly-line convinced Bator a college education wasn't such a bad idea and he enrolled that fall.

Bator did an internship at Ludlow (Mass.) Country Club and, with associate degree in hand, became head superintendent at Mill River Country Club in Stratford, Conn., at the ripe old age of 20.

Mill River had some of the state's best golfers. But the course had been allowed to deteriorate to the point that the state golf association declared it would never again stage the state title there, said Bator. Within three years, he whipped the Tom Winton-designed course into shape and the Connecticut Open returned.

The Country Club of Pittsfield (Mass.), "the blue blood course in that area," according to Bator, was his next stop. He stayed there seven years before venturing out of New England in 1977 to Oak Hill which was preparing for the 1980 PGA Championship.

Bator was selected from among 100 applicants for the head post at the 36-hole, Rochester, N.Y. club, thereby accomplishing the second of his two career goals when he graduated from UMass — heading a Connecticut club and hosting a major tournament.

"There were a lot of trials and tribulations," said Bator. "The Fazios (George and Tom) had just rebuilt four holes and we were waiting for those to grow in. Both courses were pretty run down. We spent the next



Dick Bator at his newest project, Merion Golf Course.

three years improving drainage, dealing with thatch and addressing the lack of turf on greens, tees and fairways. We had to rebuild from top to bottom. We made a lot of mistakes. But there was no comparison between the course when we took over and when the PGA took place."

Pine Valley was ranked among the top three courses in the world when Bator assumed the head superintendent's post in 1983. Poor turf conditions, particularly a thick thatch layer, were keeping the Clementon, N.J. facility from its rightful No. 1 spot, he said.

Bator's crews aerified the fairways 23 times over the next three years in preparation for the 1985 Walker Cup. He also used triplex mowers on fairways for the first time to get a 3/8-inch cut. The result was a successful Walker Cup and the No. 1 ranking among the world's courses, said Bator.

"We'd had some problems with the course before Dick came," said Pine Valley Chairman Ernest Ransome, who was president

SUPER FOCUS

eyes is a thrill. Building a course is like an artist molding a piece of clay. I always wondered if I could build a course and I found out that I could. What I learned as a superintendent at Oak Hill and Pine Valley certainly helped."

But the lure of again managing a world-class course finally won out. While interviewing for the head post at Tom Fazio's exclusive Caves Valley Club in Baltimore last summer, Bator was approached by Merion Green Committee Chairman James Bradbeer and President W. Scott Smith.

"There was an instant chemistry between Mr. Bradbeer, Mr. Smith, the committee and myself," said Bator. "When I left Pine Valley, I said I'd never come back this way. But here I am again at a major league course trying to maintain major league conditions."

"The transition from designing to the daily battle of maintaining a course has been the most difficult aspect of the job. I'm still a little rusty."

"Maybe there were no challenges left in Rochester. Maybe I missed the big time. I don't know. All I do know is I've always loved this course and I'm glad I'm here."

Bator immediately set about trying to restore the Hugh Wilson-designed facility. Wilson, coincidentally, helped finish Pine Valley's final four holes after original-architect George Crump's death.

"The biggest thing was to get the greens up to speed," explained Bator. "It's a thinking man's course. If the speed is what it should be, then it's tough to break par. We want to bring the greens back to (U.S.) Open speed."

"We've started a massive aeration program; modified them with pure sand to harden them up; started an overseeding program with Penncross bent; top dressed them to smooth them out; improved the nutrient levels; checked for nematodes and diseases; and started a monthly newsletter outlining the steps we were taking to all members."

His crews have rebuilt seven tees and patched a dozen others. A two-year, drainage-improvement program is in place. Tree root pruning around greens is underway. The irrigation system is being refurbished and maintenance areas updated.

"We're trying to restore the ragged edges around what may be the best-designed bunkers in the world," said Bator, who is ahead of schedule at the close of the first year of his three-year restoration program. "We want to restore their Scottish appearance."

"We also want to restore the old fescues and the native grasses for the contrasting colors. . . We'll begin gradually converting our fairways from poa to bentgrass Aug. 6. We'll overseed and by next June we'll have 90 to 95 percent bentgrass on the fairways. We did a similar thing at Pine Valley in 1983."

Bator credits his maintenance crew and Merion's administration for much of his success.

"It's to their (maintenance staff) credit that they've adapted to my high intensity and expectation level. The new and existing staff have blended well and are improving weekly. This first-year crew is as good as any I've had."

As for the green committee: "I've always been blessed with a free hand anywhere I've gone. It's the same here. I've never had an incompetent green committee, chairman or president anywhere I've been," he said.

Over the years, Bator has become known as a regional turfgrass expert.

"He's a dirt under the fingernails type of superintendent," said Jan Beljan, a senior designer in Fazio's office. "He's the grass guy

Continued on page 32

**Let
the
Professionals
Blend
Your
Greensmix**

The nation's leading soil blenders

Producing premium blends of sand and organic mixes since 1946.

GREENSMIX owns and operates high capacity soil conglomerators/homogenizers for precision blending of sand and amendments at, or near, your jobsite. **We travel anywhere in the USA or Canada to blend your rootzone mixture.**

CALL TOLL-FREE 1-800-537-1796

A DIVISION OF FAULK'S BROS. CONSTRUCTION, INC.

Christine Faulks
715-258-8566
FAX: 715-258-8750

PLANTSTAR, INC

- Manufacture of High Grade Liquid Fertilizer
- Customized Fertigation Systems
- Bulk Transfer And Handling Systems

1-800-277-STAR
404-769-TURF

PLANTSTAR, INC
PO BOX 304
Watkinsville Georgia
30677

Dollar Spot

Leaf Spots



The Most Effective, Longest-Lasting Solution.

In university test after test, and on course after course, Vorlan® has proven to be the most effective Dollar Spot and Leaf Spots fungicide available.

It's the result of Vorlan's unique chemistry, making it both a curative and longer lasting preventative. One application insures

disease-free turf for up to 28 days!

Vorlan is also more economical. The cost-in-use is lower, because it lasts longer.

And Vorlan is easier to use. You can apply it at the same low rate for both Dollar Spot and Leaf Spots control. And it's available in both liquid flowable and wettable powder forms.

Contact your Grace-Sierra distributor today and order Vorlan. Or, call us toll-free at 1-800-492-8255.

Because nobody can help you through the tough spots like we can.

GRACE SIERRA
Tournament Condition Every Day

U.S. Open win spurs more business for Hale Irwin

BY PETER BLAIS

A U.S. Open victory is good for business, just ask Patrick Fister or Richard Phelps.

Fister is senior vice president of Hale Irwin Golf Services, Ltd. Phelps, who has many courses to his own credit, is Irwin's lead architect on golf course projects.

"There's definitely been a lot more interest," said Fister, following Irwin's second straight tour victory at the Buick Classic. "We've had a lot more requests for information and site visits. And the people we've been negotiating with have signed up quickly."

"It's hard to say whether it's the excitement over Hale's victories or wanting to preserve the contract price. But we've put no pressure on people to sign up before the price goes up."

In fact, there are no plans to cash in on Irwin's success by raising his \$450,000 architectural fee, said Fister.

"Hale's always believed his ability to play and win has no direct correlation to his ability to design an excellent golf course," Fister said.

Overseas offers in excess of Irwin's fee have come since his June rampage. But due to his busy schedule, which includes 20 to 22 Tour events yearly and organizing a charity tournament for a St. Louis children's hospital, he won't be accepting more overseas work than usual, Fister said.

Irwin has limited himself to three or four courses a year since entering the design field

in 1985. Four Irwin courses are open and another seven are in varying stages of planning or construction, including two in Japan.

The three-time U.S. Open winner has become increasingly involved in the actual design and sales calls, Fister said. He devotes six to 10 days to each project, making 10 to 15 site visits.

But as do most player/designers, Irwin relies heavily on a trained golf course architect in laying out a facility. In Irwin's case, that's Phelps.

"Hale offers different ideas than someone like myself who was college-trained in landscape architecture," said the Evergreen, Colo.-based architect. "He is more careful about things like making sure three or four consecutive doglegs don't all go in the same direction or seeing that all the par 3s are aligned differently. And he adds some artistic slants that are very refreshing."

Phelps has been in the golf course architecture business for 29 years and was president of the American Society of Golf Course Architects in 1980-81. He enjoyed great success before joining with Irwin. For instance, four of his five Texas courses were ranked among the top 20 in the Lone Star State by the Dallas Morning News.

"Most of my courses were in the municipal and public sector. The budgets were smaller and the sites less desirable. With Hale, we get better sites and bigger budgets that allow us to express ourselves. It gives us the opportunity to be more creative," said Phelps.

He and Irwin have projects underway in Springfield, Ill., Ft. Wayne, Ind., Edenton, N.C., Sun Valley, Idaho, and San Jose, Calif.

NEW COURSES

von Hagge team designing in Mexico

Von Hagge Design Associates of Spring, Texas, is keeping busy around the world, including two courses in Mexico.

Robert von Hagge and his team are proceeding with work on a 27-hole championship course in Queretaro, north of Mexico City, and a 27-hole layout at Isla Navidad on Mexico's central Pacific coast.

The Queretaro course is part of a private residential development in a historically promi-

nent political and cultural area. The course is part of a sports complex, that will include a clubhouse, casitas and about 1,000 residential lots developed by Ignacio Santos.

The Isla Navidad property should provide extraordinary holes and vistas. It is on an isthmus, surrounded by mountains, the ocean and an inland bay from which the Spanish conquistadors built and launched their ships that sailed west to discover the Philippine Islands.

P.B. Dye creates 'manicured' look

P.B. Dye departed from his links style in designing a new nine-hole course at Fisher Island, Fla., which he says possesses an "Augusta National look."

With manicured fairways and roughs and a variety of grasses, the resort community course on Biscayne Bay should be exciting, Dye and its owners say.

There's "nothing short about it," Dye said, referring in part to ocean winds that prevail over the 3,105-yard layout.

Fisher Island Managing Director Jim Baumann said Dye was told "to give us the best nine-hole course in America, and he's promised to deliver."

The course will feature tropical vegetation grown by one of the club members, Manuel Diaz, whose Manuel Diaz Farms is the largest tropical nursery in Florida.

Dye's trademark hole is the seventh. It is a 165-yard island green par 3, set amidst a lagoon with Miami Beach a scenic backdrop.

Newly planned U.S. courses

Following is a chart containing the sites and contacts for new courses and renovations in the preliminary planning stages. When these courses are ready to begin construction they will be listed again in the "Courses newly approved in the U.S." chart.

We would appreciate your help in updating this section. To contact us call 207-846-0600 or write Golf Course News, P.O. Box 997, 38 Lafayette St., Yarmouth, Maine 04096.

Location	Contact
California	
Desert Hot Springs	Cornerstone Development, El Toro
North Fontana	Lewis Homes of Upland
San Luis Obispo	Dan Heath, Water World Resorts Inc.
Stockton	Howard Arnaiz, Steven Malcoun
Thousand Palms	Paul Heck, Rancho Mirage
Truckee	Ron Paar, Camray Capital Group
Colorado	
Grand Junction	Par Excellence Recreation Co., Littleton
Florida	
Pensacola Beach	Joe Endry, JME Realty
Stuart	Martin County Commissioner Maggy Hurchalla
Illinois	
Chicago	Oak Lawn Park District
Galena	Forum Development Corp., Bloomingdale
Indiana	
East Chicago	Parks Dir. Richard Gomez
Hammond	Mayor Thomas McDermott
Indianapolis	George Adams, Ft. Myers, Fla.
Indianapolis	Mansur Development Corp.
Indianapolis	R.N. Thompson & Assoc.
Munster	Town Manager Thomas DeGiulio
Iowa	
Clinton	Mayor Betty Snyder
Kentucky	
Louisville	Arnold Palmer
Maryland	
Annapolis	Washington Brick & terra Cotta Co.
Massachusetts	
Mattapoisett	Keller Co.
New Hampshire	
Chichester	Frank Darling
New Jersey	
Jersey City	Peter Ylvisaker
New York	
Bridgehampton	Rees Jones
Holbrook	Benjamin Development, Garden City
South Dakota	
Vermillion	City Manager Jeff Pederson
Texas	
Weslaco	First Golf Corp., Denver
Vermont	
Colchester	Drumlin Development Corp.
Virginia	
Bristol	Larry Dingus
Fredericksburg	Robert E. Reid, Jr.
Washington	
Olympia	John Morrison, Gig Harbor
Vancouver	Port Commissioner Arch Miller
Wisconsin	
Weston	William Greenwood

IT'S THE LAW!

Meet mandatory government regulations for storing hazardous materials with...

Smith's STEEL CONTAINMENT BUILDINGS

Especially designed for securely storing and handling hazardous products such as pesticides, herbicides and fertilizers. Environmental Products Containment Systems® are ideal for spill accountability. Produced from only high quality materials, they meet all current government regulations — and are Factory Mutual (FM) approved. Plus they are far more efficient and cost-effective than other types of storage structures.

Heavy duty steel construction ■ Chemical resistant epoxy finish ■ Portable ■ Requires no additional foundation or supports ■ Explosion relief roof panel ■ Vents for cross flow and gravity ventilation ■ Many options **SIZES: 5' x 5' and 5' x 10'**

SHIPPED FACTORY ASSEMBLED OR IN EASY TO ASSEMBLE KIT

Your ideal preventative measure!

Smith's INC.

DRAWER X, Red Bank, N.J. 07701 • TEL. (908) 222-4600 • FAX 908-222-7288

Toll Free (OUTSIDE N.J.) 800-631-2226

WRITE FOR LITERATURE

SW-488

Jones' new challenge: 1st Fla. course

In creating his first course in Florida, Robert Trent Jones Jr. will remake flat terrain into a layout "with gently rolling hills, lush tropical vegetation and strategically placed lakes and lagoons."

Jones is teaming with Arvida's Weston, a new Broward County community, to build Weston Hills Country Club, a 6,930-yard, par 72 course that will open in September. At least one more course will be constructed in the community.

Jones said: "The warm subtropical winds and south Florida sun are important factors that dictate the placement of bunkers and which grasses to use."

He selected Tidewater Bermuda on the fairways.

With four sets of tees, players of all abilities can play the course. "Weston Hills will be a course where you have the opportunity to use every club in your bag with a good mix of long and short holes... I patterned this course after my own game. I want to identify the best club champion at Weston Hills Country Club, not the best player in the world," Jones said.

The first four holes on both nines have no water hazards, but water comes into play on a number of other holes.

Golf Club of Ga. opens Hills layout

The Lakeside course has been completed at the Golf Club of Georgia, an Arthur Hills design in Alpharetta, Ga., near Atlanta.

A second 18 holes by Hills, named Creekside course, is now under construction.

The Lakeside course will open in the summer of 1991, giving it a full year to grow in. The course measures 7,034 yards from the back tees. The Golf Club of Georgia is part of the Windward development by Fuji.

Meanwhile, groundbreaking is scheduled for Aug. 24 for a new Hills course for the city of Miamisburg, Ohio, outside Dayton. The course will be an upscale municipal course, located on a rolling site.

Courses newly approved in the U.S.

Golf Course News is publishing this list monthly. It includes courses that have been approved around the country in the past month. In addition, the chart on the next page contains the sites and contacts for new courses and renovations in the planning stages. When those courses are ready to begin construction they will be

listed again in this "Courses newly approved in the U.S." chart.

We would appreciate your help in updating this section. To contact us call 207-846-0600 or write Golf Course News, P.O. Box 997, 38 Lafayette St., Yarmouth, Maine 04096.

Under "Type" — D= Daily Fee; P= Private; and M= Municipal.

Location	Course Name	Type	Holes	Address	Architect/Contact
California					
Camarillo	Spanish Hills Golf & CC	P	18	N/A	Bob Cupp
Carlsbad	Lake Calavera GC	M	18	N/A	Ted Robinson
Escondido	N/A	M	18	N/A	David Rainville
Rancho Cordova	Shalako	N/A	18	Sunrise & Kiefer Blvds.	Tom Weiskopf
San Diego	N/A	D	18	Pointe Resort	Billy Casper
Florida					
Marianna	Magnolia Oaks Golf & CC	D	18	2496 Indian Springs Rd.	Bergmen Enterprises
Georgia					
Greensboro	Port Armor	P	18	1 Port Armor Pkwy	Willard Byrd
LaGrange	The Fields GC	D	18	Priddy Rd	Mike Young
Monticello	Hunter-Pope CC	P	18	Hwy 82	Mike Young
Hawaii					
Lanai City	N/A	D	18	Lanai City	Greg Norman
Illinois					
Belleville	Orchards GC	N/A	18	Greenmount Rd.	Bob Goalby
Orland Park	Crystal Tree	P	18	14300 Crystal Tree Drive	Tobert Trent Jones, Jr.
Iowa					
Long Grove	N/A	M	18	Scott County Park	Blue T Golf Inc. of Omaha, Neb.
Kentucky					
Louisville	Nevel Meade GC	D	18	Covered Bridge Rd.	Steve Smyers
Michigan					
Oxford	Metamora CC	P	18	N/A	Bills/Childs Assoc. of Sylvan Lake
Minnesota					
Inver Grove Heights	Inver Grove Heights GC	M	N/A	Babcock Trail & 70th St.	Williams, Gill & Assoc., River Falls, Wis.
Rochester	N/A	N/A	18	N/A	Leon DeCook
Missouri					
Cameron	Cameron Memorial GC	D	9	N/A	Don Wright Golf Design
Kansas City	Heritage Park	D	18	Johnson County	Donald Sechrest
Kansas City	LionsGate	D	27	Johnson County	Donald Sechrest
Platte City	Platte County GC	D	18	N/A	Don Wright Golf Design
Montana					
Great Falls	Black Eagle	M	9	Anaconda Hills	Neff & Assoc.
Nebraska					
Bayard	Bayard Municipal GC	M	9	PO Box 648	Marty Johnson, Sioux City
New Mexico					
Santa Ana Pueblo	Valle Grande GC	D	27	P.O. Box 1736, Bernalillo, N.M.	Ken Killian
North Dakota					
Fargo	Rose Creek GC	M	18	201 4th St. North	Richard Phelps
Ohio					
Toledo	Fallen Timbers Fairway	D	18	7711 Stitt Rd.	Steve Levitin & Harold Gauthier
Oklahoma					
North Oklahoma City	N/A	D	18	Kelley Ave.	Randy Heckenkemper, Tulsa
Pennsylvania					
Factoryville	Stone Hedge CC	D	18	RD-1	Jim Blaukovitch
Pittsburgh	Southpointe CC	P	18	Southpointe	Arthur Hills
South Carolina					
Hilton Heas	Colleton River Plantation	N/A	N/A	N/A	Jack Nicklaus
Seneca	Cross Creek Plantation	P	18	Wells Hwy.	P.B. Dye
Virginia					
Louisa	Louisa CC	P	9	N/A	Larry Kavanaugh

Clearly Affordable Two-Way Radios By Motorola Radius

Put the crisp, clean sound of MOTOROLA technology to work for you. RADIUS two-way radios are affordably priced. They will put more communicating power where you need it the most.

MOTOROLA radios deliver years of dependable trouble-free performance no matter where you use them. Indoors or out, the field proven quality of MOTOROLA can help make sure you are clearly understood.

- Low Cost: Radios Start at \$235.00
- Trade-Ins Accepted
- Up to Three-Year Warranty
- Free Two-Week Trial
- Immediate Delivery
- Variable Power Models Available

For more information in regard to the RADIUS line, or to take advantage of our trial offer, please call our nationwide toll-free number: 1-800-527-1670.

*Actual trade-in allowance depends on make and model of unit being traded in.



Page-Com, Inc. 10935 Alder Circle, Dallas, Texas 75238 1-800-527-1670

For free information circle #112

We create dreams, not nightmares.

Golf courses that begin as drafting table dreams too often end as maintenance nightmares.

At Mike Young Designs, we prevent nightmares by designing and building courses based on solid agronomics, total site evaluation and years of practical turfgrass experience.



**M I K E
Y O U N G
D E S I G N S**

Mike Young Designs. Knowledgeable turfgrass professionals committed to outstanding golf course design, construction and renovation. Dedicated to creating dreams.

P.O. Box 289
25 Main Street
Watkinsville, GA 30677
Phone: (404) 769-7415
Fax: (404) 769-8538

For free information circle #113

Clubs million-dollar losers in Supreme Court decision

BY MARK LESLIE

The U.S. Supreme Court has clarified a gray area of the Tax Code in a decision that will cost private tax-exempt clubs millions of dollars a year.

"We are naturally disappointed with the decision," said Harold B. Berman, chairman of the National Club Association's legal/legislative committee. "The High Court, at least, has clarified a murky part of the law."

The Supreme Court voted 6-3 in favor of the Internal Revenue Service's interpretation of Revenue Ruling 81-69 in the case of Portland Golf Club v. Commissioner of Internal Revenue.

The decision settles a nine-year court battle with the National Club Association and various clubs during which the clubs won two decisions in the Tax Court and one of four in circuit courts.

The contested tax has averaged \$2,000 to \$5,000 a year for tax-exempt clubs that have been in the Revenue Ruling 81-69 audit. A few clubs have substantially more at stake, according to the NCA.

James Singerling, executive vice president of the Club Managers Association of America, said of the Supreme Court decision: "Without a doubt, we're talking about millions of dollars a year."

NCA Director of Government Relations Tom Walsh said, "There are probably 100 to 200 clubs that will feel an appreciable impact."

At issue is a complex rule concerning the circumstances under which a social club may offset losses from selling food and beverages to nonmembers against the income from investments.

The High Court unanimously held that tax-exempt clubs must have a profit motive in "unrelated business activities" if losses from those activities were to be used to offset income from other sources.

Six of the nine justices agreed that profit motive must be determined by the same accounting method employed for tax-reporting purposes.

Writing the majority opinion, Justice Harry Blackmun said: "Congress intended that the investment income of social clubs (unlike the investment income of most other exempt organizations) should be subject to the same tax consequences as the investment income of any other taxpayer. To allow such an offset for social clubs would run counter to the principle of tax neutrality which underlies the statutory scheme."

Therefore, Blackmun wrote, losses incurred in sales to nonmembers can only offset investment income if those sales "are motivated by an intent to profit."

Portland Golf Club — and many others nationwide — use two accounting methods in figuring fixed expenses. The "gross-to-gross" method sets the percentage of fixed costs equal to the percentage of income earned from nonmember activities.

The IRS has demanded that the clubs use the alternate "square-foot-and-hours-of-actual-use" method, which greatly reduces the fixed expenses.

Justices Anthony Kennedy, Sandra Day O'Connor and Antonin Scalia disagreed with the majority, arguing that clubs should have greater flexibility in demonstrating profit motive than the single choice.

Kennedy said the Internal Revenue Code allows clubs the option of demonstrating profit motive by methods different from reporting

taxes.

"A taxpayer's profit motive, in my view, cannot turn upon the particular accounting method by which it reports its ordinary and necessary expenses ... The Court cites no authority for its novel rule and we cannot adopt it simply because we confront a hard case," Kennedy wrote.

"A taxpayer does not alter the nature of an enterprise by selecting one reasonable allocation method over another... The Court's decision also departs from the traditional

GOVERNMENT UPDATE

practice of the courts and the IRS. Rather than relying on strict consistency in accounting, the courts long have evaluated profit motivation according to a variety of factors that indicate whether the taxpayer acted in a manner characteristic of one engaged in a trade or business."

Jack Kelly, acting executive assistant of the IRS' Exempt Organizations Technical Division, agreed with the NCA and CMAA that the added taxes to clubs nationally "could be millions."

The Portland Golf Club had only

\$5,000 at stake. The NCA rose to its aid to use it as a test case for everyone, Walsh said.

Now, Walsh said: "The only way to get around this would be to get the IRS to change its interpretation ... or go to Congress. And this is basically too small a matter to get Congress involved. It amounts to asking them to open a loophole. The prospects of that are just not good."

Kelly agreed the Supreme Court decision should mark the end of the

Continued on page 17

Some big names have already started arriving for the 1992 PGA

Hosting one of golf's four major championships is a huge job. Just ask Superintendent Tom Van De Walle of St. Louis' Bellerive Country Club — site of the 1992 PGA Championship.

"I came here in 1986 with the major responsibility of getting Bellerive ready for the PGA," says Van De Walle. "Six years sounds like a lot of time, but we've rebuilt greens, tees, bunkers, fairways — even redesigned some holes entirely — and we still have a lot left to do.

"John Deere has played a big role in our success. We mow greens with the John Deere 22s, fairways with a 5-reel 3325 Turf Mower and tees and intermediate rough with a 3-reel 856 Reel Mounted Mower. The condition of the course has improved dramatically since we started using these mowers.

"We've converted almost all our fairways and tees to zoysia — a grass that's great to play on but tough to mow. The John Deere 3325 and 856 are the only mowers we've found that can handle it. Their cutting units stay true and don't let the turf get puffy. Plus, the single lever lift on the 3325 improves our fairways by allowing us to cross-cut more easily. In fact, the 3325 has done so well, we plan to buy another one next year."

For the name of your nearest distributor, or free literature on all John Deere's Golf and Turf Equipment, call 1-800-544-2122 toll free or write John Deere, Dept. 956, Moline, IL 61265. We know, like Tom Van De Walle, you're going to like what you see.



Tom Van De Walle of St. Louis' Bellerive Country Club is using a fleet of John Deere reel mowers to help him prepare for the 1992 PGA Championship.



Nothing Runs Like a Deere®



Referenda to reduce field-burning fail

BY MARK LESLIE

A pair of statewide initiatives that would have drastically or totally reduced field-burning in Oregon have failed.

The petitions were filed with the Oregon Secretary of State's Office on July 6, but fell short of the 63,578 signatures needed to put the matter before voters in November.

"We have a reprieve for a year maybe," said Dennis Hays, executive vice president of the Oregon Seed Trade Association in Portland. "We're sure a bill will be proposed in the state Legislature in January. If they (field-

burning opponents) don't get that through, they'll bring up this initiative again.

"These people are not going to stop."

The case is important to the golf industry in the United States. Oregon's 70 seed companies provide all U.S.-produced ryegrass, bentgrass, Chewings and creeping red fescues seed, half the U.S.-grown tall fescue seed, and about one-fourth its bluegrass seed.

For the growers, field-burning is the proven method to ensure a healthy crop.

"When you burn, the root stays alive and it comes back next year.

The burning gives it a new life so that it comes back pure and clean," Hays said.

"If there's no burning, you get disease-filled crops. The burning purifies. It kills disease and insects."

One of the initiatives called for a total ban on burning in five years. That failed to get the needed signatures but was still turned in to the secretary of state.

The second initiative would cut the number of acres that could be burned every year for four years until it lowered the maximum from the current 250,000 to 50,000 acres. That one got just more than

65,000 signatures, but some 1,500 allegedly were forged by petitioners who were being paid per vote.

Research continues

Hays said "tons of research" is being done to find new ways to purge the fields of disease and pests.

"The state is financing some of the research, a lot of private companies are researching it, and Oregon State University is studying it.

"They're looking for some way to deal with all the straw. Some straw goes to Japan now for ani-

mal feed, but there's not much nutrient in it. And there's not nearly enough demand."

Asked about the possibility of more propane burning, Hays said the process can create more

Continued on page 18

Tax case

Continued from page 16
debate.

"A Supreme Court decision is the law of the land. This decides the issue," he said.

Singerling feels Congress might be persuaded to rewrite the Code, but it is not the CMAA's role to lobby. "We encourage our members to assist congressmen to write positive legislation," he said.

The IRS is undefeated in the Supreme Court on tax-exempt tax code matters over a number of years, according to Walsh and Kelly. Walsh placed the number of cases at 18.

Added Kelly: "Yes, we've gone 12 or 13 (cases) over the last 15 to 20 years without losing. Most every case was a close issue that could have gone either way. And this one as well because we lost in several circuits."

In fact, the IRS lost this issue in three of six court decisions.

The IRS won in the 2nd Circuit (vs The Brook, Inc. in 1986), but lost in the 6th Circuit (vs Cleveland Athletic Club, Inc. in 1985) and twice in the Tax Court (vs North Ridge Country Club in 1989 and vs Portland GC). The IRS successfully appealed both Tax Court decisions to the 9th Circuit Court.

"It (Supreme Court decision) is disappointing," Walsh said. "Especially because when we left the oral arguments we at least had our fingers crossed that we might win. As it turns out we got three of the nine. We weren't that far off, especially given the IRS success rate-kill ratio on taking anyone to court on tax-exempt matters."

CMAA's Singerling doesn't think anyone "won" this case.

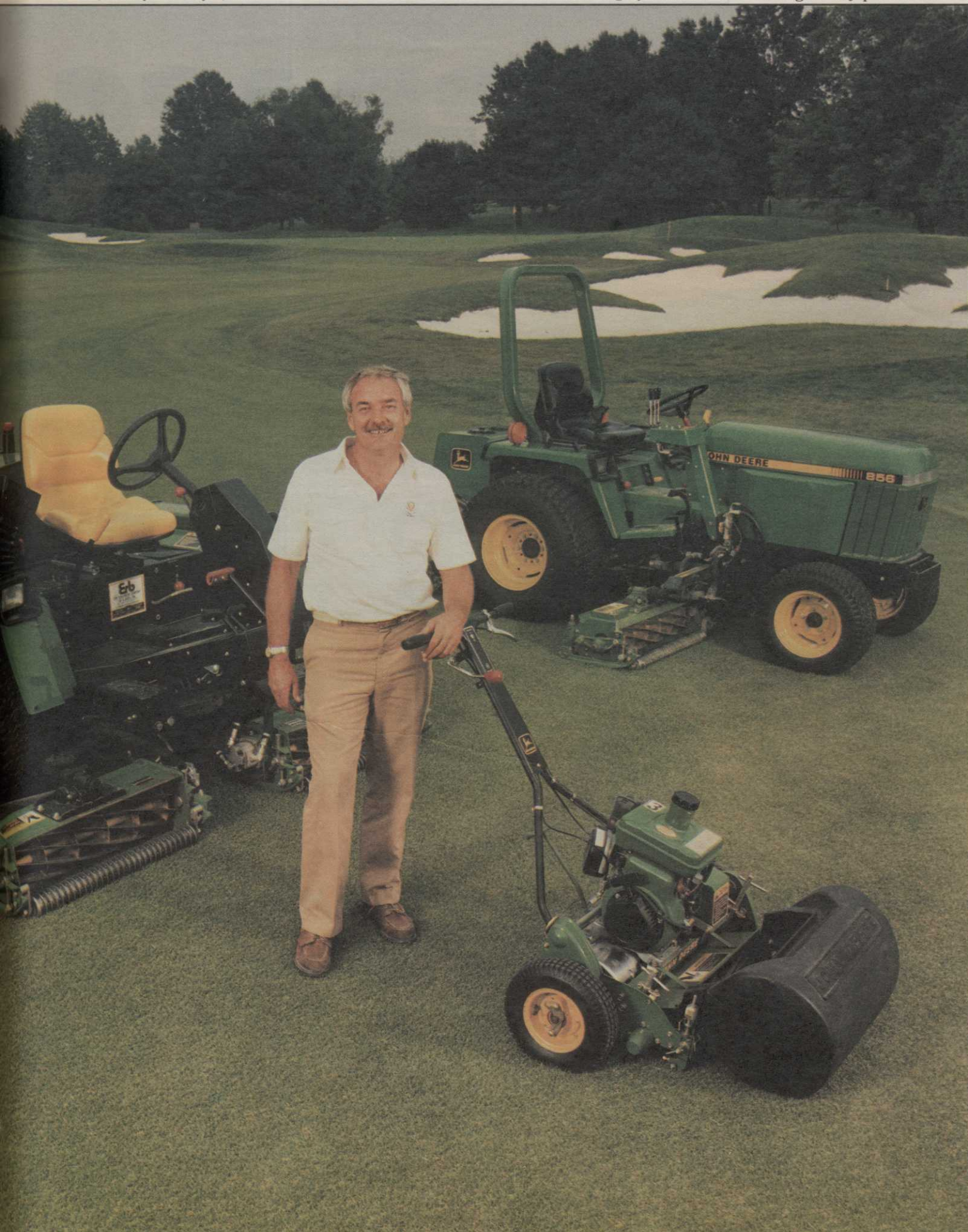
He said the IRS and courts are judging clubs by circumstances 20 years ago, when, in some cases, there was competition with local businesses. But, he added, clubs have vastly changed since then.

"Clubs today aren't in competition with local business but provide a place for special functions... As club business has expanded, we have further defined what a private club is. In a given community it may be the only place to hold a special dinner, or charity event," he said.

Singerling said: "Private clubs don't generate profits. No member of a private club has ever received a dividend from that club. Any revenue goes directly back into the community—to hourly employees and businesses who supply goods to that club. So by inhibiting these dollars, the community loses.

"Those who look at this as a victory, I'd like to know who they think will benefit..."

Singerling said CMAA is financing a study to determine the impact of the court decision. That study should be complete by September.



Washington county enacts burning law

While turfseed growers struggle against field-burning opponents in Oregon, the county of Spokane in Washington State puts a strict field-burning law into effect this year.

The Spokane County Commission established a tough new law that seed producers fear may spread to neighboring counties and the state of Idaho.

Doyle Jacklin, vice president of marketing for Jacklin Seed in Post Falls, Idaho, said the Spokane County law "does not affect Idaho or the surrounding counties but it's only a matter of time before those counties probably adopt the same rules.

"It definitely is a worrisome factor. It will affect us. And it appears there will be a gradual phaseout of burning in the Northwest."

The Spokane County law limits the number of "burn days" to 14 and they must be consecutive. "If rain comes and you can't burn, then that's tough," Jacklin said.

The law "also places a cap on the number of acres, and, in essence, says that existing acres can be burned but newly seeded acres cannot," he said.

A group called the Clean Air Coalition has been formed in Jacklin's home state of Idaho to oppose field-burning.

Jacklin said its members claim "burning could cause cancer because they don't know what toxins could be emitted by fields that have been treated by herbicide or insecticide. Well, in the first place they are very short-lived chemicals that are biodegradable and they don't even exist when we burn. If they did exist, burning would turn them to carbon dioxide and water.

"But they have raised the issue in the media as if it could be a cancer-causing process."

Jacklin guessed that in Idaho

the question of burning will be one or two years behind the states of Washington and Oregon, "but it will fall into line, and we'll have to deal with it in the same way as they have."

In the meantime, private companies are researching the subject, and the state has funded \$350,000 this year to the Department of Ecology to study to discover the effects of burning; if any toxins are emitted during the process; and the best climatic conditions to burn in.

Field days show industry progress

Record, even international, attendance was reported at the seed industry field days held this summer in the Northwest, the capital for turf seed.

Since the first field day, held eight years ago by Turf-Seed in Hubbard, Ore., the events have been growing in popularity and attendance.

Jacklin Seed Co. in Post Falls, Idaho, and Turf Merchants in Tangent, Ore., are also now holding annual field days.

Many seed distributors are turning the field days into a one-week tour of the region. This year, Jacklin hosted its "Discovery Tour" on Monday and Tuesday,

Turf-Seed held its event Thursday and Turf Merchant closed the week with a Friday presentation.

"We had an excellent turnout. Just under 200 (wholesale distributors and media people) attended," said Doyle Jacklin, vice president of marketing for Jacklin Seed.

Jacklin said his firm set a different sort of agenda this year, its third. It spent time on its "burn trials" which tested 90 turfgrass varieties on 40 acres for their production when the field is not burned.

The company also took people on a tour of its greenhouse, research laboratory and condition-

ing plant. Jacklin said a separate tour will be scheduled, if needed, for sod growers and golf course superintendents.

Tom Stanley said 500 attended Turf-Seed's event, equaling 1989 when the American Seed Trade Association Conference was held in Seattle, Wash.

Sod producers, golf course superintendents, landscapers, university professors and most of the firm's regional seed distributors attended the session.

"It was truly an international event," Stanley said, referring to guests from Finland, Japan, Aus-

Continued on page 22

BENTGRASS

Chester Manni
Bodega Harbour Golf Links
Bodega Bay, CA

Armen Suny
Castle Pines Golf Club
Castle Rock, CO

David Fleming
Singing Hills Country Club
El Cajon, CA

Kenny Goodman
Bull Valley Country Club
Woodstock, IL

Wesley L. Mathany
Glen Echo Country Club
Normandy, MO

Ben Crenshaw & David Doguet
Barton Creek Conference Resort
Austin, TX

Timothy G. Madden
Mt. Snow Country Club
Mt. Snow, VT

Steven A. Nash
International Town & Country Club
Fairfax, VA

Anthony W. Gustaitis
Whitemarsh Valley Country Club
Lafayette Hill, PA

Field-burning

Continued from page 17

problems than the field-burning, because "the residue doesn't go up in smoke but just lays on the ground."

He said: "A lot of growers are just plowing up the fields. But where they've done that, it's like a dust bowl."

Mike Robinson, president of Seed Research of Oregon, said the initiatives' failure "has made the growers and state agencies realize that something really has to be done. I think we'll see more effort into research. The farmers are doing more on their own to reduce burning.

"I think eventually within 10 years we're going to have to phase out field-burning."

Robinson said propane burning could be the answer, but burning foes include it in their call for a ban.

"If it's properly done, there's very little smoke produced, and that's ideal," he said.

These Pros Know A Great Bentgrass When They See It.

It takes a real professional to recognize the benefits of a superior turfgrass. These superintendents are pros at growing grass. Their expertise is invaluable in evaluating new turfgrass cultivars. So when we developed Providence and SR 1020 we went straight to them. We realized that university data was useful but that evaluation by outstanding superintendents under varied golf course conditions was more important.

These superintendents have all used Providence and/or SR 1020. Their comments have been enthusiastic about the performance

of both cultivars: the color, texture, density, disease resistance, and heat and drought tolerance are outstanding.

Providence and SR 1020 also produce excellent putting quality. That's important to the superintendent and to the golfer. Especially, a professional golfer like Ben Crenshaw. Ben knows golf greens and appreciates a bent that can provide a fine textured, uniform surface with an absence of grain for true putting quality.

Both cultivars produce this outstanding turf and putting quality with reduced maintenance. That's

important to superintendents, golfers, architects, and greens committees.

So nationwide the pros agree, Providence and SR 1020 really are exciting new cultivars. They represent the new generation of creeping bentgrasses.



P.O. Box 1416 • Corvallis, OR 97339 • (800) 253-5766

Endophytes a critical find for research

Nature more important in face of environmental constraints, says USDA official

BY MARK LESLIE

As research redoubles to develop turfgrasses that are resistant to every malady and attack from nature, the use of a natural fungus will play a significant role, according to the national director of the U.S. Department of Agriculture's National Turfgrass Evaluation Program.

Speaking from his Beltsville, Md., office, Kevin Morris said "use of endophytes will be more and more prevalent in developing varieties of grass."

An endophyte is a fungus that lives within plants and gives them natural resistance to certain surface insects.

"With the use of pesticides being restricted, this is going to be a bigger and bigger factor," Morris said.

"There are quite a number of perennial ryegrass varieties that have high levels of endophyte in the seed. It was first found in perennial ryegrass and has been bred into several perennial ryegrass varieties."

Now, breeders are searching for endophyte in other species.

Morris said it has been discovered in fine leaf and tall fescues, leading to work to incorporate it into those species.

"It's not as prevalent as it is in ryegrass right now, but it will be down the road. Hopefully we'll find one for Kentucky bluegrass — and maybe bentgrass, eventually," he said.

Asked for a timeframe for the public to expect new endophyte-laden varieties on the market, Morris said: "In practical terms, if they find an endophyte somewhere in Kentucky bluegrass it will be five or six

years before it will be readily available to buy."

Burn research

Meanwhile, turfgrass companies in the Northwest are making progress in research into ways to cope with a possible future ban on field-burning.

Doyle Jacklin, vice president of marketing for Jacklin Seed Co. of Post Falls, Idaho, reported that "some varieties of seed are being developed that aren't affected as much as current varieties by absence of burning."

The seed industry contends that field-burning doubles or triples seed yield. Jacklin Seed has confirmed those claims on a 40-acre test site, but in the meantime has also found some new varieties that call for special attention.

"We found that burning tripled production of many varieties, doubled production of others, and just increased yield of some,"

Jacklin said. "But there are a few that, by luck or happenstance, aren't affected so much.

"We have selected those with a good response and will proceed in developing them, even though they might not be as good a seed as others."

Seed yield under a no-burn situation "is a key consideration in developing new varieties," Jacklin said.

More Varieties Available

Other Seed Research cultivars bred for golf courses include:

- SR 4000 Perennial Ryegrass
- SR 4100 Perennial Ryegrass
- SR 4200 Perennial Ryegrass
- Nova Perennial Ryegrass
- SR 3000 Hard Fescue
- SR 5000 Chewings Fescue
- Titan Tall Fescue
- Trident Tall Fescue
- SR 8200 Tall Fescue

For Additional Information

Contact your nearest Bentgrass Marketing Group member for information and university test results:

Agriturf
59 Dwight St.
Hatfield, MA 01038
(413) 247-5687

Arkansas Valley Seed Co.
4625 Colorado Blvd.
Denver, CO 80216
(303) 320-7500

Arthur Clesen, Inc.
543 Diens Dr.
Wheeling, IL 60090
(312) 537-2177

Crenshaw & Doguet Turfgrass
7447 Bee Caves Rd.
Austin, TX 78746
(512) 263-2112

Lea's Green Meadows, Inc.
5050 Beach Place
Temple Hills, MD 20748
(301) 899-3535

Old Fox, Inc.
38 N. Court St.
Providence, RI 02903
(401) 438-5000

Pacific Horticultural Supply
12714B Valley Ave. East
Sumner, WA 98390
(206) 863-6327

Plant Gro Corp.
P.O. Box 703
San Jose, CA 95106
(408) 453-0322

Professional Turf Specialties, Inc.
133 Kenyon Rd.
Champaign, IL 61820
(217) 352-0591

Smith Turf & Irrigation
P.O. Box 669388
Charlotte, NC 28266-9388
(704) 393-8873

Sweeney Seed Company
488 Drew Court
King of Prussia, PA 19406
(800) 544-7311

The Terre Co.
P.O. Box 1000
Clifton, NJ 07014
(201) 473-3393

FOREIGN GROUP MEMBERS:

Kenko Commerce & Co. Ltd.
Mizushima Bldg., 4th Floor
2-11, Uchikanda 3-Chome
Chiyoda-ku, Tokyo, 101 Japan
(03) 258-8061

Rothwell Seeds Ltd.
P.O. Box 511
Lindsay, Ontario, Canada K9V 4S5
(705) 324-9591

Wright Stephenson Seeds
P.O. Box 357
Seven Hills, N.S.W.
Australia 2147
(02) 674-6666

Zoysia sod

Continued from page 21

ability in drought periods than other grasses like fescues and bentgrasses."

Morrow said improved Zoysias are being developed for other qualities, such as shade tolerance.

Stone said Zoysia's advantages are balanced somewhat by its susceptibility to brown patch in early spring and grubs that do it more damage than Bermuda.

Yet that apparently detracts little.

"I'm amazed people are going that route (sodding fairways), especially using Zoysias, because Zoysia is generally the most expensive to produce," Morrow said.

She said in the Southeast Bermudagrass sod costs 14 to 18 cents per square foot, whereas Zoysia sod costs 20 to 30 cents.

Mel Lavery, director of private real estate for Hallmark Cards, said at Hallbrook Farms Country Club in Leawood, Kan., the course was sodded at a cost of more than \$6 million.

While "a fair amount" of the rough was

sodded with bluegrass, 40 acres of Zoysia sod was laid, including all the fairways and some collars.

"Kansas is in the transitional zone and I don't know anyone else in the transition zone who did not use Zoysia," Lavery explained of the decision to use Zoysia.

Will the increased demand mean sod farms will increase their acreage of Zoysia?

They have the capability, according to Fender, who said most Zoysia farms also produce other types of turfgrass.

Asked if Pursley would do so, Morrow said: "I imagine, yes, if the demand is there. We have the capability."

Fifty of Pursley's 1,500 acres of sod are now in Zoysia. Other farms have as much as 200 or 300 acres of Zoysia.

A drawback for producers is that Zoysia can't be harvested as often as some other warm-season grasses, Fender said.

Morrow said a farm in the Sunbelt might get one harvest per year of Zoysia, while sod grown in the North probably would

Seed outlook

Continued from page 1

said: "The crops look tremendous this year, because of good growing weather... Every crop is great, even wheat."

But Hays and others tempered the optimism, saying the heavy supply will mean lower prices for most grasses except the high-quality, proprietary varieties that golf courses buy.

Seed Research of Oregon's president, Mike Robinson, said the 1990 season industrywide is mixed.

"The volume of seeds will be excellent," he said, "but there's probably more seed available than will be needed. We're in an over-supply situation in general. Some of the older varieties are more readily available than the newer varieties."

"Prices are off a little bit on the ryegrasses and bluegrasses, but not on the bentgrass and tall fescues."

"Proprietaries will hold their prices. Then you'll have a huge gap between them and the common varieties," Patterson said. "You'll see a 5- to 10-percent price reduction in some proprietaries, but overall they won't go down much in price... Top-quality proprietary varieties probably sold out earlier this year."

Hays said many companies that are growing expensive, proprietary crops "have had some failures and they need an average year to get their money back."

Robinson said his 40 distributors have bought all his company's proprietaries this year.

"Ryegrasses, bluegrasses, tall fescues, bluegrasses, fine fescues and so on are all sold out," he said, explaining that that seed is still available in the distribution chain.

But that's not the case at all companies, Robinson said. "A lot of companies are coming out with pretty cheap prices, so obviously they have seed to sell."

Kevin Morris, the national director of the U.S. Department of Agriculture's National Turfgrass Evaluation Program, said the golf industry's increased demand for bentgrasses will mean supply problems.

"There's more bentgrass on the market now but supplies are still tight on them. They don't have the production, especially on the new varieties, to keep up with the demand," he said.

Morris predicted that perennial ryegrass supplies will be good, as will Kentucky bluegrass, "except some of the proprietary varieties."

Marketing techniques said changing

The marketing of seed has evolved into a more sophisticated creature.

"We are marketers. We sell our seed first, then contract for the acreage we need," said Scott Patterson, vice president in charge of turf seed at Peterson Seed Co. in Savage, Minn.

Referring to a "carry-over" supply of turf seed from last year's crop that is pushing down prices, Patterson said the seed industry would not get caught with an over-supply if all the companies did business in this manner.

"There is still a lot of companies that do business the old-fashioned way, putting acreage in and then going out and selling it. But that philosophy is going more and more to the wayside," Patterson said.

While the prices for common turf seed plummet with over-supply, Patterson said, "The mentality has been to hold prices on proprietary varieties. There's more to it than just growing costs. You've got royalties, administration fees, advertising, a lot of costs they didn't used to consider."

"We've gotten smarter about our marketing product. Fifteen years ago I can't say we (in the seed industry) were the smartest marketing people in the world."

Company officials agree the marketplace has a "carry-over" of seed. Because of wet springs in the Midwest, Northeast and Mid-Atlantic states, homeowners and others didn't plant as much seed as normal. In Texas, Arkansas and other regions that were flooded last spring, the growing season is past for most of the public.

But golf course superintendents must carry on.

"We envision that especially in the golf course trade, sales should be excellent this fall," Robinson said. "Golf courses are not so seasonal. The ones in the South are going to overseed no matter what. In the North it's more of a homeowner market. If the weather is bad and housing starts are down, that's reflected in the marketplace."

"We're finding that a lot of golf courses in the North are having problems. It's hot and humid weather, they're getting a lot of diseases and a lot of kill on grass, and they will be doing a lot of seeding this fall with perennial ryegrasses and bentgrasses."

Heavy rains could harm the harvest, which started a little late, but otherwise the harvesting should carry on through July.

The new seed will be bagged in September and October.

GOLF COURSE NEWS

Zoysiagrass sod is

Supplies limited, growers say

BY MARK LESLIE

Zoysiagrass sod is growing in popularity, but a short supply will drive up the price this year, experts say.

"Fewer acres of Zoysia are harvestable this year because of weather damage, so the prices will be driven up for a season," said Douglas H. Fender, executive di-

rector of the American Sod Producers Association in Rolling Meadows, Ill. "Some golf course superintendents have called us looking for Zoysia sod. Some can't find it for hundreds of miles away from their courses."

Fender said weather has been the biggest problem.

"We had freezes in December that took out a lot of grasses, especially warm-season varieties. Then flooding hit in the spring along Texas, Louisiana, Arkansas and

Alabama."

In the wake of that damage, the price of Zoysiagrass sod rose "astronomically," Fender said. "Yet, for growers it was often an empty hope because there was no product to sell."

Regardless of the short-term outlook, the future looks bright for Zoysia sod producers because their product is becoming increasingly popular at golf courses.

Why? "Its characteristics are matched more closely with what

An exclusive industry survey

Company Address Contact person Telephone number	Type Zoysiagrass sod grown	Cost/Square Yd.	Acres harvestable in August 1990	Type of soil sod grown in	Provide refrigerated transportation?	Region served	Company Address Contact person Telephone number	Type Zoysiagrass sod grown	Cost/Square Yd.	Acres harvestable in August 1990	Type of soil sod grown in	Provide refrigerated transportation?	Region served
Beauty Lawn Zoysia 603 Union Rd. Lebanon, OH 45036 Jay Frick 513-424-2052 Circle No 201	Meyer	N/A	100	Mineral soil	No	Mid-South	Emerald View Turf Farm PO Box 146 Cedar City, MO 65022 Jim Keeven 314-634-3444 Circle No 212	Meyer	N/A	30	Sandy loam	No	Midwest
Beck's Turf Nursery PO Box 752 Auburn, AL 36830 Cynthia Beck 205-821-0969 Circle No 202	Meyer Emerald Mattrella	1.90	330-350	Sandy loam, clay	Yes	S'east	Emerald View Turf Farm 1722 Highway 79 O'Fallon, MO 63366 Ed Keeven Jr. 314-281-2120 Circle No 213	Meyer	N/A	50	Mineral	No	Midwest
Big Creek Turf Farm Box 155 Oneida, AR 72369 Gere Carnathan 501-572-2740 Circle No 203	Meyer	2.00	50	Silt loam	Yes	South, S'east	Emerald View Turf Farm PO Box 215 Columbia, IL 62236 Tom Keeven 618-281-6050 Circle No 214	Meyer	N/A	30	Sandy loam	No	Midwest
Big River Turf Farm RR 2, Box J-9 Hollandale, MS 38748 Larry Goss 601-378-2006 Circle No 204	Meyer	1.60	25	Sandy loam	No	S'east	Glen Oak's Turf RR 1 Camilla, GA 31730 Susan Taylor 912-336-7783 Circle No 215	Emerald Meyer	1.98	40	Sandy loam	Yes	S'east
Brookmeade Sod Farm RR 1, Box 547 Doswell, VA 23047 Louis Brooking 804-883-6338 Circle No 205	Meyer	3.50	3	Sandy loam	No	Virginia	Green Acre Sod Farms 12300 S. Mingo Rd. Bixby, OK 74008 Gene Forrest 918-369-5918 Circle No 216	Meyer	2.25	120	Sandy loam	No	Mid-South
Canadian Valley Turf Farm PO Box 424 Spencer, OK 73084 Christopher Roberts 405-771-5122 Circle No 206	Meyer	2.70	50	Loamy/ slightly clay	No	Mid-South	Green's Grass Farm RR 6, Box 289 Dothan, AL 36303 James Green 205-794-6410 Circle No 217	Emerald Meyer	1.75	35-40	Sandy loam	No	S'east
Caroland Farms Turfgrass 2794 N. Pacolet Landrum, SC 29356 David Slater 803-457-3327 Circle No 207	Belair Emerald Meyer	N/A	1	Sandy loam	Yes	S'east	Hernando Zoysia Farm 121 Malone Rd. Hernando, MS 38632 Pat Traicoff 601-429-9521 Circle No 218	Meyer	2.25	10	Silt loam	No	Mid-South
Carroll Sod Farm RR 1 Counce, TN 38326 Frank Carroll 901-689-5522 Circle No 208	Meyer	2.00	5	Silty clay loam silt loam	No	S'east	Hughhins Sod Farm RR 2, Box 98A Red Level, AL 36474- McRhee Hughhins 205-222-8581 Circle No 219	Meyer	N/A	650	Sandy loam	No	S'east
Cherry Point Farms, Inc. PO Box 128 Brunswick, TN 38014 Wayne McGowan III 901-829-4797 Circle No 209	Meyer	2.15	20	Silty clay loam	No	100 miles	Kidwell Turf Farms, Inc. 1925 Puddledock Rd. Petersburg, VA 23803 Charlie Haley 804-733-7170 Circle No 220	Meyer	3.60	5-7	Sandy loam	Yes	Mid-Atlantic
Cowikee Turf, Ltd. PO Box 56 Eufala, AL 36072 Ronald Nixon 205-687-6751 Circle No 210	Matrella Emerald Meyer	1.80	50	Sandy loam	No	S'east	Mason's Tree & Turf Farm 905 Sanbar Ferry N. Augusta, SC 29841 Jack Mason 803-827-0331 Circle No 221	Meyer	1.53	40	Riverbottom soil	No	South
Double Springs Grass Farm PO Box 706 Searcy, AR 72143 George Friedrich 501-729-5847 Circle No 211	Meyer	2.25	100	Silt loam	Yes	1,200 miles	Meyers Turf Farms, Inc. RR 1, Box 69 Stilwell, KS 66085 Lorna Meyers 913-681-2667 Circle No 222	Meyer	2.25	20	Black mineral	No	U.S.

more popular and more expensive

the buyer is looking for today," Fender said. "They're developing improved varieties that have a smaller leaf structure and are deeper green. They give you more tolerance, in the transition zone especially. If you put a Bermudagrass in and you get a cold spell, you can lose it. If you put Zoysia in, you're going to keep it."

Superintendents agree. "A lot more courses are going with it," said David Stone, superintendent at The Honors Course in

Ooltewah, Tenn. Stone said The Honors was "solid sodded" in Zoysia in 1985 after winter kill wreaked havoc on the Bermudagrass fairways.

"The first year the course was open we had significant winter kill on the Bermuda fairways. We also had some Zoysia on the course and it had no winter kill at all," Stone said. "So, superior winter hardiness is one reason more people are using it... Zoysia does great in both hot sun and cold winters.

"Superior playing surface is another reason. Even when the Bermuda was real good, Zoysia was better."

Jan Beljan, an architect with Tom Fazio Golf Course Designs and an avid golfer, likened Zoysia to heaven on a golf course.

"In the wintertime playing on Zoysia is one of the greatest experiences you'll ever have in hitting the ball because you just don't get a bad lie," she said.

Stone said: "The ball sits totally

on top of the blades. It doesn't sink down in the grass at all."

Stone added that in the South, superintendents with Bermudagrass have to raise their cutting heights "quite a bit" in the last part of summer to help protect it through the winter. "That's not necessary with Zoysia. We mow it a little under 1/2 inch year-round," he said.

Fender said Zoysia's aggressive growth is another positive characteristic. "Zoysia fills in an area

quickly," he said. "Many people sprig or plug Zoysia for this reason."

Cathy Morrow, national sales manager for Pursley, Inc., a sod producer in Bradenton, Fla., and Salisbury, Md., said Zoysia's popularity has increased "principally because people are interested in more drought-tolerant grasses. Also, on golf courses they want grasses that are more wear-tolerant as well. Plus, it has better survival

Continued on page 19

Company Address Contact person Telephone number	Type Zoysiagrass sod grown	Cost/Square Yd.	Acres harvestable in August 1990	Type of soil sod grown in	Provide refrigerated transportation?	Region served	Company Address Contact person Telephone number	Type Zoysiagrass sod grown	Cost/Square Yd.	Acres harvestable in August 1990	Type of soil sod grown in	Provide refrigerated transportation?	Region served
Nutri-Turf, Inc. PO Box 758 Fayetteville, TN 37334 Tony McCartney 615-433-9700 Circle No 223	Meyer	2.50	10	Loam	Yes	Mid-South	Super Sod - Perry Rt. 1, Box 1270 Ft. Valley, GA 31030 Lee Kaney 800-535-1320 Circle No 234	Emerald Meyer	1.53	50	Sandy loam	No	S'east
Oakwood Sod Farm, Inc. Rte. 11, Box 662 Salisbury, MD 21801 Gary Wilber 301-742-3086 Circle No 224	Meyer Belair	2.70	6	Sandy loam	No	Mid-Atlantic	Super Sod-Georgia 119 Murrell Ave. Lakeland, GA 31635 Ben Copeland 800-634-1672 Circle No 235	Emerald Meyer	1.53+	200	Sandy loam	Yes	East
Palmetto Turf Farms 2320 S. Delljoe Cir. Florence, SC 29501 Sandra Jones 803-346-5029 Circle No 225	Emerald Meyer	1.65	140	Sandy loam	No	S'east	Super Sod-Carolina Rte. 3, Box 150 Orangeburg, SC 29115 Joe Livingston 800-255-0928 Circle No 236	Emerald Meyer	1.53	250	Sandy loam	No	South, East
Pursley, Inc. Bradenton, FL 34202 5803 Braden Run Walter Pursley Jr. 813-753-1625 Circle No 226	Cashmere Meyer	N/A	50	Sandy loam and clay	No	S-east Mid-Atlantic	Tulsa Grass & Sod Farms 5638 S. Rockford Tulsa, OK 74105 Ray Valentine 918-744-8324 Circle No 237	Meyer Matrella	N/A	75	Loam	Yes	Oklahoma
Quail Valley Farms, Inc. 7501 Kanis Little Rock, AR 72204 David Hildebrand 501-224-8873 Circle No 227	Meyer	N/A	85	Silt loam	Yes	South	Turf Center, Inc. 1409 Spencerville Rd. Spencerville, MD 20868 Dave Van Kirk 301-384-6300 Circle No 238	Belair Meyer	6.75	2	Sand, clay	No	Md., N.Va.
Richard's Turf Nursery Rt. 2., Box 281 Peculiar, MO 64078 Richard Becker 816-884-3206 Circle No 228	Meyer	N/A	6	Loam	No	Missouri	United Turf Rt. 1, Box 170 Powells Pt., NC 27966 Gary Lucks 919-491-8561 Circle No 239	Meyer	2.50	30	Sandy loam	Yes	Mid-Atlantic
Richland Creek Sod Farm PO Box 87 Buford Sta. Rd. Lynnville, TN 38472 Michael Coker 615-527-3897 Circle No 229	Meyer	1.75	100	Sasser	No	250 miles	Warren's Turf, Inc. Rte. 1, Box 26A Buckholts, TX 76518 Martin Manuel 512-446-5057 Circle No 240	Emerald Meyer El Toro	2.75	7	Mineral	No	Texas
Riverside Turf Farm PO Box 127 Ft. Gaines, GA 31751 Raymond Morris 912-768-2884 Circle No 230	Meyer Emerald Matrella	N/A	300	Sandy loam	No	S'east Mid-Atlantic	Lee Wilson & Co. PO Box 96 Wilson, AR 72395 Robert Fuller 501-655-8311 Circle No 241	Meyer	N/A	40	Silt loam	No	Arizona
Riverview Sod Ranch PO Box 100 Leonard, OK 74043 Charles Binney 918-366-4141 Circle No 231	Meyer	2.25	5	Sandy loam	No	N'east Okla.	Winrock Grass Farm PO Box 3437 Little Rock, AR 72203 Frank Whitbeck 501-375-0749 Circle No 242	Emerald Meyer Matrella	2.25	300	Sandy loam friable clay	No	Central S'east, S'west East
Sod Atlanta, Inc. PO Box 921136 Norcross, GA 30092 J. Kenneth Morrow 404-525-2272 Circle No 232	Emerald Meyer	2.25	65	Silty clay	No	S'east	Winstead Turf Farms 8676 Memphis-Arlington Rd. Memphis, TN 38134 Bobby Winstead 800-624-8873 Circle No 243	Meyer	2.25	60-100	Silt loam	No	Mid-South
Summit Hall Turf Farm 21300 River Rd. Poolesville, MD 20837 Frank Wilmot 301-948-2900 Circle No 233	Meyer	4.95	15	Silt loam	No	Mid-Atlantic							

Green Section deciding \$3M in research funds

BY PETER BLAIS

The United States Golf Association Turfgrass and Environmental Research Committee has begun meetings to discuss how \$3 million in research money on the environmental impact of golf courses will be spent.

The Research Committee began meeting in July to evaluate the 83 proposals received from land grant universities throughout the United States. The proposals deal with the effects of pesticides and fertilizers on the environment, alternative methods of pest control and the influence of golf courses on people and wildlife.

The committee will make its final funding decisions by December, according to USGA Green Section National Director Jim Snow.

Some successful proposals, especially those in the North, where experimental plantings need to be made before the onset of winter, could be notified earlier, he added.

The 10 to 12 proposals chosen begin receiving money by next February, the USGA official said.

The proposals have ranged from a \$10,000, three-year University of Maryland study on valuation of cultivation techniques for white grub control to a \$395,000, three-year University of California at River-

'The game is threatened by the lack of knowledge about the environmental impact of fertilizers and pesticides.'

— C. Grant Spaeth, USGA President

side study of the fate of pesticides and nitrogen in a turfgrass environment.

The \$3 million funding package is part of the USGA's overall three-year, \$5.4 million research effort, more than double any previous spending on research.

"Right now the game is threatened by the lack of knowledge about the environmental impact of fertilizers and pesticides," said USGA President C. Grant Spaeth. "I can

think of nothing more urgent to golf than to answer this environmental question and to propose responsible solutions."

The Research Committee plans to expand its current 13 members to include officials from a governmental agency like the Environmental Protection Agency, an environmental organization like the Audubon Society and a technical turf expert, according to Snow.

The committee currently consists

of Chairman Snow; Green Section Committee Chairman Raymond Anderson; Sea Island (Ga.) Golf Club superintendent Tom Burton; Iowa State University Professor Nick Christians; USGA Executive Director David Fay; University of California at Riverside Professor Vic Gibeault; Peter Hayes, director of the Sports Turf Research Institute in Bingley, England.

Also Howard Kaerwer, a retired turfgrass breeder with Northrup-King, Inc.; USGA Director of Green Section Research Mike Kenna; Director of Green Section Administration Dean Knuth; Michigan State University Professor Paul Rieke; Golf Course Superintendents Association of America secretary/treasurer Bill Roberts; and Jim Watson, vice president of Toro Co.

The project will be the responsibility of the Green Section Committee chaired by Anderson. The GCSAA is cooperating with the USGA on this enterprise.

Spaeth promised the USGA will enter the program with no preconceived position.

"We must maintain a position as the honest and independent broker," he said.

The studies will examine whether fertilizers and pesticides contaminate ground water and, if they do, the duration of their impact.

The USGA plans to appoint a wildlife ecologist to help golf courses develop and preserve wildlife habitat.

"Golf courses are often ideally suited for the preservation of wildlife species and we want to assist our members in improving their habitat," Spaeth said.

Field days

Continued from page 18

tralia, New Zealand and other countries.

Stanley said field days are "a very important marketing tool because people can see, first-hand, our research effort and how legitimate it is, talk to our staff, and see that we do things one way — the right way. And they appreciate that.

"It's also a good chance to communicate important information to our customers."

A tour took attendees to Turf Seed's 110-acre research site.

Steve Tubbs said Turf Merchants limits its field day to distributors and the media. This year's, attended by 125, was "a time to look at what's new, to learn, and to have a barbecue and socialize as well as educate," he said.

Tubbs said Turf Merchants unveiled new varieties and explained how and why certain varieties were chosen over others to develop — "all things that help them sell the seed."

Turf Merchants also conducted a tour of its 130-acre research site which includes 5,000 turf plots and breeder blocks.

The future of field days? They will keep growing. "We've already got next year's planned," said Jacklin with a laugh. "Next June 18 and 19."

Introducing a new pressure relief package from Ryan.



At \$300, it's just a drop in the bucket compared to the alternative.

The pressure of heavy traffic during peak summer months can cause extreme soil compaction which puts you under a lot of pressure as well. How do you maintain healthy turf without interrupting play and spending a small fortune?

You get Ryan's new Solid Tine Aeration Kit.

The Solid Tine Aeration Kit converts your Ryan GA™30 or Greensaire® 24 to a



supplemental aerator with adjustable depths up to 3" and variable spacing on the GA30. The kits include holders and 1/4" solid tines which easily mount in just minutes. There's no mess to clean up after aeration. No hoses to drag around. No high price to justify.

There's really no reason not to have one. Contact your Ryan dealer or call toll-free 1-800-228-4444 for more information today.


RYAN

BUILT TO LAST

9132 Cushman, P.O. Box 82409, Lincoln, NE 68501
© Cushman Inc. 1990. A Ransomes Company

For free information circle #117

All rights reserved.



Turf area
not protected

Protected by
Warren's®
TerraShield®
100% Polyester
Greens Blanket

Unretouched photo taken the day the TerraShield Greens Blankets were removed at Crystal Lake Country Club

"When our TerraShield® Covers came off this spring, the greens looked like they'd been painted."

Craig A. Marfia CGCS, Golf Course Superintendent Crystal Lake Country Club, Crystal Lake, Illinois reports on his results with Warren's TerraShield protective blankets for greens and tees.



Craig Marfia CGCS

"Probably the biggest reason we use TerraShield is the dramatic results it gives us. When our TerraShield covers came off this spring, the greens looked like they had been painted. It took the turf on our fairways nearly a month and a half to match our greens.

"In addition to earlier root development, the overall improvement in turf density with TerraShield is almost unbelievable.

"TerraShield gave our greens the added stress-resistance they needed to survive the surprise 3-inches of snow we got in May. And, it's helping them withstand the heavy play we get during our short season (up to 30,000 rounds in 9 months).

"This fall every green on our course will be covered with TerraShield."

Every spring, Warren's TerraShield® proves once again that it is, by far, the best greens blanket in the business.

Best for winter protection – because it gives you up to 3 times more protective blanket material than you get with thin plastic films, flimsy sheets, or lightweight fabrics.

Best for wind protection – because TerraShield is a 100% polyester non-woven blanket that does a better job keeping the cold, dry winds of winter away from vulnerable grass crowns.

Best for early spring green-up in both warm and cool season turf – because it lets the sun's rays and warmth pass through. Root development gets underway earlier so turf is more dense, healthier, and ready for full play sooner.

(Before changing to TerraShield, Crystal Lake Country Club had experimented with another major brand of greens covers but found the turf under those covers got too warm and when they were removed in the spring, the greens couldn't take the shock.)

You can have TerraShield Greens Blankets ready for your course in plenty of time for installation this fall ***if you act now!***

Just phone Warren's **today at**
1 800 828-8873 Toll Free

(please phone between 8 a.m. and 4:30 p.m. Pacific Time)

Warren's®
TURF PROFESSIONALS

Suisun City, California 94585

For free information circle #118

ASSOCIATION NEWS

IoG elects long-time London horticultural official president

Robert J. Corbin, who retired in 1980 after 33 years as horticultural manager for the Greater London Council housing department, has been elected president of the Institute of Groundsmanship in Great Britain.

Corbin holds the Ministry of Agriculture Certificate in Advanced Horticulture and is an associate of the Royal Horticultural

Society, a fellow of the Linean Society, the IoG and the Institute of Horticulture, and an associate member of the Institute of Parks and Recreation Administration.

Corbin has been involved with the IoG since 1955 when it was known as the National Association of Groundsmanship.

He was instrumental in changing the NAG to an institute.

ASTA names new executive vp

David Lambert, who has 17 years experience in Washington, D.C., has been elected executive vice president of the American Seed Trade Association.

ASTA President Jerome J.

Peterson of Peterson Seed Co. announced the appointment after Lambert was ratified by the board of directors.

Lambert worked in government relations with the National Grange

for seven years, and for 10 years was assistant to the executive vice president for legislative and regulatory affairs.

He retired from the U.S. Army as a lieutenant colonel.

Moody chairs PLCAA education panel in Georgia

Douglas K. Moody, deputy executive director for the Professional Lawn Care Association of America, has been named chairman of the Education Committee for the Georgia Society of Association Executives.

Moody will be responsible for offering eight educational workshops to association executives in

Georgia as part of the newly created Education Leadership Improvement Training and Education Program. Besides the continuing education program, the Education Committee is developing reciprocal training opportunities with the University of Georgia's business management curriculum.

Moody has served on GSAE's Education Committee for three years and has also served on the Directory and Annual Tradeshow Committee.

GSAE represents more than 400 executives, managers and suppliers of professional, trade and individual membership associations headquartered in Georgia.

IF A TRUE-LINE PUTTING SURFACE IS WHAT YOU WANT—

TRY Putter[®]

Creeping bentgrass

With its superior true-line putting surface and dark bluish-green color, Putter creeping bentgrass is fast becoming the choice of some of the finest courses around.

Tested side by side with the best-known bentgrasses, Putter exhibited superior color and excellent growth habit. With outstanding turf vigor, fine-leaf texture and improved resistance to take-all patch and other diseases. Add Putter's dwarf growth habit, high-shoot density and aggressiveness against *Poa annua*, and you have a green that's as tough as it is beautiful.

Not to mention one that satisfies your straightest shooters.

Put Putter up against the old favorites and compare. Putter quality #1. Putter density #1. Putter color #1. Putter disease resistance #1. Now, order Putter for the new world-class greens.

Another fine quality-controlled product of

Jacklin Seed Company

W. 5300 Riverbend Avenue, Post Falls, ID 83854-9499
208/773-7581 FAX: 208/773-4846
TWX: 5107760582 Jacklin PFLS



Putter creeping bentgrass featured at MeadowWood Golf Course

For free information circle #119

GCA moves Krause directs communications...

The Golf Course Association's new communications chairman intends to strengthen the organization's monthly newsletter.

Mark Krause of Muskego Lakes Country Club said the expanded newsletter "may include articles of individual members, articles from associate members on new products, family business-related articles, letters to the editor, an equipment-for-sale category and other interest sections."

... and Clark named a director

The Golf Course Association has elected Dan Clark of Des Moines, Iowa, to a three-year term on the board of directors.

The GCA also named Chuck Bennell of Canton, Ohio, to lead membership recruiting and selected Naples, Fla., as the site of the 1991 convention, according to President Fred Tingle.

Clark, who owns Willow Creek Golf Course in Des Moines, is director of the newly formed Plains region comprising North and South Dakotas, Kansas, Iowa, Missouri and Nebraska.

Bennell, who owns Tam O'Shanter Golf Course in Canton, has been involved in developing the Ohio Chapter.

The ninth annual conference will be held Jan. 6-10 at the Registry Hotel.

Illinois plans tournament

The Illinois Turfgrass Foundation is holding its annual Northern Illinois Golf Day on Aug. 20 at St. Charles Country Club and Geneva Golf Club. The day begins with a noon shotgun start and ends with dinner at St. Charles CC.

Turfgrass industry suppliers support the event through tee sponsorships.

During 1990 the Illinois Turfgrass Foundation expects to provide \$60,000 for turfgrass research at University of Illinois and Southern Illinois University.

The \$95 registration fee includes half a cart, greens fees, lunch and dinner. Interested people may call the Illinois Turfgrass Foundation office at 312-644-0828.

Irrigation experts form chapter

A Northeast chapter of the American Society of Irrigation Consultants has been formed. ASIC members Richard W. Smith, Robert M. Healey and James M. Barrett voted on April 27 to establish the chapter.

The purposes of ASIC-Northeast Chapter are those expressed in the goals and code of ethics of the national organization, with special emphasis on:

- Promoting efficient irrigation through sound design principles, system evaluation based on professional experience, and awareness of advances in irrigation technology and management.
- Addressing regional issues of environment, water and energy conservation, and a rapidly expanding irrigation industry through proper irrigation design and practices that respond to the specific requirements of local climate, environment and population.
- Promoting professionalism in the field of irrigation consulting.
- Promoting the use of irrigation consultants in all phases of irrigation projects from conceptual design through final approvals.

Regular membership is reserved for individuals who are working as independent irrigation consultants, and who have met the society's experience and education requirements. Associate membership is available for individuals and companies actively engaged in a related irrigation field. Apprentice and student memberships are also available.

Smith was elected president, Healey first vice president and Barrett second vice president. James M. White and Michael J. Agram was elected secretary treasurer.

All officers are regular members of ASIC and all are certified irrigation designers in the national Irrigation Association's certification program.

Smith has been in the irrigation business for nearly 30 years, as a contractor (owner of Smith Turf Irrigation), a wholesale supplier (president of I & E Supply), and as an independent consultant since the 1985 formation of Richard W. Smith & Associates, Inc. in Milford, Conn.

Healey has been involved in irrigation installation, maintenance, design and consulting for 16 years. His firm is located in Natick, Mass.

Barrett began his 20-years irrigation career working for an installer. He then spent 12 years with Robert Trent Jones, Inc. as a design associate and irrigation designer.

In 1985 he founded James Barrett Associates, Inc., located in Montclair, N.J.

White graduated from the University of Massachusetts, and is a PE licensed in Massachusetts, New Hampshire, Maine, Connecticut and Rhode Island. He has been involved in irrigation consulting and engineering since 1978.

Agram has been involved in irrigation consulting and design since 1980. His company, Northern Designs, is located in Milford, Conn., and specializes in irrigation design and specification work for architects, landscape architects and engineers. His projects have ranged from residential jobs to large commercial sites for major corporations.

The chapter intends to have periodic meetings throughout the Northeast with guest speakers addressing irrigation topics such as design, materials, contract liability, water management, and environmental considerations.

Irrigation Expo preparations made

Preparations for the 11th International Irrigation Exposition and 3rd National Irrigation Symposium continue as more than 200 companies have contracted to exhibit, Oct. 28-31, in Phoenix, Ariz.

The event, "Visions of the Future," is a joint production of the Irrigation Association (IA) and the American Society of Agricultural Engineers (ASAE). It will showcase technological developments.

Specific topics to be covered will be the leading methods of water conservation, in-depth technical training, presentations by urban/landscape and agricultural-irrigation experts, and dozens of original papers on irrigation research and technology.

"Visions of the Future" will also be the first time that the U.S.D.A.'s Agricultural Research

Service has honored the IA by selecting the show's Oct. 29 keynote session to present the B.Y. Morrison Lecturer for 1990.

Also, an international business center will set up for all international visitors to register, contact interpreters, and meet with U.S. firms interested in international trade.

Certification exams will be given Oct. 28. They include the Step 2 exam and a choice of the following Step 3 exams: Irrigation Designer General Agriculture (with drip, surface or sprinkler specialties); Irrigation Designer General Turf (with residential, golf course, or commercial specialties); Irrigation Contractor; or Irrigation Manager.

"IA University" will present a new series of short courses Oct. 27 and 28. These require separate registration, which includes a free

Expo pass for Sunday's grand opening.

The IA has set its headquarters for "Visions" at the Hyatt Regency Phoenix, while ASAE selected the Sheraton Phoenix. Both hotels are near the Phoenix Civic Plaza, where the expo/symposium will be held.

Tours will be offered throughout this highly irrigated desert region, some featuring general-interest sites and some with a special irrigation focus. Included is a trip to Biosphere II, 2.25 acres of dome-covered, controlled-climate landscape.

The IA President's Annual Reception and Banquet will be held Oct. 30 in the Hyatt Hotel.

People may contact the IA at 1911 North Fort Myer Drive, Suite 1009, Arlington, VA 22209-1630; 703-524-1200.

It Works Better. It Costs Less. End Of Ad.



Foreign money

Continued from page 1

or built 30 courses in California alone, including such shrines as La Costa Country Club in Carlsbad and Riviera Country Club in Los Angeles, site of the Los Angeles Open.

"There's a rumor they've offered the members at a Hollywood course \$1 million each plus a lifetime membership for their course," said Abrams.

The \$137 million paid for Riviera was considered exorbitant by many and led to speculation the Japanese are more interested in golf courses as future subdivisions than playing fields.

Abrams disagrees.

"The Japanese are so into golf,

and the cost of golf is so high in Japan, that \$137 million for a prestige course isn't considered that high," he said. "I don't question their motives. They seem pretty pure."

In a country where 90 percent of the golfers never make it from the driving range to the course, belonging to a private club carries a great deal of prestige. In fact, memberships are often held in corporate names and are traded like stocks, sometimes for millions of dollars.

"Golf courses are a very important place for the Japanese to carry on business," said Abrams.

Negotiating with the Japanese

can be a very frustrating experience for an American businessperson used to a quicker pace, according to Abrams.

"The Japanese take a long time to study a proposal," he said. "All decisions are made by consensus. A business proposal is analyzed first by a lower-level management person. If he accepts it, he moves it on to the next level until it eventually works its way to the company president. That's the opposite of the way we do things in this country, where the president makes a decision and it's up to the underlings to carry it out."

"While the Japanese system is slower, there is an advantage. There

isn't one person to blame if an investment goes wrong since everyone has a hand in the final decision. Since everyone is responsible, everyone tries to make sure the investment works. So while you have to wait longer for a decision, once it's made, everyone helps out.

"And they're very honorable to deal with. It's not unusual for them to pay a company they're working with well before the due date."

While it's tough to sell the Japanese on an idea, they move quickly once a decision is made, Abrams said. For instance, he was involved in the purchase of the Tantalum Country Club in Washington, D.C. The course bordered a nearby ho-

tel. When the hotel owners decided they wanted the course, a Japanese company, TSA Associates, offered financial backing.

Abrams' group was asked to name a price. The Americans presented what they figured was a fairly-high price and prepared for long negotiations. But the Japanese immediately countered with an offer that was just \$100,000 below the asking price and the deal was quickly done.

The Japanese are also open to creative ideas, Abrams said. His company proposed building a course on Guam with nine Senior players designing two holes apiece. Japanese developers jumped at the idea. Abrams' company received its first payment before a formal contract was even drafted. And the Japanese developed a novel marketing scheme. One house was built on each hole. Hole and house were then sold to different corporations for \$1 million each.

How do you find Japanese investors?

"It helps to be properly introduced by an American group that has done business with them or a member of the Japanese group itself," Abrams said. "Or you can contact the American headquarters of the bigger Japanese companies directly. But I know of one company that gets something like 150 proposals a day. They have a warehouse full of them."

"But if you have an existing, prestigious property, they're generally very interested."

Pension funds

Pension funds have become increasingly involved in golf course developments in recent years.

Union pension funds own courses in Half Moon Bay and Palm Springs, Calif., said Abrams. The Teamsters Union recently sold La Costa to the Japanese, he added.

Other pension funds own Green Lefe Country Club in Haines City, Fla. and Foxfire Country Club near Pinehurst, N.C., a 36-hole, 40-room golf resort that officials hope will attract 36,000 Japanese visitors a year by 1992, said Abrams.

Why are pension funds interested in golf? The returns on investment are often higher than pension funds can attain elsewhere, said Abrams. That's very attractive considering the losses many funds have experienced in the weak office building real estate market.

"There's so much money in pension funds," said Abrams. "AT&T alone gets something like \$200 million in new money every month. The question is how to invest that money. I think you'll see pension funds investing in golf communities more often."

There are many different pension funds — private, public, union, employee and many others. The best way to locate pension fund money is to find a fund trustee, "preferably one who is a golfer," said Abrams, and pitch your idea to him or her.

Other sources

"There are a few companies spe-

Continued on page 27



FLEXBRUSH

There's never been a faster, better, easier way to top dress greens!

Now you can turn your Toro or Jacobsen greens mower into the finest top dress brushing system ever invented, with FLEXBRUSH from Standard Golf.

FLEXBRUSH enables you to save time, while avoiding unnecessary damage to your greens. It's actually a set of three brushes that follow contours and undulations like no dragging method can, and it's excellent for brushing after deep tine aeration. Plus, it installs quickly and easily.

For more information, contact your nearby authorized Standard Golf distributor.

STANDARD GOLF Pro Line

Standard Golf Company

P.O. Box 68

Cedar Falls, IA 50613

319-266-2638

FAX 319-266-9627

S&Ls

Continued from page 1
championship course was completed in 1986. It hosts 45,000 rounds a year, breaks even financially and includes an 11,000-square-foot clubhouse with locker rooms, restaurant and lounge, said Timm.

The course sits on 198 acres. The rest of the land is available for commercial development. The RTC is asking \$35 million for the entire project. It had received three offers through mid-July.

"If a buyer isn't found in the next two to three months, we'll begin splitting out the property," explained Timm. "There's been a lot of interest in the course. It's a full-grass course. Many of the new courses here are target courses.

"It is also piped for effluent water, which is a plus with the new laws coming along requiring effluent use on golf courses. And it's in a fast-growing area, East Mesa.

"A regional mall is opening in the vicinity this fall and the highway is supposed to be extended another three miles in 1991. That should allow for a lot more traffic."

The course alone is valued at \$7 million and an adjacent, 15-acre resort parcel at \$2 million, said Timm.

Western Savings was established over 60 years ago, said Timm. It eventually became the second-largest savings and loan in Arizona. Its asset base grew to between \$6 billion and \$7 billion in the early 1980s with the deregulation of the

Fort Dix course not closing

The June issue of *Golf Course News* incorrectly reported that the Fort Dix (N.J.) golf course was closing. It was a source error.

According to a Fort Dix spokesperson, the Trenton facility "is having its training mission realigned by the Army but will remain open for other missions under a 'semi-active' status... current plans are to keep the 18-hole golf course open to serve the permanent staff that will remain after realignment and also the thousands of military retirees in South Jersey who frequent the course."

Foreign

Continued from page 26

cializing in golf course financing," added Abrams, who has worked with, among others, San Francisco-based GATX Golf Capital (telephone 415-955-3200). "They're good. But they're incredibly selective."

The National Golf Foundation lists 10 companies, including GATX, as potential financing sources. They are:

Alternative Mortgage of Longwood, Fla. (407-774-9009); The Balcor Co. of Skokie, Ill. (708-676-6923); BLB Associates, Inc. of Acton, Mass. (508-635-0400); First Golf Corp. of Denver, Colo. (800-621-9454); G.E. Capital — HRFs of Charlotte, N.C. (704-541-4966).

Greyhound Financial of Phoenix, Ariz. (800-525-4532); The Investment Matchmaker of Van Nuys, Calif. (818-780-1034); Maloney Golf Finance, Inc. of Kansas City, Mo. (816-444-2353); and The Prestwick Group of Northbrook, Ill. (708-676-6874).

banking industry.

But the downturn in the Arizona real-estate market in the second half of the decade eroded the company's equity base. It was placed into conservatorship last summer and receivership May 31 after the Bank of America purchased its 61 branches and deposits. Happy Trails was among the assets that remained.

Begun as a recreational vehicle resort in 1982 for "Snowbirds" escaping the Midwest's winter snow and cold, Western Savings and its partners began marketing 1,900 lots as part of the first phase of development, according to Western Savings Operations Manager Jerry

Shambaugh.

The 2,500- to 4,500-square-foot lots sold well the first two years. But in 1984, a half dozen additional RV resorts came on line.

"The market was flooded," said Shambaugh. "There were suddenly 10,000 to 12,000 lots. It's interesting that Happy Trails is the only one still going."

But sales were about half of projections, adding to Western's woes. Sales continue at about 150 lots annually, less than half the 350 a year originally predicted.

Again, the golf course is doing well. Play at the Greg Nash/Ken Kavanaugh-designed course has increased dramatically since the addi-

tion of a second nine last summer. For instance, 4,300 rounds were played in March 1989. That was up to 6,200 rounds in March 1990, a 44-percent increase.

Approximately \$35 million has been invested in Happy Trails, which includes the course; town center with stores, post office, ballroom and dining room; three neighborhood centers with showers, laundry and pool; information center with sales and pro shop; RV storage and washing area; and \$2 million in furniture.

The property has been appraised at \$12 million. A second appraisal was scheduled for completion in late July.

"We've had a lot of interest, somewhere between 100 and 150 calls

already," said Shambaugh. "We've had three solid offers. But we can't accept any until we get the second appraisal. I feel we'll get another 10 to 12 offers almost immediately.

"It's an excellent opportunity for someone to pick up a valuable piece of property for about \$12 million, sit on it for a couple of years and then sell for around \$35 million."

For more information on these properties call Paul Timm at 602-468-4034 or Jerry Shambaugh at 602-468-5800.

The RTC had other courses available in Texas and South Carolina as of mid-July. For more information, contact the regional RTC offices in those areas.

BEFORE YOU BUY JUST ANY BENTGRASS, GO BY THE BOOK.



Phone 1-800-547-0255 today for your complimentary copy of the Penn Pals catalogue. You'll see why Penncross, Penneagle, PennLinks and Pennway blend set the standard for bentgrass on golf courses.

Tee-2-Green Corp.

PO Box 250, Hubbard, OR 97032

FAX 503-981-5626

1-800-547-0255

NGF figures show more golfers, fewer rounds in '89

'Relatively little growth overall for industry,' reports Beditz

The number of golfers grew, but rounds decreased in 1989, according to the National Golf Foundation's latest research report on golf in the United States.

The report, "Golf Participation in the U.S.," showed that the nation's golfer population rose 5.6 percent — from 23.4 million to 24.7 million players — but aver-

age rounds played per golfer dropped 7.7 percent — from 20.8 to 19.2. That decrease resulted in a 2.7-percent decline (487 million vs. 474 million) in total rounds played for the year.

Rounds played is one of the leading business indicators for golf course owners/operators, golf equipment manufacturers, and other golf-related businesses.

In 1987 and 1988, annual rounds played had increased three percent and 12 percent, respectively.

Researchers believe that record spring rains that drenched the Northeast and Hurricane Hugo's assault last fall on the Southeast

contributed to the dropoff in 1989.

"Whatever the reasons," said Dr. Joseph F. Beditz, NGF president and chief executive operator, "our findings show that, while there were certainly more people than ever playing golf in 1989, they played on average a little less often ... meaning relatively little growth overall for the golf industry."

"It also shows us," he added, "that to achieve its full potential for growth, the industry needs to work together collectively to not only ease the entry of beginning golfers into the game, but also to encourage less frequent golfers

'The industry needs to work together collectively.'

— Dr. Joseph Beditz

to play more often."

In its surveys, the NGF defines a golfer as anyone 5 or older who has played at least once during the survey year. It also distinguishes players by frequency of play, with "frequent golfers" being those who play 25 or more times a year.

Frequent golfers, who consistently constitute approximately 25 percent of the U.S. golfer popula-

tion, historically account for 75 percent of all the rounds played each year. In 1989 their numbers decreased slightly — from 5.6 million to 5.5 million.

The report also shows that the national participation rate (percentage of population that are golfers) increased from 10.4 percent to 10.8 percent in 1989.

Minnesota, Wisconsin, Utah, Iowa, Michigan and North Dakota remain the only states with participation rates exceeding 14 percent. Minnesota, breaking last year's tie with Wisconsin at 15.9 percent, became the first state to exceed 17 percent.

California still easily tops the nation in total golfers with more than 2.6 million. New York and Illinois are next with just under 1.5 million golfers each. Texas, Ohio, Michigan and Florida remain the only other states with golfer populations exceeding 1 million.

Ten percent of golfers, or 2.5 million, were beginners — playing for the first time in 1989. There were also 2.1 million golfers who "returned to action" after one or more years of not playing. Those two pluses were offset by the 3.3 million golfers who dropped out in 1989 after having played during 1988. This yielded a net increase of 1.3 million golfers for the year.

Among other findings of the report were:

- For the fourth straight year, about 40 percent of all new golfers were females — 1 million out of the 2.5 million total. However, the attrition rate among females in 1989 also continued to be disproportionately high. Although women constituted 22 percent of the golfer population, they accounted for 33 percent of those who dropped out.

- Highest participation rates are among Americans in their 20s and 30s — 16.2 percent and 14.0 percent, respectively. Half of the nation's golfers come from these two age groups combined.

- Although their numbers remain at about 3.4 million, seniors (age 60 and older) represent a diminishing proportion of all golfers. In 1986 they were 16.5 percent of the total, in 1989 only 13.9 percent. Golfers age 60 and above constitute nearly 30 percent of all frequent golfers.

- Golfers' average household income is \$45,100 a year, almost 30 percent above the national average.

- More than 40 percent of all golfers live in households headed by a college graduate. Another 28 percent come from households whose head attended college but did not graduate.

- In 1989, as in previous years, 80 percent of the nation's golfers were "public golfers," playing at least 50 percent of their rounds on public courses.

- Private golfers play more often than public golfers (26.7 vs. 17.1 rounds per year).

- Male junior (under age 18) golfers are 4 1/2 times as numerous as junior females — 1.6 million versus 362,000.

We just eliminated your last excuse for buying a converted golf cart.

Introducing the Cushman® GT-1. Suggested retail price: \$3,564.00*.

When you can have Cushman quality at a competitive price, there's no reason to accept second best.

The new Cushman GT-1 utility vehicle will outperform and outlast any converted golf cart on the market. Its frame and chassis are stronger and more durable. You'll find a bed

made of 14-gauge steel instead of 16-gauge steel. One-inch axles instead of 3/4-inch axles. And a proven Kohler industrial engine that's more reliable and easier to maintain.

When you need a utility vehicle that's been specifically designed for work instead of one that's been converted from play, contact your Cushman dealer for a GT-1 demonstration. Or call toll-free 1-800-228-4444 for more information today.



CUSHMAN
BUILT TO LAST

*Does not include sales tax, freight or dealer prep. Prices may vary with dealer. For free information circle #123

8109 Cushman, P.O. Box 82409, Lincoln, NE 68501
© Cushman Inc. 1990. A Ransomes Company
All rights reserved.

Course for handicapped takes shape

Many companies offering services

BY MARK LESLIE

Inspired by an "excellent idea" with "worthwhile" goals, companies of all sorts are offering to help build the country's first golf course for the physically handicapped.

Edwin Shaw Hospital in Akron, Ohio, hopes to have its three-hole course, driving range and practice area seeded by this fall, when it will make a pitch for renewed funding from the NEC World Series of Golf.

"People have given a lot," said Linda Cinson, vice president of marketing and development at the rehabilitation hospital. "The project seems to have a lucky star over it, it is so charmed."

Among the free offers:

- Lesco Inc. of Rocky River, Ohio, will donate all grass seed and fertilizer.
 - Wadsworth Construction Co. in Plainfield, Ohio, has committed to build and shape the course.
 - Hurdzan Design Group of Columbus, Ohio, will design the facility.
 - Pro Path Inc. of Englewood, Fla., will install all golf cart paths.
 - Commercial Pump Service of Swanton, Ohio, is donating a pumping station.
 - Kurtz Bros. of Cuyahoga Heights, Ohio, will mix the sand.
 - Local tree companies will clear the site.
 - A firm is considering building a prototype golf car wheelchair.
- "A lot of people want to and will be involved," said Paul Eldredge of Wadsworth Construction, who is coordinating construction. "It's a



PGA Pro Tom McKinney helps John Willims improve his swing at Edwin Shaw Hospital.

good project. It's an excellent idea. I think it's very worthwhile.

"There's enough property there to do what they want to do, and it won't cost a lot. But it will take a little time and effort to get it all coordinated."

The timetable has been slowed by the discovery that the wetlands on the site are larger than originally thought. Architect Barry Serafin said surveyors checked the land in July to delineate wetlands.

The wetlands required adjustments to his

original routing plan, Serafin said.

Saying planners still hope to have "something done to show the project is off the ground" in time for the World Series of Golf, Aug. 24-27 at Firestone Country Club in Akron, Eldredge said: "It's going to be hard to get it done this year. If it could get seeded this year it will be a blessing."

The number of parties involved will slow the project, Eldredge said. "Everybody wants to do good, but when it comes the day to get their equipment, or whatever, down there, they may have to work it into their schedule. That makes it harder to coordinate."

Meanwhile, handicapped golfers are being trained by the dozens at Edwin Shaw Hospital and are awaiting their chance to play on a real course.

Coordinated by PGA Pro Tom McKinney of Fox Den Golf Course in Stowe, Ohio, four area professionals have donated their time teaching 14-person classes at the hospital.

Edwin Shaw conducted three series of classes in 1989 and has had three already this year, with more scheduled.

Cinson said the hospital had envisioned a nine-hole course but opted to begin with three holes and the practice facilities to make it a learning center "with the hope of expanding later."

"We want a clubhouse with a facility to adapt equipment for the handicapped," she said.

Cinson tempered any optimism, saying, "People have given a lot, but we still need more."

She said \$20,000 of the \$60,000 received from the World Series of Golf has been spent on artificial Mod Sod and grass practice

Course designed for all to play

Paul Eldredge of Wadsworth Construction Co. said the new course for the handicapped will have to appeal to everyone, "because there are not enough handicapped golfers to pay for upkeep."

Architect Barry Serafin of Hurdzan Design Group said the course is not designed for the handicapped, meaning handicapped players don't want to feel their disability was catered to in terms of difficulty.

But the design will address special problems facing the handicapped. For instance:

- Cart paths from tee to green.
 - Specially designed wheelchairs with wider tires that reduce compaction on the greens.
 - Access areas, like ramps, onto greens and tees.
 - Flat sand traps.
- "We want to make it as natural as possible," Serafin said. "Slopes won't be as severe but it will be a challenge for everybody."

Planners have considered Mod Sod, artificial grass and real grass for the greens on the course. They are leaning toward bentgrass.

greens, a driving range, equipment for classes, a video and book library, and brochures.

PENNINGTON

Research... Production... Quality... Personal Service...
WE DELIVER!

PENNINGTON Covers the nation!

Pennington Subsidiaries

Pennington Seed, Inc. of Madison Madison, GA (404) 342-1234 Pennington Seed, Inc. of Columbia Columbia, SC (803) 771-4222 Pennington Seed, Inc. of Cullman Cullman, AL (205) 734-9486 Pennington Seed, Inc. of Orlando Orlando, FL (407) 295-6271 ALBY'S, INC. Jacksonville, FL (904) 721-1200	Pennington Seed, Inc. of Greenfield Greenfield, MO (417) 637-5979 Pennington Seed, Inc. of Louisiana Hammond, LA (504) 386-7611 Pennington Seed, Inc. of Virginia Petersburg, VA (804) 732-4769 GRO-TEC, INC. Eatonton, GA (404) 485-9489 MID-SOUTH SEEDS, INC. N. Little Rock, AR (501) 945-1474
---	--

Manufacturers

CACTUS SEED COMPANY, INC.
Roll, AZ (602) 785-9605
 Pennington Seed, Inc. of Oregon
Lebanon, OR (503) 451-5261
National WATTS
1-800-543-1814

For additional information write
PENNINGTON SEED, INC. Turf Dept.
 P.O. Box 290 Madison, Georgia 30650

Insure Your Stand,
Ask For

ON THE MOVE

Murphy new sales manager at Jacobsen

Jacobsen Division of Textron in Racine, Wis., has named Howard H. Murphy national sales manager.

Murphy is a 1971 graduate of Cleveland (Ohio) State University.

He is responsible for managing the Jacobsen's sales staff, domestic distributor relations and national account sales.

ParCar reports promotions

Columbia ParCar Corp. in Deerfield, Wis., has announced that Oliver Julien has been named director of engineering and quality assurance and Ben Sherwood is the new director of marketing and sales.

Julien has directed engineering and new product development at Tennant Co. in Minneapolis, Minn., Polaris Snowmobile in Roseau, Minn., and Fort Motor Co. in Dearborn, Mich.

Sherwood previously worked for Outboard Marine Corp. as national product group manager for Johnson & Evinrude Outboard Products, and has owned and operated a Chevrolet dealership.

Elsewhere...

Southern Turf Nurseries has named **Ron Gelvin** general manager of the Lake Wales, Fla., production farm and **Bill Carraway** sales manager for the Florida and Caribbean territory. Gelvin has been involved in agricultural management for more than 25 years. He has served as professor of farm and ranch management at Northeastern A&M College in Miami, Okla. Carraway has 15 years experience in landscape construction and maintenance.

Airlake Aeration Inc. has promoted **Keith Passaur** to South-eastern regional manager. Passaur has been regional sales manager for Florida for the Lakeville, Minn., company. President **Steve Brown** also announced that **Ron Rehor** has taken Passaur's old position, joining the firm after serving as regional service manager for Century Rain for six years.

Bernd Druebbisch is the new product manager for herbicides with **Ciba-Geigy's** Turf and Ornamental Products group. Druebbisch moves from Ciba-Geigy's worldwide headquarters in Basle, Switzerland, to the company's U.S. headquarters in Greensboro, N.C.

Promark Products, Inc. has appointed **Ron Pettifer** as regional sales manager for the eastern half of the United States. Pettifer has previous experience with John Deere, Ariens and, most recently, as a divisional sales manager with the Jacobsen Division of Textron.

The **Karsten Golf Course** at Arizona State University has appointed **Jeff Reich**, 32, to the position of head golf professional. Reich is a class A-8 member of the PGA.



Howard H. Murphy

Club Group names Eubanks to post

The Club Group, Ltd. of Hilton Head Island, S.C., has added J. Stephen Eubanks as director of consulting and customer service.

Eubanks served the last three years as president and chief executive officer of Club Recruitment Group, an Atlanta, Ga.-based executive search agency founded by Eubanks and specializing in golf operational personnel.

Scott appointed SyncroFlo golf sales manager

SyncroFlo, Inc., of Atlanta, Ga., a national pumping system manufacturer, has named Bob Scott national golf systems sales manager.

Scott's duties will include coordinating development of distribu-

tion and to serve as a liaison to irrigation consultants and golf course architects.

He has more than 18 years of experience in the irrigation industry. Prior to joining the firm, he

As one of seven principals,

At The Club Group, Eubanks is developing a service-intensive management model and training program for all Club Group operations.

The Club Group is a golf course development and management company emphasizing upscale, daily fee golf operations in large metropolitan markets.

Established his own consultant firm in the Atlanta area. He has also worked for Rain Bird Manufacturing. Scott is a National Irrigation Association certified designer of golf courses and commercial systems.

Eubanks brings customer service expertise to the Club Group team. His recent book, "Winning the New Service Game," will be available this year, and his service-consulting business has expanded to all industries.

Eubanks is a member of the PGA of America and is a former head golf professional at Bent Tree Country Club in Atlanta.

The Finest Putting Is Now Waiting For

All those golfers who blame the green when they miss a putt have just lost their last excuse. Introducing the Greensmaster® 1000 from Toro. The most advanced walk greens mower ever built. Now you can manicure your putting surfaces to a level you've never experienced before. And achieve superior playability as evidenced by a faster, truer ball roll.

A special air-flow basket design packs clippings evenly and keeps them from being deposited back on your greens. Accessories for the Greensmaster 1000 add all the finishing touches to your greens, including a micro-cut bedknife and optional quick up, quick down grooming reel.

Ease of operation is essential for a consistent quality of cut. That's just the reason for Toro's exclusive loop handle. It's ergonomically designed to fit the operator's natural hand position for easy steering. Greater handle area allows short or tall operators the same comfort. Even turn arounds are easier which keeps the operator from having to struggle with the machine.



Winter kill

Continued from page 1
ered," he said during the second week of July.

The cost to replace the greens was \$105,000. Play was down 50 percent in June and early July, knocking revenues off about \$100,000, according to Stevens.

"People don't come to play and they don't stay to eat and drink. It adds up," he said.

Two Houston area courses — The Club at Falcon Point and Lochinvar Golf Club — came through the freeze better than most because they were planted in bentgrass, Stevens said.

But most suffered.

Between 50 and 100 percent of

the hybrid Bermuda on overseeded greens was lost in Texas, according to Richard Duble, extension turfgrass specialist at Texas A&M University. The damage extended from Corpus Christi, up the Gulf Coast to Port Arthur and from there north.

"I've got one green that was pretty bad and the rest are spotty," said Tom Fox, superintendent at Oso Beach Municipal Golf Course in Corpus Christi and president of the Texas Gulf Coast Superintendents Association. "It's the worst I've seen in 22 years here."

"We hit them with about two tons of Milorganite. It's a good, safe fertilizer that stimulates root

'It's the worst I've seen in 22 years here.'

— Tom Fox, president

Texas Gulf Superintendents Association

growth."

Ironically, courses that didn't overseed with ryegrass suffered less damage. "I don't know why," Fox said. "You'd have expected the extra cover to help, not hurt."

Rockport Country Club a little farther north along the coast had "a little" winter kill and Riverside Municipal Golf Course at inland Victoria "lost a couple of greens," Fox said. But for the most part, the Gulf Coast and inland valley escaped

the severe damage suffered to the north in Houston, Dallas and Austin. Courses in Fox's area have benefitted from the extra business as north Texas golfers have ventured south to find better playing conditions.

"In Houston people don't call to ask for a tee time. They call to ask how many temporary greens you have. Golfers just don't like them," Fox said.

The damage extended well

eastward. J. Hal Richburg, immediate past president of the Louisiana-Mississippi Golf Course Superintendents Association and head superintendent at Belle Terre Country Club in LaPlace, La., reported extensive damage throughout the two-state area.

"We replanted all 19 greens," he said of his own course. "There were seven or eight greens that were killed and the rest damaged. It was a good excuse to do them all. It cost about \$33,000. Nobody was playing anyway because of the conditions, so it seemed just as well to do them all."

According to Richburg, Louisiana courses that had to replace all or some of their greens included Santa Maria Country Club in Baton Rouge, New Orleans Country Club, Metairie Country Club, English Turn Country Club in Gretna (home of the USF&G Classic), Bayou De Siard Country Club in Monroe, Chateau Country Club and Old Harbor Country Club.

Mississippi courses included Diamond Head in Bay St. Louis and Shreveport Country Club, he said.

"The newer courses with sandier greens were hurt most," Richburg said. "The older ones didn't seem to get hit so bad. The older ones probably had more clay. They held the water better, froze and protected the grass. The sandy greens dried out with the wind and were hurt more by the cold. There was no killer frost before the cold, either, that would have forced the grass into dormancy."

The damage has meant a booming business for nurseries whose plants survived the cold.

"We've been straight out," said Tom Nalls, director of golf course sales and service with Southern Turf Nurseries in Omega, Ga., which has answered urgent requests for sprigs from the Carolinas to Texas "We've been concentrating on replacing greens. But in a lot of cases we've had to just ship merchandise rather than put it in ourselves. The courses have had to put it in because we're just too busy."

Nalls said it takes 2,500 to 3,000 bushels of sprigs to re-do 18 average greens. He has already sent more than 50,000 bushels to Texas this year, he said.

"Our price has stayed about the same as last year. But there have been big increases in some areas," Nalls said.

There is little superintendents could have done to minimize the damage during "one of the worst freezes I've ever seen," Nalls said. "There is no way any superintendent should be considered negligent. The damage was just too widespread."

Medrano plans to put hay on First Colony's greens this winter and soak then with water to build a protective layer of ice if similar conditions appear likely.

"But I really don't know what you can do," said Rethlake, the club's assistant pro. "It was a freak of nature."

Surface Possible The Finest Putters.



Easy serviceability is a growing demand. And the Greensmaster 1000 is way ahead of the others. Its durable all-belt design eliminates the need for oil lubrication. The precision bedknife adjustment is another convenient feature you can appreciate.

What makes the new Greensmaster 1000 the standard others will be imitating? For starters, its 11-bladed reel gives the smoothest cut available with a .166 in. clip. Next is its front-balanced weight design. Competitive walk greens mowers have their weight centered in the rear making them susceptible to 'riding up' and inconsistent handling. The result: uneven cutting. The Greensmaster 1000 changes all that. Its weight is centered up front giving you unmatched straight tracking, greater penetration and a uniform cut.



If you'd like to give your greens the finest putting surface possible from a walk greens mower, you need the new Greensmaster 1000. Nothing handles like it. Nothing cuts like it. And

no other walk greens mower can match its overall performance. For a demonstration, call

your local Toro distributor or contact Toro at the address below.

TORO

The Professionals
That Keep You Cutting.

"Greensmaster" and "Toro" are registered trademarks of The Toro Company. ©1989 The Toro Company. The Toro Company, Commercial Marketing Services, 8111 Lyndale Avenue South, Minneapolis, MN 55420.

For free information circle #125

BUSINESS NEWS

Continental buys bridge line from DeBourgh

Continental Manufacturing, Inc. of Alexandria, Minn., has acquired the Town & Country Bridge line from DeBourgh Manufacturing of Minneapolis.

Continental is a diversified manufacturer with divisions in prefabricated pedestrian, vehicular, and utility bridging systems, automotive collision repair, and custom-designed automated

equipment manufacturing.

Continental began as a prefabricated bridge manufacturer in 1972. Officials said this acquisition will enhance Continental's position as North America's largest manufacturer of custom-designed prefabricated bridges. Continental Bridge will continue to manufacture and market its bridges from its Alexandria headquarters.

Detroit society cites Hancor, Inc.

The Detroit Section of the Society of Plastics Engineers awarded Hancor, Inc. the Process Award and the Grand Award for its storm drainage product, Hancor Hi-Q pipe.

Hancor's marketing manager, Bill Altermatt, and project engineer, Matt Ankrom, received the awards at the society's annual awards banquet held in Troy, Mich., in April.

Hancor's Hi-Q pipe competed against other non-automotive plastic products manufactured in northwest Ohio, northeast Indiana, and southern Michigan for five awards — The Product, Process, Design, Application, and the Erik Erikson awards.

The five winners then competed for the Grand Award recognizing the best product among the five.

Hi-Q is a polyethylene pipe with

a corrugated exterior and smooth interior. Its smooth interior allows Hi-Q to carry more water than other pipes traditionally use for storm drainage. Its corrugated exterior makes Hi-Q strong enough to be installed under highways.

The Process Award honors the innovations and refinements Hancor has made to plastic processing equipment to make Hi-Q.

Jacobsen presents scholarship to turf student

Jacobsen Division of Textron has awarded a scholarship in golf course operations to Tom McAlister, a student at Lake City (Fla.) Com-

munity College.

McAlister is enrolled in the school's turfgrass program.

In announcing the award, Jacob-

sen Regional Sales Manager George Hollander praised the school for its service to the industry.

"We have a definite need for trained people in the turfgrass field," Hollander said. "Lake City is doing a great job of providing these skilled people, and Jacobsen is pleased to help advance the program."

The presentation was made during an awards banquet sponsored by Jacobsen and its Florida distributors.

Briefs...

Golfax, Ltd. of Ponte Vedra, Fla., announced it has appointed **Complete Golf Services Co.** of Phoenix, Ariz., to represent its products in Arizona, New Mexico, Nevada and Southern California.

Ciba-Geigy's Pennant liquid herbicide now has a 24(c) special local need label for use in commercial sod production in Florida. This is the first time Pennant applications have been allowed on turf. The herbicide was initially labeled for use on ornamental plants in 1987.

Currently, the pre-emergence herbicide can only be used in Florida on commercially grown St. Augustinegrass.

LABB Systems, the publisher of TRIMS Grounds Management Software, has signed international marketing agreements with Sadimato Materiel D'Irrigation in France and the British and International Golf Greenkeepers Association in the United Kingdom.

Bator

Continued from page 12

in the Northeast I want to talk to if I have any questions."

Bator said designing and building courses has been the most enjoyable part of his 28 years in the business, "although my forte is probably restoring old Rembrandts (like Oak Hill, Pine Valley and Merion)," he said.

Asked to pick his favorite course, Bator said it was too close to call between Pine Valley and Merion. In both cases, he mentioned the free reign given him by Ransome at Pine Valley and the green committee at Merion.

There are no other U.S. courses where Bator would like to try his hand, although he mentioned a fascination for Scotland's Ballybunion.

"It would be a different experience to host a British Open," he said. "The superintendents over there care for courses the old-fashioned way. They have very little money. They rely on God and nature."

High Pointe GC in Traverse City has everything...heat, cold, snow, rain, wind, shade, traffic and Oregon Grown Fine Fescue.

High Pointe GC in the resort town of Traverse City, Michigan, is exposed to extremes of nature and man. This course demands a great deal from its turfgrass... that's why it's wall-to-wall Oregon grown fine fescue.

Architect Tom Doak desired a links-type course with low maintenance qualities. Fine fescue filled that bill. Now, superintendent Dan Pillard finds that thousands and thousands of dollars have been saved establishing the turf, and in maintenance costs, over other species.

And since it's from Oregon grown seed, they know the turf will stay manageable, predictable and playable.

For a series of tech sheets on Oregon Grown Chewings and creeping red fescues, call or write:



**OREGON FINE
FESCUE
COMMISSION**

866 Lancaster Dr. SE
Salem, OR 97301
503-585-1157

For free information circle #126

Stewart scores an ace with 'A Tribute to Golf'

BY PETER BLAIS

You've got to make room on the coffee table for this one.

"A Tribute to Golf" makes you reflect, makes you appreciate, makes you laugh. And more importantly, at least in the world of Fernando's coffee-table literature, 'It looks mahvelus.'

A colorful Mark King illustration of the 11th hole at Augusta National graces the jacket of Tom Stewart's 240-page collection of art, photography and literature celebrating the game of golf.

Inside are hundreds of like illustrations and photographs that will keep fond memories of the game burning bright even while winter snows are piling up outside the windows of northern duffers.

The art and photography alone justify the \$59.95 price tag, making the literary efforts a sort of free dessert. And the pastry cart is loaded with a variety of delectable goodies.

Among my favorites are "The Story of a Tee-Club" by Blackheath Club poet-laureate Thomas March; "The Sole of Golf" by P.A. Vaile; "Zen Golf" by Gordon Weaver; "The Drama of Golf" by Arnold Haultain; "The Happy Hacker" by Jim Bishop; "Out of the Depths" by Tom Morrissey; and the poem "A Golfer's Wish" by Edgar A. Guest.

Even a literary boor like myself, who enjoys poetry as much as rust on my Toyota, can appreciate Guest's closing lines:

*But every golfing fiend will know
Why gold and fame I'd sacrifice
If but some fairy, good, would
show
Me how to drive without a slice*

Tree support discussed in Duckbill book

A new specification brochure for Duckbill Professional Tree Supports has been produced by Foresight Products.

The four-page booklet contains complete detailed drawings and specifications of components for all Duckbill Tree Support models, which are used to support trees up to 10-inch caliper and larger.

Landscape architects will be able to transfer drawings and specs directly from the new brochure to their own planting details.

The Duckbill Professional Tree Guying kits include three pre-assembled guy lines, each consisting of a Duckbill anchor, galvanized steel cable turnbuckle, tree collar and all necessary hardware.

Duckbill models have holding capacities from 300 to 5,000 pounds.

One kit secures one tree, and no rods or stakes remain above ground to injure people or damage equipment.

The average time required to guy one tree with three anchors is five to 10 minutes.

For further information call or write Foresight Products Inc., 6340 East 49th Drive, Commerce City, Colo. 80022; 800-325-5360 or 303-286-8955.
Circle No. 253

Stewart is a member of the PGA and a professional golfer who has competed, taught and written about the game throughout the world. His knowledge and love of the game comes through in this collection, of which Arnold Palmer writes in the introduction:

"It is a wonderful and whimsical recollection of mentors and moments, hushed at one turn and hilarious at the next.

"It is a multi-faceted book about a many-faceted game. It is, above all, blatantly and honestly, a labor of

love."

"A Tribute to Golf" is available by calling 1-800-338-8211.

It won't make you a more skilled player, a more capable superintendent or a better architect. It will enhance your appreciation of the sheer beauty of the best of games.

Which should appeal to Fernando. But while the Latin interrogator may have believed it's more important for a book to make you look good than to feel good, "A Tribute to Golf" does both.

NEW LITERATURE

Fun, profit topics of Fla. guide

A full-color, 160-page guide to Florida's major golf-oriented resorts and best golf courses has been published by Sentinel Books.

Travel and golf writer Edward Schmidt Jr.'s book targets avid and casual golfers, non-golfing spouses, meeting planners, executives and others looking for information about the state's best resorts and golf courses.

Each of the 40 resort reviews includes a four-color photo layout, a schematic of the signature course and a detailed information box.

Florida Golf Getaways is available in retail and wholesale outlets for \$19.95 or mail \$23.50 (includes tax and postage) to:

The Orlando Sentinel, P.O. Box 1100, Orlando, Fla. 32802.
Circle No. 254

FLORIDA TURFGRASS ASSOCIATION Annual Conference and Show

September 30 – October 3, 1990 ♦ Orlando, Florida
Orange County Convention/Civic Center
Sheraton World Resort — Convention Hotel



TURFGRASS PARADISE — FTGA '90

With the cooperation of University of Florida, IFAS

The Largest Warm Season Turf Show in Southeastern United States

Exhibiting 100,000 square foot showroom of
Equipment, Products and Services for Turfgrass Managers

EDUCATIONAL CONFERENCE

Eight different Hands-on Workshops and three Concurrent Educational Seminars for Warm Season Turfgrass Professionals — managers and their employees — include: ♦ Identification & Recommendations for Control of Insects, Disease, Weeds and Nematodes ♦ Current Pesticide Regulations — Stewardship, Movement in Soil, SARA Title III, Right-to-Know ♦ Industry Trends — Water Restrictions, Computer Usage, Biological Control, Xeriscape, Controlled Release Fertilizer ♦ Advanced Plant Pathology and Nematology ♦ Irrigation Design, etc. for better water management ♦ Putting Green and Athletic Field Construction ♦ Turfgrass Growth Responses to the Environment ♦ Basic Hydraulics for Golf Course Equipment ♦ DACS Pesticide Licensing — Training and Equipment

Continuing Education credits will be offered.
Call for brochure and registration information.



FLORIDA TURFGRASS ASSOCIATION
302 S. Graham Avenue ♦ Orlando, FL 32803-6399
407/898-6721 ♦ FAX 407/894-3975

NEW PRODUCTS

Four new quality seeds released by Seed Research

Seed Research of Oregon has released four, high-quality proprietary turfgrass varieties.

SR 4200 represents the next generation in the development of dwarf-type perennial ryegrasses. It is a leafy, fine-textured turfgrass that has high tillering ability and a bright, dark green color that will produce a very dense, attractive turf. SR 4200 was rated number one for color in the 1988 Rutgers University perennial ryegrass trials.

SR 5000 Chewings fescue was bred for a dark green color, high-quality appearance and improved summer performance.

The new Chewings fescue has improved shade tolerance and high levels of Acremonium-type endophyte. It forms a dense, low-growing turf that tolerates relatively close mowing and is a good choice for low-maintenance, shady areas.

SR 8200 is Seed Research's newest tall fescue. A dwarf-type tall fescue, it has several maintenance advantages. A slower growth rate reduces mowing.

The dark green color allows reductions in nitrogen application without sacrificing appearance.

It has excellent shade, wear and cold tolerance; tolerates low mowing; survives in poor soils; tolerates drought conditions due to a deep and well-developed root system.

SR 2000 Kentucky bluegrass is a low-growing bluegrass with a dark green color. It has moderately wide leaves so it can be readily mixed with fine-textured tall fescue varieties. SR 2000 has excellent heat and drought tolerance and high wilt resistance. It provides an excellent, dense stand of turf in areas of varying light.

For more information call 800-253-5766. Circle No. 303

Energy and water savings with new Paco suction pump

Paco Pumps, Inc. of Oakland, Calif. has introduced a new Pacoflo 9000-ES end suction pump, factory-assembled booster systems offering low cost, maximum flexibility and energy savings.

With stainless steel manifolds from three to 10 inches in duplex and triplex configurations, it offers flows of more than 3,500 USGPM and heads to 400 feet. It utilizes 35 distinct sizes of high efficiency end suction pumps, each with impeller trimmed to precise requirements and motors sized accordingly. The pumps exhibit a broad band efficiency to ensure low operating costs throughout the duty cycle.

The Pacomonitor Flow Sensor provides direct flow sensing and sequencing with visual indication in both GPM and percentage of flow. It is field adjustable from a single point, with the system in operation.

The manufacturer estimates 25 percent operating cost savings over identically sized conventional systems. Each system is hydrostatically, electrically and hydraulically tested to 10 percent flow before shipment. Shipping time is two to four weeks.

For more information contact PACO Pumps Inc., 845 92nd Ave., Oakland, Calif. 94604-2924 or call 415-639-3200. Circle No. 307

Golf Course Marketplace

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

For a flower display they'll talk about all year long.

SCHIPPER & CO.

Wholesale Bulbgrowers and Exporters
1616ZG Hoogkarspel, Holland



USA Address: P.O. Box 236, Haddonfield, NJ 08033
Toll Free: 1 800 -TPP -TOES or 1 800-877- 8637

"Our Roots Are Bulbs"

For free information circle #140



Nationwide delivery • Install in less than two hours

Golf Course Bridges!
1-800-328-2047

Thousands in use.
Built to last.
Sponsor Member
CONTINENTAL BRIDGE
Route 5, Box 178, Alexandria, MN 56308 • (612) 852-7500



For free information circle #142



FLYMO

- NEW 1990 GCT 20
- EXCLUSIVE FLYMO DISTRIBUTOR



PRECISION SMALL ENGINE CO.

FOR MORE DETAILS
CALL 1-800-345-1960 OR (305) 974-1960

For free information circle #141

willadsen scale models

Custom Models
for the
Golf Industry

555 whitehall street s.w.
atlanta, ga. 30303 (404) 658-1704

For free information circle #143

2-WAY PORTABLE SYSTEM

ANDERSON INSTRUMENT & supply co.

\$395 INCLUDES:
2 WEEK FREE TRIAL
2 Radios
2 Holsters
2 Charging Systems

MADE IN THE USA

800-333-6212
1850 Kimball Rd. S.E., Canton, OH 44707

For free information circle #144

Poa Free

Pennsylvania Grown PENNCROSS

BENTGRASS SOD

CALL 800-USA-TURF (872-8873) or 717-898-5000

SPORTING VALLEY SOD

For free information circle #145

ENGRAVED YARDAGE LABELS
FOR SPRINKLER HEADS

CALL FOR FREE SAMPLE KIT

165

- Bright colors
- Fasteners included
- Orders quickly shipped UPS

1-800-284-YARD
THE YARD EDGE GOLF CO.
P.O. Box 13159 Wichita, KS 67213

For free information circle #146

WITHOUT GRASS

WITH GRASS

GRASS PAVERS

\$2.20/SQ. FT. DELIVERED IN U.S.A.

- Protect Grass from Vehicle Traffic.
- Used for Cart Paths, Service Roads, Parking Lots and Repair of Worn Areas
- Made of High Density Polyethylene

Free Sample Upon Request.
Using a Touch Tone Phone Call: **1-800-824-9029** Wait for Tone — **753**

GOLF 2000 CORPORATION
9842 HIBERT STREET, SAN DIEGO, CALIFORNIA 92131

For free information circle #147

Golf Course Marketplace

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



PIPE LOCATOR
THE LOCAT™
INEXPENSIVE

Locates, traces underground pipes, including drain pipes, made of PVC, ABS, steel and cement. Finds sprinklers, valves and clogs.

Used by Hundreds of Golf Courses

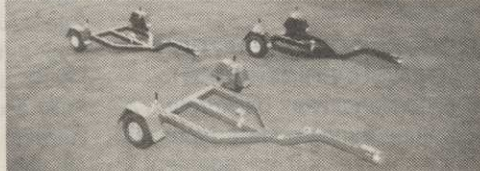
Satisfaction Guaranteed

Bloch & Company

Box 18058, Cleveland, OH 44118
(216) 371-0979

For free information circle #148

MOWER MATE®



U.S. & Foreign Patents Pending

Protect your greensmower from damage due to transport from green to green. Our exclusive 3-point clamping system suspends your reel, bed-knife, verticutter & differential. Call or write for details.



BELL TURF EQUIPMENT

316 Blossom Hill Rd.
San Jose, CA 95123
(408) 972-5061

For free information circle #149

SUNBELT PATH PAVERS

For maintenance free concrete paths using the "FAST TRACK" METHOD Environmentally Sensitive & Economical

For more details, call

(904) 628-3141

P.O. Box 4228 • Homosassa Springs, FL 32647
Members GCSAA, GCBA

For free information circle #150

Clearly Affordable Two-Way Radios By Motorola Radius

- LOW COST: RADIOS START AT \$235.00
- UP TO THREE-YEAR WARRANTY
- IMMEDIATE DELIVERY
- TRADE-INS ACCEPTED
- FREE TWO-WEEK TRIAL
- VARIABLE POWER MODELS AVAILABLE

1-800-527-1670

*Actual trade-in allowance depends on make and model of unit being traded in.

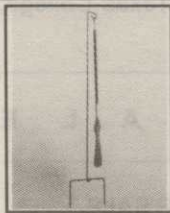
PAGE-COM

Page-Com, Inc. 10935 Alder Circle, Dallas, Texas 75238 (214) 348-0382

For free information circle #151

THE PATH TO THE CUP is strewn with fallen debris. The blowers have all disappeared to the shop, but your golfers are still out.

With the **GROOM BROOM** in place, this path can easily be cleared and the game continues.



Ask Your Golf Course Distributor for **INNOVATIVE MAINTENANCE PRODUCTS**

From

Master of the Links

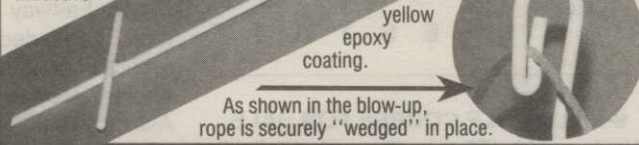
P.O. Box 52 • Lombard, IL 60148-0052
(708) 627-8379 (MASTERY)



For free information circle #152

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



yellow epoxy coating.

As shown in the blow-up, rope is securely "wedged" in place.

Call for a special introductory offer.

1-800-253-2112 / In Michigan call Collect: 313-429-9571

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

For free information circle #153

GOLF COURSE RADIOS



Motorola

2 WAY RADIO
PORTABLE FM
POCKET SIZE
GOLF COURSE ORGANIZATION

\$235.00

Radius Mail Order Pricing...

for details call Jim Martin

(800)

523-0625

2 YR. WARRANTY

FREE DEMO

WAREHOUSE RADIO

602 Third, Columbus, IN 47201

For free information circle #154



ACCU-GAGE

Accu-gage is a precision measuring instrument for making highly accurate height-of-cut adjustments on greensmowers or other precision mowers.

—FEATURES—

- Adjustments can be made with the gage on the mower. Simply read the gage while turning the adjusting knob.
- Measurements are made at the front edge of the bedknife regardless of bedknife wear.
- Eliminates the inaccurate "feel" method of old-type adjusting bars.
- Available in 15", 18" and 24" bars.

For more information on this and other precision tools call Toll Free: 1-800-253-2112 / In Michigan call Collect: 313-429-9571

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

For free information circle #155

Soil conditioner said to reduce water usage and runoff loss

Isolite has been introduced to the United States by New Golf Concepts, Inc.

Touted as a breakthrough soil conditioner, Isolite has the ability to reduce water usage as much as 50 to 65 percent, runoff by 90 percent and improve turfgrass quality, a combination that could mean substantial savings for many golf courses.

Isolite is a porous ceramic made of diatomite crusts. It is lightweight, porous and prevents the escape of fertilizer.

The company says that even in clay soil, air permeability and water drainage are excellent, enhancing root growth while preventing root decay.

Research reveals Isolite contains no environmentally harmful elements.

Developed in Japan over a nine-year period, it has been in use in that country for three years at 200 courses.

For more information write New Golf Concepts Inc., 8771 Wolff Court, Suite 220, Westminster, Colo. 80030 or call 303-426-4383. Circle No. 304

Melroe introduces three new compact Bobcat mini-excavators

The Melroe Company has introduced a line of three new Bobcat compact hydraulic excavators with digging depths ranging from 80 inches to 121 inches that represent the first North American-built mini-excavators.

The model 231 is the largest in the line, measuring 94 inches tall and 61 inches wide. It has a maximum digging depth of 121 inches and dumping height of 115 inches. It is powered by a 34-horsepower Kubota, liquid-cooled diesel engine with a maximum travel speed of 1.64 miles per hour.

The model 225 measures 94 inches tall and 55 inches wide. It has a digging depth of 92 inches and dumping height of 99.6 inches. Its 23.1 horsepower engine attains a top speed of 1.1 miles per hour.

The smallest is the model 220, measuring just 85 inches tall and 39 inches wide. It has an 80-inch digging depth and 84.6-inch dumping height. Its 13.5-horsepower engine can accelerate to 1.1 miles per hour. The 220 is equipped with rubber tracks.

All three models feature a full-open hood for easy maintenance access and a rubber-mounted engine for quiet operation.

All also come with auxiliary hydraulics as standard equipment for use with hydraulic attachments such as an hydraulic breaker.

Melroe has also introduced several attachments that fit many of its Bobcat loaders.

An angle broom attachment with a 68-inch straight sweep width (62 inches when fully angled) is compact enough to get into tight corners and against walls and fences. It is ideal for sweeping sidewalks, driveways and small parking areas.

An industrial broom attachment built on the framework of the grader attachment has a seven-foot sweep that makes it ideal for larger parking lots.

The long wheelbase helps it work on uneven terrain.

A new hydraulic tree transplanter attachment for the 700 and 800 Series skid-steer loader is also available. The four curved digging blades enhance tree survival compared to straight blades. It is capable of producing four standard rootball sizes.

For more information contact Leroy Anderson, Melroe Company, P.O. Box 6019, Fargo, N.D. 58108 or call 701-241-8700. Circle No. 306

CALENDAR

August

1 — University of Georgia Turfgrass Field Day at Griffin, Ga. Contact Dr. Gil Landry or Dr. Tim Murphy at 404-228-7300.6

9 — Rutgers Turfgrass Research Field Day at the Turfcenter, Ryders Lane, Cook College, New Brunswick, N.J. Contact Dr. Henry W. Indyk, Crop Science Department, Cook College, telephone 201-932-9453.

16 — GCSAA seminar in Murrieta, Calif., on Water Quality and Irrigation Scheduling.*

16-17 — South Dakota Seed Trade Association annual meeting at the South Dakota State Game Lodge in Custer (S.D.) State Park.

21 — Golf Course Construction/Renovation and Golf Day, sponsored by the New York State Turfgrass Association, at the State University of New York at Delhi in Delhi, N.Y., cosponsored by the Metropolitan GCSA, Central New York GCSA, Northeastern GCSA and Hudson Valley GCSA. Contact NYSTA at 800-873-TURF or 518-783-1229.

25-Sept. 10 — Asia Horticultural Tour of Thailand, Hong Kong and Japan. Contact the Professional Plant Growers Association at 517-694-7700.

September

4-6 — The Institute of Groundsmanship's Sports & Leisure World Trade Exhibition at the East of England Showground in Peterborough, Cambridgeshire, United Kingdom. For more information contact Milton Keynes at The Institute of Groundsmanship, 19-23 Church St., The Agora, Wolverton, Buckinghamshire MK12 5LG; telephone 0908-312511.

9-11 — National Club Association's first annual Club Director Conference at Pinehurst (N.C.) Hotel and Country Club. It is designed for incoming officers. Contact the NCA, Washington Harbour, 3050 K St. NW, Suite 330, Washington, D.C. 20007; 202-625-2080.

12-13 — Golf Development Conference, sponsored by Crittenden News Service, Inc., at the Peabody Orlando in Orlando, Fla. Contact Crittenden News Service, 250-G Bel Marin Keys Blvd., Novato, Calif. 94949.

18 — Professional Turfgrass Field Day, sponsored by the Metropolitan Golf Course Superintendents Association, at Westchester Country Club in Rye, N.Y. Rain date is Sept. 19. Contact Bob Lippman at 914-248-7476 or Byron Johnson at 201-473-3393.

18-19 — Virginia Tech Turfgrass Research Field Days at the Virginia Tech Turfgrass Research Center in Blacksburg, Va. Contact John R. Hall III, professor and Extension agronomist, at Department of Crop and Soil Environmental Sciences, 424 Smyth Hall, Blacksburg, Va. 24061-0403; 703-231-9736.

20-21 — GCSAA seminar in Sacramento, Calif., on Environmental Considerations in Golf Course Management.*

24 — GCSAA seminar in Banner Elk, N.C., on Maximizing Job Satisfaction.*

25-26 — GCSAA seminar in Caledon, Ontario, Canada, on Golf Course Construction Techniques and Management.*

27-19 — Golf Collectors Society's 20th annual meeting, including a private auction and two-day public trade show, in Birmingham, Ala. Highlights include a members-only reception at the Alabama Sports Hall of Fame and the Hickory Hackers 18-hole tournament, with players using only wood-shafted clubs and wearing 1900s-style attire. Contact Bob Tidwell at 205-328-3885.

30-Oct. 3 — Florida Turfgrass Association Annual Conference and Show — "the largest warm season turfgrass trade show in the Southeast" — at the Orange County Convention Center in Orlando. Workshops and seminars will cover environmental regulations, enforcement policies, biological control programs and advanced turf management practices; and the IFAS Research Update program of the University of Florida will present current facts for the turfgrass industry from the last year of research. Call 407-898-6721 for more information.

30-Oct. 4 — Professional Plant Growers Association annual conference at the Marriott City Center Hotel in Denver, Colo. Contact the Professional Plant Growers Association at 517-694-7700.

October

3-4 — The 30th Annual Southern California Turfgrass Council Expo at the Orange County Fairgrounds in Costa Mesa, Calif. Contact Chuck Wilson, CGCS, chairman of the SCTC Expo Committee, at 26442 Vera Cruz, Mission Viejo,

Continued on page 37

Golf Course Marketplace

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

EMPLOYMENT

LANDSCAPE ARCHITECT

Progressive, well-established contracting firm in Michigan seeking aggressive, self-motivated indiv. to fill a Landscape Architect position within our company. Send resume & salary requirements to:

DeAngelis Landscape Inc.
22425 Van Horn Rd.
Woodhaven, MI 48183

GOLF COURSE CONSTRUCTION MANAGER/SUPERINTENDENT

Excellent educational work background & experience. Superb knowledge of all phases of golf course construction management & maintenance, incl. irrigation. Experience includes that of golf course supt. & contractor. Willing to travel worldwide. Please contact: **Mark Sosnowitz, 21-H Weavers Hill, Greenwich, CT 06831. (203) 531-5110.**

SHAPERS WANTED

For project in Japan. Probable time frame is early 1991 for 6-month period. Must demonstrate experience on premier golf courses designed by top golf course architects. Send resumes to:

International Golf Developments
P.O. Box 8415
Westerville, OH 43081-9998

POSITIONS AVAILABLE

Experienced golf course construction supervisors & shapers needed for overseas work. Send references & resume to "Overseas Golf", 14651 Big Basin Way, Saratoga, CA, 95070 or Fax to 408-867-9680.

POSITION WANTED — GOLF COURSE EXECUTIVE

Ex-golf course owner/operator seeks responsible position in golf course industry. Will travel. (517) 362-7386.

REAL ESTATE

9-HOLE GOLF COURSE FOR SALE

Western MA (30 min. from Springfield). 439+ acres w/approx. 60 acres commercially zoned used for course & bldgs. w/ balance being in natural state. On-site spring water supply for greens; timber & gravel on property. 3600 sq. ft. clubhouse w/owner's apt. Full service bar w/all alcoholic license/breakfast, lunch, dinner & banquet facilities. Call or inquire for details.

Orchard Associates
8 Old New England Path
Woronoco, MA 01097
(413) 568-7948

MICHIGAN YEAR-ROUND RESORT

18-hole championship golf course. 25,000 sq. ft. clubhouse, 1000 seat convention center, 71 unit inn. 500 acres w/2500 lake frontage. Owner retiring. Price \$6 million. **M. Baganis, P.O. Box 641, Novi, MI 48376**

15 GOLF COURSES ALL OVER TEXAS

9 & 18 holes. \$365,000 & up. Some with owner financing. Phone or fax for descriptive list.

TEXAS GOLF PROPERTIES
(512) 442-7106
FAX (512) 442-1812

EDUCATION

MOVE UP IN THE GREEN INDUSTRY

2 year AAS degree program in Golf Course Superintending, Irrigation Management, Landscape Contracting & Park Supervision. Fully accredited, VA approved, expanded learning facilities, new equipment. Graduate job placement assistance available. For more information contact: **Golf Course Operations/Landscape Technology Dept., Western Texas College, Snyder, TX 79549.**

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 avail. Contact: **GCC, 6101 Grayson Dr., Dennison, TX, 75020. (214) 465-6030, ext. 253.**

NEW — Golf Course & Landscape Equipment Mechanic Training Program

One year Certificate includes training in Irrigation Repair, Maintenance & Trouble Shooting; Engine & Hydraulic Systems repair, Maintenance & Trouble Shooting; Reel Grinding, Mower Service & Repair. For info. contact: **Mr. Mace McDaniel, Golf Course Operations/Landscape Technology Dept., Western Texas College, Snyder, TX 79549.**

FOR SALE

EQUIPMENT FOR SALE

FH-15 Fairway Mower. Hydraulic-driven reels, 11-bladed. All units & reels 100% rebuilt & ground. Tractor has brand new engine. Mower doesn't suit our needs. Asking \$15,000 (neg.)

Call (919) 626-0450

STOLON PLANTING SERVICE

We plant golf courses mechanically. From Sod to planted Stolons in seconds.

FAST • ECONOMICAL • PROVEN
Call or write for brochure & specifications.
FLANNIGAN Stolon Planting Service
1467 Buena Vista Drive
Vista, CA 92083
(619)630-8910 • Fax (619)945-6783

BENTGRASS SOD

Putting green quality, grown on a fumigated sand base. Putting green sod @ 1/8" height of cut; tee sod @ 5/16" height of cut; fairway blend @ 7/16" height of cut. Guar. weed disease & poa annua free. Now taking orders for late summer & fall renovations. **STORMY ACRES, West Haven, VT. (802) 265-3046**

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

SUPERINTENDENTS WANTED!!

To try these new labor-saving devices:

- **The "New Flymo"**: The original Flymo is back with a brand new look.
- **"LEVEL-EEZ"**: A unique kit that allows you to raise Toro & Rain Bird sprinkler heads in minutes with **No Digging Required.**
- **"DonuTTrimmer Edging Blades"**: Allows you to edge bunkers, sprinkler heads, yardage markers & cart paths in minutes.
- **"Aqua-Quick"**: Turns Toro & Rain Bird valve-in-head sprinklers into 1" water source instantly. To order, call:

Precision Small Engine Co.
Andy Masciarella, Distributor
1-800-345-1960
Thomas R. Wait
New Product Developer

INDUSTRY INFO.

THOMAS R. WAIT

Inventor/developer of the:

- DonuTTrimmer Edging Blade
- Aqua-Quick Coupler
- LEVEL-EEZ Sprinkler Head Raising Kit
- Greens Encroachment Barrier

Announces that as of April 1, 1990 he is no longer associated with Greenstate International of Ft. Laud., FL. To contact Tom or for product information, call:

1-800-345-1960

ACCESSORIES

SAVE ON PERSONALIZED FLAGS

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

1-800-476-7005
Four Seasons Golf Co.
P.O. Box 78011
Greensboro, NC 27427

EXPORT - IMPORT

EXPORT - IMPORT

JOHN CORRICK INC. exports golf course equip. & systems to buyers in other countries. We buy at this end & sell at the other end & do all shipping, payment & collections. Currently involved in business regards golf car fleets, quick couple sprinkler/irr. sys., spray & jet fountains, pools, chemical feeding, dewage treatment & other desired items. We will respond to overseas requests that may come to you or sales & shipments you wish to make. FAX details for quick response

FAX 408-438-8427 • PH 408-438-3860
552 Bean Creek Rd. #75
Scotts Valley, CA 95066
or
PO Box 698, Pebble Bch., CA 93953

Zoysiagrass Growers

BECK'S TURF KNOWS ZOYSIA GRASS!

With three generations and 50 years experience in Zoysia production, we grow as good a sod as can be grown. When quality is what you need, call us for all of your Emerald and/or Meyer Z-52 needs.

BECK'S TURF-NURSERY, INC.
 PO Box 752 (205) 821-0969
 Auburn, AL 36831 (800) 288-4291

Beck's — the oldest Zoysia company in the U.S.

For free information circle #156

Quality Zoysia & Tifton Golf Courses Our Specialty

CARNATHAN BROTHERS

BIG CREEK TURF FARM

P.O. Box 155 • Oneida, Arkansas 72369
 Phone: 501-572-2740
 Mobile: 501-572-6538

Call for references from satisfied customers

For free information circle #157

Double Springs Grass Farm

Zoysia sod, sprigs & strips available. Row planting, strip sodding & solid sodding for fairways, bunkers & tees. Turnkey jobs. Call for details.

1-800-458-4756

For free information circle #159



A DIVISION OF PATTEN SEED CO.

ONE OF THE SOUTH'S OLDEST AND LARGEST PRODUCERS

HOME OF CHAMPIONSHIP TURFGRASS FOR OVER 45 YEARS

- Fescue
- Emerald Zoysia
- Meyer Zoysia
- Raleigh St. Augustine
- Centipede
- Tifway II Bermuda
- Tifway Bermuda
- Mercedes St. Augustine

Hybrid Bermuda Sprigs Available

Highest Quality — Delivery Anywhere

CALL TOLL FREE 1-800-255-0928

For free information circle #162



A DIVISION OF PATTEN SEED CO.

Premium quality Emerald & Meyer Zoysia cut in 16" x 81" rolls for faster installation & a better finish because of fewer joints than block sod. **Super-Sod** zoysias are grown on sandy-loam soils & will consistently root quicker & grow better on other types.

Buy from the largest grower of high quality Emerald & Meyer Zoysias in the U.S. Call one of our locations listed below for prompt delivery at premium prices.

LAKELAND, GA: (800) 634-1672
ORANGEBURG, SC: (800) 255-0928
PERRY, GA: (800) 535-1320

For free information circle #158

Over Twenty Years Experience in Golf Course Renovation/Establishment

EMERALD VIEW TURF FARMS ED KEEVEN SOD CO., INC.

Meyers Z-52 Zoysia Sodding • Seeding • Strip Planting
 Bluegrass Sprigging • Plugging
 Turftype Tall Fescue

St. Louis 314/441-5150 CONTACT THE KEEVENS
 Illinois 618/281-6050 ED, JR. • TOM • JIM
 Jefferson City 314/634-3444



For free information circle #160

OAKWOOD SOD FARM, INC.

PREMIUM ZOYSIA — BERMUDA GRASS SOD

ZOYSIA

MEYER
 BELAIR
 CASHMERE*

PURSLEY'S CASHMERE® — U.S. PLANT PATENT #6529

BERMUDAGRASS

TUFCOTE
 VAMONT

ALAN WILBER
 GARY WILBER

301/742-3086

Rt. 11 Box 662
 SALISBURY, MD
 21801

For free information circle #161

RIVERSIDE TURF FARM

"Quality Sod with Quality Service"

Emerald, Matrella, and Meyer Zoysia

(205) 585-6453

For free information circle #163

Continued from page 36

Calif. 92691; 714-951-8547.

4-5 — GCSAA seminar in Melville, N.Y., on Golf Course Design Principles.*

5-7 — First Joe Lee Challenge Matches, pitting teams of five golfers playing at Wynlakes Golf and Country Club in Montgomery, Ala. Contact Michael Reilly at Wynlakes.

11-12 — GCSAA seminar in Somerset, Pa., on Plant Nutrition and Fertilizers.*

22-23 — GCSAA seminar in Little Rock, Ark., on Golf Course Design Principles.*

23-26 — BGIA golf trade exhibition in Birmingham, England. For more information call 0903-883381.

24 — Safety and Preventative Maintenance Seminar, sponsored by the New York State Turfgrass Association, at Oyster Bay, N.Y. Contact NYSTA at 800-873-TURF or 518-783-1229.

28-Nov. 1 — The 11th Annual International Irrigation Exposition and 3rd National Irrigation Symposium, presented jointly by The Irrigation Association and the American Society of Agricultural Engineers, at Phoenix, Ariz. Contact Lisa Brownell-Pierce at The Irrigation Association, 1911 North Fort Myer Drive, Suite 1009, Arlington, Va. 22209-1630; 703-524-1200.

29-31 — West Virginia Golf Course Superintendents' Association's first annual turf conference at Cedar Lakes Conference Center near Ripley, W.Va. The conference will include equipment and product demonstrations and educational programs. Contact John C. Cummings at Berry Hills Country Club in Charleston, W.Va.

29-30 — GCSAA seminar in Manchester, N.H., on Golf Course Construction Techniques and Management.*

31-Nov.1 — GCSAA seminar in St. Louis, Mo., on Landscape Design and Materials.*

November

1-2 — GCSAA seminar in Bolton, Mass., on Integrated Pest Management.*

3 — American Seed Trade Association Lawn Seed Conference at Crown Center in Kansas City, Mo. Contact the ASTA at Suite 964, Executive Building, 1030 15th St., N.W., Washington, D.C. 20005; 202-223-4080.

3-6 — Western Seedsmen's Association convention at Crown Center in Kansas City, Mo.

6-7 — GCSAA seminar in Kansas City, Mo., on Public Relations and Public Speaking.*

8-9 — GCSAA seminar in East Lansing, Mich., on Managerial Productivity.*

12-13 — GCSAA seminar in Painesville, Ohio, on environmental management.*

12-14 — Golf Summit 90, the third in a series of industry strategic planning meetings, at Marriott's Desert Springs Resort and Spa in Palm Springs, Calif. Coordinated by the National Golf Foundation, the summit will focus on the progress made in the programs of the Strategic Plan for the Growth of Golf, first introduced by the NGF in 1988. Contact the NGF, 1150 South U.S. Highway One, Jupiter, Fla. 33477; 407-744-6006.

13-16 — New York State Turfgrass Association Turf and Grounds Exposition at the Rochester (N.Y.) Riverside Convention Center. Contact NYSTA at 800-873-TURF or 518-783-1229.

14 — GCSAA seminar in Palm Beach Gardens, Fla., on Budgeting and Forecasting.*

14 — Scotsturf 1990 in Ingliston, Edinburgh, Scotland. Contact Anne Swan at 0908-311856.

15-16 — GCSAA seminar in Louisville, Ky., on Plant Nutrition and Fertilizers.*

26 — GCSAA seminar in Rapid City, S.D., on Water Quality and Irrigation Scheduling.*

27 — GCSAA seminar in Albuquerque, N.M., on Developing Your Hazard Communication Program.*

28 — GCSAA seminar in Albuquerque, N.M., on Safe Pesticide Management.*

28-30 — Second Golf Course Europe, an international exhibition and conference on the design, construction and maintenance of golf courses and golf club management, at Le Parc des Expositions in du Bourget, Paris, France. Contact Ellen MacGillavry at Expoconsult, Industrieweg 54, P.O. Box 200, 3600 AE Maarssen, Holland; 03465-73777.

29-30 — GCSAA seminar in Pleasanton, Calif., on Golf Course Restoration, Renovation and Construction Projects.*

December

2-3 — GCSAA seminar in Denver, Colo., on Environmental Considerations in Golf Course Management.*

3-4 — GCSAA seminar in Cedar Rapids, Iowa, on Managerial Productivity.*

* — For more information or to register, contact Betsy Evans, education coordinator, Golf Course Superintendents Association of America, at 800-472-7878 or 913-841-2240. The seminars are dependent upon the availability of the instructors, and are therefore subject to change. One-day seminars cost \$100 for GCSAA members and \$120 for non-members; two-day seminars cost \$180 for members and \$210 for non-members.

Future Golf removes boredom from range

BY MARK LESLIE

Imagine. You're at Augusta National Golf Club. The par 3, 155-yard 12th hole, to be exact. The swirling winds, water and sand facing you belie the fact it is a truly difficult hole...

Wait a minute. You haven't driven more than 10 miles from your Chicago home. You are probably 1,000th on the list of hopefuls to ever join the fabled Augusta club. Plus, you're indoors.

You see, you are actually at Future World, the fulfillment of a dream of avid golfer Thomas Ruth.

Ruth's imagination was working overtime on the practice range one day. The Barrington, Ill., attorney didn't have time during his lunch hour to play a round of golf. And he was "getting pretty bored just banging balls." So he played his home course in his imagination, and now we can all play our courses in our imagination — at Ruth's Future Golf.

Located in Crystal Lake, Ill., outside Chicago, Future Golf is a complete practice facility. Its 10,000-square-foot building contains sand traps and two large greens. It has 10 tee areas looking out onto a "course" that features six "target" greens, complete with sand traps and pins. Greens range from 25 to 275 yards from the tees.

Keeping a hole at his home course in mind, the golfer drives toward one of the greens. He then gauges the remaining distance to the green and hits his second shot to whatever green is the correct distance away.

If the golfer hits into a trap, he just moves to one of the two sand traps within the building and chips to a green. Once on the green, he putts on one of the indoor greens. One green is "tough, very slick and undulating" while the second is moderately difficult, Ruth said.

"We've had an unbelievable reception. Everybody likes it," said Ruth.

Ruth said Future Golf has won the hearts of many beginning golfers.

"Nobody is in front of you. There's nobody behind. And you don't lose any balls," he said. "It's also fun because people come in with their kids. A kid can play a par 3 course and



The view from Future Golf's tee area.

Dad can play a championship course. They tee off together and putt together. So you get the best of both worlds."

More disabled people are coming to Future Golf because "it's the only place they can go," he added.

Time is a major factor on his side, Ruth feels.

"Golf takes an awful long time and I, for one, just didn't have the time to play a full round of golf," he said.

Relating how he once visualized playing his home course, Stonehenge Golf Course in Barrington, he said: "I'd play the course in my imagination. Then I'd go up to the clubhouse and have a sandwich and putt out on the practice green, and I'd putt 18 holes.

"I found out I could get 18 holes of golf in an hour and a half and have lunch, too."

Ruth said few people practice "because it's a chore. Sometimes I like this better than playing golf, because your bad shots don't bother you and things like that."

Ruth's partners in Future Golf are Stonehenge General Manager Dean Nissen and the deceased Charles Maddox Jr. Maddox's father, Charles Sr., a longtime golf course architect and owner of Stonehenge, designed the target course.

As for the facility:

- The target greens are built of sand mixed with a chemical that melts snow and remains soft so that balls don't bounce. When winter hits, a snowplow can clean off the perimeter of the greens.

Pittsburgh borough planning year-round practice facility

A new driving range and golf training facility that will allow area golfers to practice their games year round is planned in Pittsburgh's Jefferson Borough.

Pittsburgh architect Alan Jesse Cuteri said construction of The Practice "T" Country Club will begin in mid-August.

For the \$2.4-million project, Cuteri has designed a driving range with 140 tees. Twenty tees will be heated for winter use. There will also be a 10-hole pitch-and-putt area, complete with sand bunkers.

An indoor practice area and golf training center will be features of an 11,000-square-foot building that will be erected on the site. The building also will include a pro shop, a 75-seat restaurant, banquet facilities for up to 100 people and offices. Babysitting services will be offered at the facility and locker rooms and showers will be added at a later date.

The Practice "T" Country Club will be open

ON THE GREEN

basically just to control tee times in the winter. Ruth reported summer play has since increased by at least 50 percent.

"The advantage of membership is that you can book tee times. During the winter, we're booked on weekends until 4 p.m.," he said.

Ruth said his group plans to franchise Future Golfs "as soon as we get profitable."

He said the cost to play is \$6 for nine holes and \$10 for 18 holes for members. There is a \$2 surcharge for non-members during the winter months. In comparison, he said greens fees at area golf courses are \$15 and up on weekdays and \$18 and up on weekends.

During winter, golfers can practice for \$6 per half hour and \$10 per hour.

A manager, assistant manager and two-man maintenance crew are the only employees necessary to run the facility.

Now look! You defied that wind and nailed your career drive. The ball is within two feet of the pin. Now drop that birdie putt.

- The indoor greens have a sand base and artificial grass that needs only an occasional brushing to keep their nap.

- Lights on the outdoor range allow 24-hour play.

- The tee areas in the private enclosures have close-cropped and rough artificial turf so that balls can be teed up or hit from the turf as a golfer would on a regular course.

- High-capacity heating allows golfers to play in sub-zero weather with sweaters.

- Groups as large as 50, playing in fivesomes, can hold tournaments. Ruth said the lone problem in tournaments is judging the distance to the pin after the drive. "You get out on the 200-yard hole and it's hard to judge the distance... As for putting, we just have a pattern of putts and everyone putts the same — two long, two short, two uphill, two downhill and a side hill perhaps."

Profit is the only obstacle for Future Golf. Ruth feels now that some misconceptions have been discovered, Future Golf is on its way to being in the black.

Ruth said the partners opened the facility in the fall of 1988 as a private club with the mistaken belief that they had to get people to return more than once "to get comfortable with the concept. It takes a little imagination, you know. But we were wrong. We found that people get right into it."

Discovering that play dropped considerably in the summertime, they changed Future Golf to semi-private status last January, accepting the \$50-per-year family memberships

Advertiser Index

RS#	Advertiser	Page
144	Anderson Instruments	34
156	Beck's Turf Nursery	37
149	Bell Turf Equip.	35
148	Bloch & Co.	35
157	Carnath Brothers	37
120	Ciba-Geigy	25
108	Ciba-Geigy	9
142	Continental Bridge	34
129	Cushman	39
105	Cushman	7
117	Cushman	22
123	Cushman	28
159	Double Springs Farm	37
160	Ed Keeven Sod	37
127	Florida Turfgrass Assn.	33
147	Golf 2000 Pavers	34
111	Grace-Sierra	13
106	Greensmix	12
119	Jacklin Seed Co.	24
133	Jacobsen	40
115	John Deere	16-17
152	Master of the Links	35
113	Mike Young Designs	15
103	O.M. Scott	4-5
161	Oakwood Sod Farm	37
126	Oregon Fine Fescue Comm.	32
112	Page Com	15
151	Page Com	35
158	Patten Seed Co.	37
124	Pennington Seed	29
107	Plantstar Inc.	12
141	Precision Small Engine	34
155	Precision Tool Co.	35
153	Precision Tool Co.	35
163	Riverside Turf Farm	37
128	Roseman Mfg.	38
140	Schipper Bulb Co.	34
116	Seed Res. of Oregon	18-19
110	Southern Concrete	8
145	Sporting Valley Sod	34
121	Standard Golf	26
150	Sunbelt Path Pavers	35
162	Super Sod - Carolina	37
122	Tee-2-Green	27
109	Toro Aeration	10-11
125	Toro Comm'l. Prod.	30-31
104	Turf Merchants	6
102	Turf Seed	3
154	Warehouse Radio	35
118	Warren's	23
143	Willadsen Scale Models	34
114	X.S. Smith	14
101	Yamaha	2
146	Yard Edge	34

Reel Deal



A truly versatile 3 gang for the money—\$6,510 list. Exclusive lightweight "hollow-roller" design is excellent for fairways and commercial use. Unique rear wheel drive design eliminates bouncing and allows for close trimming.

For over 75 years Roseman has been building durability into each mower. Whether you choose the 3, 5, 7, 9 or 11 gang model, you can be sure it's made to last. Call or write today.



ROSEMAN MANUFACTURING COMPANY
2300 Chestnut Street
Glenview, IL 60025
1-800-852-ROSE
In IL (708) 729-2300

For free information circle #128

Destroy the evidence or suffer the consequences.

The Cushman® Core Destroyer™ is the only effective means of providing quality play soon after fairway aeration. Use anything else and you'll have unhappy golfers on your hands. If you're going to aerate, do the whole job right. Get a Cushman Core Destroyer and *totally* pulverize cores at up to 6 mph.

Comes with FREE mowing deck. Order a Cushman Core Destroyer and a liquid-cooled gas or diesel Front Line tractor before September 30, 1990, and



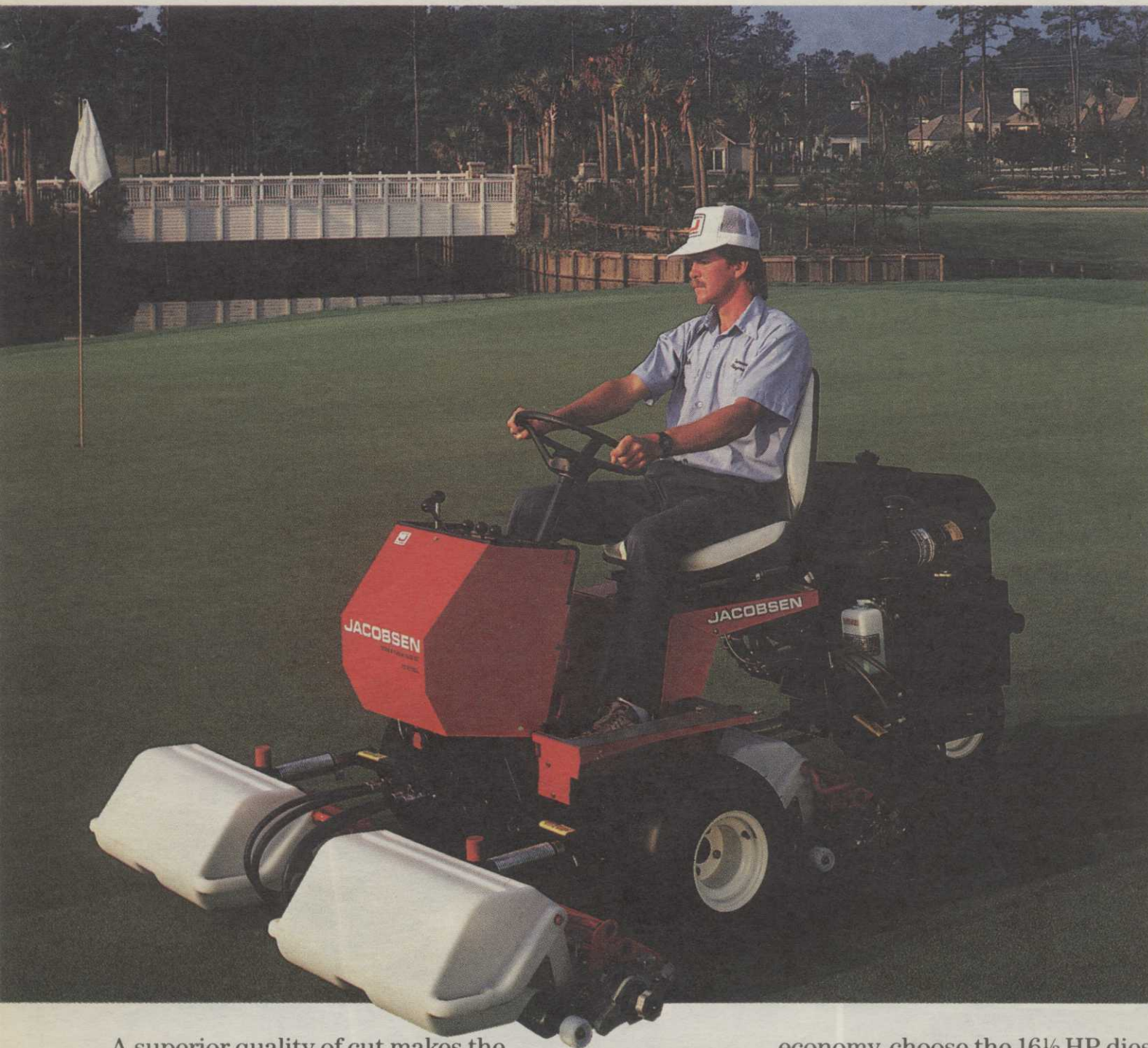
you can have your choice of a 60" or 72" mowing deck free! It's the perfect way to get maximum mileage out of a Front Line tractor that's not afraid to go head-to-head with anything else on the market. For all the facts and a convincing demonstration, contact your Cushman dealer or call toll-free 1-800-228-4444 today.



CUSHMAN
BUILT TO LAST

In this domain, the King reigns supreme.

NO
7.9%
APR FINANCING ON JACOBS
PRODUCTS
UNTIL SEPTEMBER 1.



- Lightest footprint, best weight distribution to minimize compaction.
- Exclusive nine blade reels with full-floating, articulated steering set the standard in fine greens mowing.
- Power backlapping standard.
- Patented Turf Groomer® for truer, healthier greens.
- New, large, easy-to-use grass catchers.
- Choose 16½ HP diesel or 16 HP gas engine.

A superior quality of cut makes the Greens King IV® the most popular greens mower in the world. With the lightest footprint in the industry, the Greens King has the best weight distribution between all three wheels to minimize compaction.

Exclusive Features Are Standard

Exclusive, fully floating, pivoting reels steer through turns without scuffing or marking on the clean-up pass. Individual reel control and power backlapping are standard to keep reels sharp with less work. The Jacobsen quality reel sets the standard for fine greens mowing. All this at a competitive price.

New, large capacity grass catchers are easier to attach and remove. For maximum durability and

economy, choose the 16½ HP diesel with power steering or choose the 16 HP gas engine.

Greens King performance with the ultimate exclusive: Turf Groomer.®

Jacobsen's new, patented Turf Groomer greens conditioner gives a smoother, truer putting surface without grain. The unique design increases green speeds up to 25% without lowering height of cut, producing truer and healthier greens.

Now heavier, larger diameter rollers, higher side frame clearance and improved durability make the Turf Groomer better than ever. Quick-lift levers let you raise the Turf Groomer ¾" to skip conditioning.

See why the King reigns supreme. Contact your Jacobsen distributor for a demonstration.

JACOBSEN
TEXTRON

Jacobsen Division of Textron Inc.