Accessible, sustainable golf gets its due

**Spring Prep**
Supers share spring-prep problems, solutions and tips for the coming season. Gear up now

**Ohio Turfgrass Wrap-Up**
Mark Leslie offers a detailed analysis of the golf-turf industry's second biggest trade show

**JACOBSON SETS SIGHTS ON SUCCESS**
A protege of Wadsworth, Nicklaus and Nugent, Rick Jacobson is stamping his own trademark on the world of course design. See Q&A, page 47.

**COURSE MANAGEMENT**
Environmental Golf takes new direction
USGC, Golf Ventures complete merger
After all, it's about diplomacy

**SUPPLIER BUSINESS**
Toro launches search for the perfect green
Club Car expands in Western Canada
Pursell adds new formulator to growing list

**MAINTENANCE**
Genetic engineering could drive seed costs up

**TALKING STICK SPEAKS VOLUMES**
Coore & Crenshaw's Talking Stick, two 18-hole courses built on Salt River-Pima-Maricopa Indian Community land, promises to bring a little Scotland to Scottsdale, Ariz. See story page 54.
You've Just Spent $40,000 to Build a Green

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At $4 to $7+ per square foot, a 6,000 foot green can cost $24 to $50 thousand. No matter how you figure it; design, grading, tiling, gravel, sand and manpower, building a green is the most important part of any course. It would be foolhardy to plant an unproven bentgrass on a whim, or because it's a few cents a pound cheaper. Of course you're going to be cautious when your reputation's on the line. You're going to insist on the stellar new Penn A and G series bents from Tee-2-Green®, developed by Dr. Joe Duich, then tested—and selected—by some of the best superintendents on some of the finest courses in the world.

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Oregon's best and most experienced bentgrass seed producers grow these exceptional creeping bents to the highest certification standards; free of any objectionable weeds.

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NGF pinpoints hot spots for course development

JUPITER, Fla. — The National Golf Foundation (NGF) has released a new trend report for developers, consultants and others who are interested in knowing just where most of the golf course development is occurring in the U.S.

Entitled "Hot Spots for U.S. Golf Course Construction Activity," it tabulates information derived from the NGF's project-tracking database which profiles golf courses that are under construction, in planning or have recently opened.

The 109-page report provides a detailed look at where golf course development is occurring, executive, par-3, regulation, or executive, par-3.

NGF has been tracking these locations for the past five years and where it will be occurring over the next five years.

The locations of this activity are provided down to the county level and presented in terms of the facility type [e.g. daily fee, municipal, private, resort, real-estate related] and length [e.g. regulation, executive, par-3].

Continued on page 4

Most active counties in U.S. golf development

<table>
<thead>
<tr>
<th>Rank</th>
<th>County</th>
<th>State</th>
<th>Holes opened Jan 92-Jun 97</th>
<th>Holes in planning*</th>
<th>Holes under construction*</th>
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<td>135</td>
<td>135</td>
<td>288</td>
<td>620</td>
</tr>
</tbody>
</table>

* As of June '97

Source: National Golf Foundation

SAY HASTA LA VISTA TO PUMP STATION PARANOIA.

Late night service calls? Exploding sprinklers? Stressful days and sleepless nights? End those pump station tantrums and foul-ups.

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Official Contest Rules: No purchase necessary. Approximate value of trip: $1,500. Must be 18 years of age or older as of 1/1/98. Entry forms available at the FLOWTRONEX PSI booth at the GCSAA show. You can also enter by mailing your name, address, telephone number and a handwritten note to: Hasta La Vista Sweepstakes, c/o FLOWTRONEX PSI, 10717 Harry Hines Blvd., Dallas, TX 75220, U.S.A. by 1/31/98. Drawing to be held on or before 2/15/98. Winner will be notified by mail. All non-winning entries will be destroyed. No photocopied entries will be accepted. Odds of winning depend on the number of eligible entries received. FLOWTRONEX PSI reserves the right to determine dates on which trip can be taken. All travel must originate within the continental U.S. Void where prohibited by law.

Official Contest Rules: No purchase necessary. Approximate value of trip: $1,500. Must be 18 years of age or older as of 1/1/98. Entry forms available at the FLOWTRONEX PSI booth at the GCSAA show. You can also enter by mailing your name, address, telephone number and a handwritten note to: Hasta La Vista Sweepstakes, c/o FLOWTRONEX PSI, 10717 Harry Hines Blvd., Dallas, TX 75220, U.S.A. by 1/31/98. Drawing to be held on or before 2/15/98. Winner will be notified by mail. All non-winning entries will be destroyed. No photocopied entries will be accepted. Odds of winning depend on the number of eligible entries received. FLOWTRONEX PSI reserves the right to determine dates on which trip can be taken. All travel must originate within the continental U.S. Void where prohibited by law.

GOLF COURSE NEWS

CIRCLE #118/GCSAA BOOTH #2817

January 1998 3
NGF library Internet accessible

JUPITER, Fla. — For more than four years, the National Golf Foundation (NGF) has been building and indexing its golf business library. Exceeding 27,000 different literature items and adding more than 6,000 new items each year, the NGF library searching system can now be accessed from the NGF's Web site at www.ngf.org.

And for a limited time, the NGF Library can be searched for free by anyone who has a NGF library password and access to the World Wide Web. After the free trial period is over, subscriptions will be sold on a quarterly or annual basis with members of the National Golf Foundation receiving substantial discounted rates.

Free passwords to access the NGF Library can be requested through the NGF's web site at www.ngf.org, on the "Information Services" page.

"With an NGF Library password, visitors to the NGF web site can now conduct keyword searches of the 27,000 items that are currently housed in the Foundation's collection of golf business literature," said Charles Mayberry, the NGF's director of information services. "In addition to research studies, government publications and newsletters, the collection also contains thousands of articles that have appeared over the past five years in the golf industry's trade and professional magazines, journals and many of the nation's newspapers."

The NGF's library collection offers information on over 1,500 different industry-related topics ranging from advertising and promotion to measurement systems and zoning. Library searches can be conducted by subject, title, author, publisher, date or any combination of the five fields. The search service will provide the user with an abstract of each item in the library and if the user wants a complete text of any item located, an online order form to receive a copy resides on the web site.

"In talking to those who have already taken advantage of the library," says Mayberry, "we're finding that it's being put to many different uses."

Hot spots

Continued from page 3

1997, or are projected to come on line sometime during the next five years. This hole count is equivalent to 3,000 18-hole courses.

The report measures development activity in terms of number of golf holes rather than number of golf courses. Using number of golf holes as a yardstick is considered the most accurate way of measuring the golf supply for a given geographical area.

It also indicates how much of the development activity is related to brand new facilities and how much instead constitutes expansions to existing golf facilities.
CFOs prefer golf to other pastimes

MENLO PARK, Calif. — When they're not in the office, the nation's financial executives prefer to spend their time on the fairways, according to results from a nationwide survey.

Twenty-one percent of the chief financial officers (CFOs) polled said their favorite leisure activity is golf. The game is even more popular with CFOs of large corporations (500+ employees), where 40 percent cited it as their favorite pastime.

The survey was developed by Accountemps, a major temporary staffing service for accounting, finance and bookkeeping professionals. It was conducted by an independent research firm and includes responses from 1,400 CFOs from a stratified random sample of companies with more than 20 employees.

Respondents were asked: "Which one of the following best describes your favorite leisure time activity, other than being with friends or family?"

Their responses were: golf (21 percent); reading (14); team sports (10); working out (9); movies or theater (9); adventure sports (9); music (5); surfing the Internet (4); tennis (3); fishing/hunting (2); other (12); don't know/no answer (20).

"While golf is a social sport, many financial executives believe it's an excellent forum for business networking with colleagues and clients without the distractions of the office," said Max Messmer, chairman of Accountemps.

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Weather delays Md. openings

CUMBERLAND, Md. — Rocky Gap's rugged nature will delay the opening of the Jack Nicklaus signature, 18-hole course for several months next year, but the related lodge and golf resort is targeted to open in April 1998. Challenges caused by either too much or too little rain through the fall have affected the grass-growing schedule. Rocky Gap's 18-hole course is now expected to open in two stages next year, with the first nine opening in mid-summer and the other nine later in the fall, according to Hans Meyer, executive director of the Maryland Economic Development Co. (MEDCO).

The 6,934-yard course and six-story lodge are being built on 260 acres of the 3,400-acre Rocky Gap State Park managed by the Department of Natural Resources. MEDCO is the construction manager of the $53.1 million project, which is being managed by Buena Vista Hospitality Group.
Golfer sues N.J. facility for eye injuries

MAHWAH, N.J. — A woman golfer has filed a lawsuit against the Darlington County Golf Course, Mahwah Township and Bergen County claiming she sustained serious eye injuries from bacteria-infested water used to irrigate the golf course.

Janice Lipack, of Franklin Lakes, N.J., said she was sprayed by water from the sprinkler system while playing golf at Darlington County Golf Course May 7. The complaint states that the sprinkler was drawing water from a nearby pond that contained the acanthomoeba organism. Lipack reportedly suffered an infection in her eye that led to the loss of a cornea.

The lawsuit seeks unspecified damages. It also asked that a judge issue a temporary restraining order prohibiting the defendants from tampering with the water before it can be tested further.

Bergen County Parks Director Wolfgang Albrecht, who was named as a defendant in the lawsuit, said the acanthomoeba is a microorganism indigenous to the area. He said the golf course has ceased random watering of the course during the day when golfers are on the course.

Albrecht said it is unclear whether Lipack suffered her injuries as a result of her trip to the Darlington County Golf Course.

AGC to operate New York links

MONROE, N.Y. — American Golf Corp. has been awarded the contract to manage the new Mansion Ridge Golf Club, an 18-hole daily-fee course designed by Jack Nicklaus which is scheduled to open for play by fall 1998.

Located one hour northwest of Manhattan in Monroe, the par-72, 6,883-yard championship layout is being carved from mature forests and rolling countryside at a historically-significant 220-acre country manor. A stone barn on the property is being converted into a picturesque 12,250-square-foot clubhouse, with two meeting rooms for corporate functions and a full service bar and grill room seating more than 100 guests. Other amenities include a two-tiered driving range, elegant locker rooms and a pro shop.

Palmer may design Pennsylvania layout

LAURELTON, Pa. — A soon-to-be-closed state residential facility for the mentally and physically handicapped in Union County may be transformed into a world-class, 18-hole golf development with a layout designed by Arnold Palmer Course Design.

A group of investors has commissioned Palmer's group to do a feasibility study and develop preliminary plans and figures for a $4 to $6 million facility at the Laurelton Center that would include conference facilities. The preliminary plan is to develop a course and amenities capable of hosting major professional golf tournaments.

The Laurelton Center, a 245-acre site with a number of existing buildings, will close by June 1998. The state is seeking proposals to sell the property.

WESTCHESTER COUNTY BUYS GOLF COURSE LAND

NEW CASTLE, N.Y. — The possibility of a sixth Westchester County public golf course increased with the county's recent purchase of 170 acres of the former Hudson Hills Golf Club west of the Taconic State Parkway. The county bought the land from IBM Corp. for a price believed to be between $3.6 and $4.6 million.

Plans have been floated for more than a year now to build an 18-hole public course on the site to join the five other county courses: Dunwoodie, Maplemoor, Mohansic, Saxon Woods and Sprain Lake.

THE JOHN DEERE RZI 700

You pick the description. The John Deere RZI 700 fits them all. Now, you have an alternative to traditional methods. You can inject liquids directly to the root zone, eliminating drift and minimizing surface toxicity.

The RZI 700 delivers treatments up to six inches deep through 16 single- or multi-orifice nozzles. The 5,000-psi system ensures injections penetrate even hard-packed soil. And, at 3 mph working speed and 3 x 3-inch spacing the RZI 700 covers a lot of ground at 64,800 square feet per hour. It all adds up to bad news for pests like white grubs and mole crickets.

In fact, tests show that a high percentage of grubs are killed from the force of injecting water alone. Hard to get more environmentally friendly than that. For the name of your nearest distributor, or free literature, call 800-537-8233. Or write John Deere, P.O. Box 12217, RTP, NC 27709-9601.  www.deere.com
Ross restoration also helps Fla. water supply

JACKSONVILLE, Fla. — The restoration of the 1920s-era Timuquana Country Club by golf course architect Bobby Weed has done more than just fix up a classic Donald Ross design. The tree-lined course, which had suffered from tree overgrowth and drainage problems, is now using treated water to irrigate. In doing so, the club is helping reduce the amount of water taken from the Florida aquifer and assisting the U.S. Navy in its goal of releasing less treated water into the St. Johns River. The course is located on the banks of the St. Johns River south of downtown Jacksonville.

The two-phase restoration project was created through some unique circumstances. The club made the decision to renovate because of a mandate by the Florida State Water Management Agency, which forced a change from well water to recycled water for irrigating the golf course. Because of water issues, Timuquana Country Club was faced with vacating the entire irrigation system.

"Since the golf course was going to be out of play for a period of time anyway, the membership voted to restore the layout and repair the drainage problems the club had lived with for years," said Weed. "Essentially, we kept the routing intact. We removed approximately 800 trees that had overgrown the fairways, changing the original Ross strategy. We kept the old growth oaks that are characteristic of the area, but removed many of the new pines. It's not the first time a Ross course has been restored, but it is probably the first time a Ross course has been restored in conjunction with a branch of the U.S. Armed Services. It was a win-win situation for both parties, particularly from an environmental stewardship standpoint."

New Tampa club recruits exclusive membership

TAMPA, Fla. — The Tampa Bay area's newest golf course is also one of its most exclusive. The Old Memorial Golf Club, designed by golf course architect Steve Smyers, will limit its membership to 400 with only 155 local memberships. The club, which was the vision of the founders of the Outback Steakhouse chain, is aiming to become an ultra-exclusive golfer's haven with a national and international membership in the vein of Pine Valley or Augusta.

Old Memorial will offer its members and guests four suites on the second floor of its 25,000-square-foot clubhouse and two private 5,000-square-foot cottages on the grounds with eight sleeping rooms in each. The golf course itself will offer three different styles within around: open, links-style holes; tighter, wooded holes; and holes set around a lake and wetlands area. No two consecutive holes play in the same direction and Smyers has found room for 120 bunkers.

"I think the thing we tried to accomplish was to develop a golf course that not only looks different, but played different," Smyers told The Tampa Tribune.

"We wanted to put the old traditional links style of play into the golf course. To develop a course that would allow you to negotiate your way around. We didn't require forced shots over water. We didn't require a high fade or a little hook. We allowed the golfer to use his imagination and give him several options as to how he wants to play the hole."

IGM TO OPERATE NAPLES, FLA. GOLF FACILITY

NAPLES, Fla. — International Golf Management (IGM) of Lakeland has been selected to provide golf course maintenance duties for The Heritage Greens Golf Club when it opens this month. IGM will oversee the course's grow-in phase and all maintenance for three years. Heritage Greens, designed by golf course architect Gordon Lewis, is a public, 18-hole course.

NOTHING RUNS LIKE A DEERE®
Michigan golfers spend almost $1 billion annually in Michigan

LANSING, Mich. — Golfers spend a minimum of $941 million in Michigan annually, according to a new economic impact study commissioned by Travel Michigan.

The study, conducted by professors at Eastern Michigan University, is the first economic impact study of golfers on the Michigan economy. "Michigan leads the nation with more than 750 public golf courses and we have led the nation in the number of new courses coming on line," said Richard Czuba, Michigan's director of tourism. "For the first time we can estimate the economic impact of golf on Michigan's economy. At nearly $1 billion, the impact is staggering."

According to the study, golfers spent $386.10 per trip, at both the golf course and in the community, on trips that averaged 2.6 nights away from home. Golfers spent at least $506.6 million at Michigan golf courses and resorts, and poured a minimum of $434.4 million into Michigan's communities.

The study measured only the expenditures of golfers. Real estate sales, construction jobs, and golf course employment were not included as part of the economic impact study.

"Tourism is the state's second largest industry, and golf is emerging as a major economic player for the state," said Czuba. "Not only do golf courses provide great enjoyment, they highlight Michigan's great outdoors while supporting the thousands of small tourism businesses across the state, bringing more jobs to all corners of Michigan."

Beyond economic figures, the study provided an interesting profile into the Michigan golfer, including a golf population younger than the national average of 40 years old and 52 percent earning an annual income in excess of $75,000.

Detroit track headed for redo

DETROIT — The 18-hole Shady Hollow Golf Course looks headed for a redesign as part of a $250 million, 700-acre retail, business and housing project north of Detroit Metro Airport.

The proposed Metro World Centre, which would be one of Detroit's largest developments, would include a 450,000-square-foot discount mall, five technology parks, corporate park, office campus, retail strip center and single-family and rental housing. Shady Hollow falls within the proposed site plan.

Metro World developer Burt Farbman has said that changes to the golf course are very likely and that it may be reduced to a nine-hole layout. He said a study has shown that 80 percent of the rounds now played on the course are nine-hole rounds.
Our turf is good, we're not sodding, and we're not spending huge amounts of man hours to babysit greens through the stress period.

- Wayne Mills
  Valencia Country Club
  Valencia, California

My fairways never looked better or healthier, and my fungicide budget went down, too.

- Bruce Burchfield
  Fox Run Golf Club
  St. Louis, Missouri

Now You Can Use Less Fungicide Per Application, Cut Your Costs, And Get Greener, Healthier Grass, Too. Just Turn The Page To Find Out How.
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For A Great Looking Course V

Thanks to their unmatched sticking and staying power, Daconil® fungicides have long demonstrated superior broad spectrum disease control at much lower rates* on a regular 7 to 10 day, preventative schedule for even better results.

Why a preventative schedule? Because disease can already be at work, doing damage to your turf well before visible symptoms appear. Even if you react at the first signs of disease, you could be reacting too late, and your grass might never fully recover. But a preventative
program stops disease before it can start, and that's one reason this approach makes so much sense. You also put down less fungicide at any one time, which club members will love. You can eliminate systemics to cut total fungicide use and save money. And above all, you get great looking grass. In fact, we guarantee you'll be happy with the results, or we'll give you enough Daconil Ultrex to respray your course using your old program.¹

Just ask your distributor for all the details. And if you're still not convinced, ask to take the Daconil Challenge, and get enough free product to try this program on a green, tee, or fairway for an entire season. Daconil Ultrex reduced rate spraying. It could put you on a better course than ever before.
See For Yourself How The Stick And Stay Power Of Super Weather Stik Makes Reduced Rate Spraying Possible.

Scanning electron microscopy of treated plant samples lets you see for yourself just how much better the Super Weather Stik formulation of Daconil Ultrex sticks and stays compared to the generic competition. And it's that stick and stay difference that makes Daconil Ultrex reduced rate spraying possible. So if you're tempted to try a similar program with some generic, just remember that the very thing that makes these reduced rates effective is the very thing generics lack — the sticking and staying power of Super Weather Stik.

Of course, with Daconil Ultrex, you also get exceptional handling, superior mixing, and easy packaging disposal with no containers to triple rinse. And remember, too, there's never been a documented case of disease resistance to a Daconil brand fungicide in over 25 years, which means you can continue to count on Daconil Ultrex for top disease control — one more good reason to put our reduced rate Daconil Ultrex short interval spray program to work for you.

Always follow label directions carefully when using turf and ornamentals plant protection products.


"For best results, we recommend using 20% lower application rates on a 7-10 day schedule. Section 12(a)(2)(G) of FIFRA provides that it is unlawful for any person "to use any registered pesticide in a manner inconsistent with its labeling"; quoted language is defined in section 2(ee) of FIFRA and expressly excludes the act of "applying a pesticide at any dosage, concentration, or frequency less than that specified on the labeling unless the labeling specifically prohibits deviation from the specified dosage, concentration, or frequency." Thus, in the absence of specific label prohibitions, it is not unlawful under section 12(a)(2)(G) to use a registered pesticide at a dosage, concentration, or frequency less than that specified on the labeling of the pesticide.

User must have label in possession when applying these rates.

†For a copy of our Daconil Ultrex Super Weather Stik Guarantee, write to Daconil Ultrex Guarantee, ISK Biosciences Corporation, Turf & Specialty Products, 1523 Johnson Ferry Rd., Suite 250, Marietta, Georgia 30062
††Micrographs have been colorized for demonstration purposes.
PGA champ Brooks designs Texas links

FORT WORTH, Texas — Construction has started on Southern Oaks Golf Club, an upscale daily-fee course designed by Mark Brooks Golf and located 15 miles south of downtown Fort Worth.

Southern Oaks will feature an 18-hole layout designed by Brooks, the 1996 PGA Champion, and also an expansive 15-acre practice and teaching area, an 8,400-square-foot clubhouse and an indoor/outdoor pavilion with seating for more than 200 people that will be used for tournaments and corporate outings.

Brooks, a seven-time Tour winner and 14-year member of the PGA Tour, has taken advantage of the site's natural landscape and wooded areas. The 300-acre course and 350-home residential community is being developed by Timberchase Development Co. Southern Oaks is the second project for Brooks and developer Peter Thomas, president of Timberchase.

“The routing is the heartbeat of any course, and in many cases, is the only permanent feature of a golf course,” said Brooks in announcing the project. “The Southern Oaks project will benefit tremendously from its natural environment, and I look forward to creating the centerpiece of this unique community.”

NationBank of Texas, Fort Worth Division, and a group of private investors are financing the project. Wadsworth Golf Construction of Plainfield, Ill., is building the course and Southern Irrigation Consultants of San Antonio is designing the irrigation system. Ken Schaumburg Architects of Fort Worth is designing the clubhouse. Southern Oaks will be managed by Mark Brooks Golf and is scheduled to open in October 1998.

Note Dame layout on schedule for 1999 opening

SOUTH BEND, Ind. — Work has progressed on Notre Dame's new 18-hole Warren Golf Course far more smoothly and quickly than designers Ben Crenshaw and Bill Coore had anticipated.

All but two or three of the 18 holes had been shaped by early December, Crenshaw and Coore said the sandy soil at the site northeast of the famous campus is one key reason why construction has gone so well.

Coore has said the sand-based soil discovered by construction crews under a clay layer has qualities consistent with the United States Golf Association greens mix. The site itself features gently rolling land with mature trees. Grass will be planted in late spring or summer and the course is expected to be ready for play by spring 1999.

Work begins on 7th RTJ Trail site

PRATTVILLE, Ala. — The latest stop in Alabama's Robert Trent Jones Golf Trail is unfolding here with preliminary clearing work.

The suburban Montgomery site is scheduled to include at least three, and possibly four, 18-hole courses. Developer Bobby Vaughn of Sun Belt Golf Corp. is guiding the project in conjunction with the state's Retirement Systems of Alabama, which is building the complex.

The first 18-hole course, which will be built above a bluff, is scheduled to open by fall 1998. The second course includes routing on the bluff. A third course is planned around the lower lands and would play around water. A fourth course, which is in the proposal stages, would be built on the opposite side of Interstate 65.

The other Robert Trent Jones Trail sites in Alabama are in Huntsville, Anniston-Gadsden, Birmingham, Auburn-Opelika, Dothan and Mobile.
Arizona course worker saves golfer’s life

SCOTTSDALE, Arizona — Putting for a $2 Nassau may not be a life and death struggle for some amateur golfers, but recently, the Boulders Golf Club witnessed first-hand that a heart attack knows no boundaries or limitations.

During a regular men’s member outing on the resort’s North course on Nov. 24, a member was stricken with an apparent heart attack while putting on the 14th green. Rob Turner, golf operations manager for the Boulders and a PGA Class A professional was touring the course with fellow employee, Mike Miller when they came upon a frenzied scene at No. 14.

“Apparently, the member was hit with the heart attack just a minute before Rob and Mike reached the green,” said Mike Lorch, head golf pro at The Boulders. “Rob knew CPR and began administering it immediately, while Rob went and called for an ambulance.”

The ambulance arrived within minutes and rushed the fallen golfer to Scottsdale Memorial North Hospital, where he underwent bypass surgery a day later. Paramedics on the scene credit the fast thinking of Rob Turner and Mike Miller for saving the member’s life.

“Rob and Mike acted without hesitation and The Boulders recognized their outstanding service with a special award and ceremony later in the week,” added Lorch.

GEORGIA LINKS RE-OENS AFTER 1-YEAR HIATUS

TIFTON, Ga. — Sunsweet Hills Golf Club reopened recently after closing for a year due to an illness to owner Leonard Morris. Sunsweet, originally opened seven years ago, was designed by Don McMillan, a Tifton resident who has been involved with more than 150 projects worldwide. Sunsweet Hills boasts a setting that includes forests of pecan, pine, oak and poplar trees and eight holes bordering water. Kevin Touchstone is the superintendent.
California airport board seeks private course operator

LOS ANGELES — Golfers in Palmdale, Calif., will continue playing the Desert Aire Golf Course as the Los Angeles World Airports Board of Airport Commissioners voted Thursday to seek a long-term private operator and end the city of Palmdale's lease to operate the course at that city's request.

The city of Palmdale has leased and operated the nine-hole, 47-acre golf course since 1982. Delano Enterprises, operator of the course's pro shop and restaurant under a lease from the city of Palmdale since 1991 and 1994, assumed the operation of the golf course in October. The $700,000 cost of operation and maintenance exceeded the course's revenues by $200,000 last year.

With the city of Palmdale's lease with LAWA expiring on Dec. 31, Palmdale Parks and Recreation officials asked LAWA to relieve them of their role and find a private operator for the course. The board of airport commissioners agreed to allow Delano to operate the entire course on a month-to-month basis, while LAWA begins a process to find a private operator.

"The City of Palmdale is very much in favor of the continued operation of the golf course, as it represents a popular and important community recreational asset," said John Driscoll, LAWA's executive director.

Delano's term of lease will last for six months. LAWA then will award a two-year lease to an operator through a request for proposal. During that period, LAWA will prepare a comprehensive request for proposal for a long-term operator. Desert Aire is located on Palmdale Regional Airport property at Avenue P and 40th Street East.

Heckenkemper 18-hole layout opens in Ark.

FAYETTEVILLE, Ark. — Fayetteville's newest course, the 18-hole, daily-fee Stonebridge Meadows, has opened for play to rave reviews.

Golf course architect Randy Heckenkemper of Tulsa used the natural terrain of the former Goff Farms east of downtown Fayetteville to create a 7,150-yard layout. Bill Meadows, CEO of Meadows Enterprises, gave Heckenkemper freedom to take advantage of the 1,000-acre site. John Streachek is the course superintendent.

The course is named for a bridge on Stone Bridge Road, which dates back to around 1900 and is visible from the course's 10th hole. The site of Stonebridge Meadows was also reportedly the setting for an early golf course in the early part of the century. The facility's 2,400-square-foot clubhouse is a renovated business farmhouse from Goff Farms.

Meadows has said long-term plans include a second 18-hole layout on the property, with one of the courses becoming private.

Phoenix planners vote to preserve Biltmore course

PHOENIX — The Adobe golf course at the Arizona Biltmore — the centerpiece of an ongoing controversy over landowners' rights — is a step closer to being preserved.

The city's planning commission has approved placing a "golf course district" designation for the Adobe course and adjacent courses, which would protect them from development. The City Council must still approve the designation.

The owner of the land on which the golf course sits, Kabuto Arizona Properties, is strongly opposed to the designation. Kabuto has said it plans to shut down the golf course and develop the land. It has also said it will fight any attempts to prevent it from developing the land.

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Former major leaguer builds course

IRVINE, Calif. — Former major league baseball player Doug DeCinces has opened his new Strawberry Farms Golf Club, an 18-hole, daily-fee course. The course has been in the works for almost five years and is the newest in a growing list of top-end, daily-fee courses in Orange County.

The par-71, 6,700-yard layout was designed by golf course architect Jim Lipe, a senior designer for Jack Nicklaus' Golden Bear Inc. By contractual agreement, Lipe is allowed to design one course a year on his own and he enthusiastically pursued and got the Strawberry Farms project.

"I liked the project because of the challenges," Lipe recently told The Orange County Register. "This course allowed for several different options."

The front nine, which is owned by the county, is a wide-open layout that has wetlands and natural vegetation. The back nine, owned by the Irvine Ranch Water District, is built around the Sand Canyon Dam and is tight and challenging. The fairways of Strawberry Farms are Bermudagrass and the greens are bentgrass. The rough is a mixture of rye and bluegrass.

Both the clubhouse and the cart barn reflect the farm feel of Strawberry Farms. DeCinces has said the goal of the project from the beginning was to have one of the county's finer courses that would be comparable to Pelican Hill in Newport Coast and Oak Creek in Irvine.

Warm fall may cause problems with leaves

MIDLAND, Mich. — The unusually warm fall weather in the northern Midwest left many leaves on trees far longer than usual, which has caused some concern with area course superintendents.

Trees in Michigan usually lose their leaves by the fourth week of October. But last fall, the process crept into late November.

Eric Kleinsorge, superintendent at the Midland Country Club, said late-falling leaves can clog drains and cause problems that lead to greens damage.

"The biggest problem we have to worry about is if the leaves fall late in the winter and we can't get them picked up before it snows," Kleinsorge said. "The leaves could plug up our drains and they wouldn't be able to get rid of the surface water that would collect."

Kleinsorge said trapped surface water, which can fall into a cycle of freezing and then thawing and then freezing, can lead to crown hydration, which kills turfgrass.

Another potential problem caused by piles of late-falling leaves is blockage of sunlight and trapping in moisture, which can lead to gray snow mold developing underneath the leaves.

AGC signs on to manage two California munis

SAN LEANDRO, Calif. — The city has signed an agreement with American Golf Corporation (AGC) to assume operation of its two municipal golf courses — the 18-hole Tony Lema course and the nine-hole Marina course.

Under the agreement, AGC has pledged $8.1 million in renovation and rents to the city. The firm plans to turn the two courses into profit-making ventures. American Golf will assume management of everything from the pro shop to maintenance operations.

Renovations to the courses are expected to start this year, with an agenda that includes redesigning and rebuilding greens complexes, tees, fairways, cart paths, drainage and irrigation of the Lema course. At the Marina course, greens, tees and drainage will be rebuilt along with the construction of a double-deck driving range.
Court rules pro golfer may use golf car

By BOB SPIWAK

A judge in U.S. District Court, Eugene, Ore., has ruled that professional golfer Casey Martin must be allowed to use a golf car in Qualifying School competition.

Martin, captain of the Stanford University golf team which included Tiger Woods, has a condition which causes great pain after he has walked a few holes, said his attorney and longtime family friend, William Wiswall, of Eugene.

Martin's request to the PGA to use a cart was denied, said Wiswall, and a suit was filed in District Court under the Americans with Disabilities Act. The disease, Klippel-Trenaunay-Weber Syndrome is one "...which limits the plaintiff's ability to walk," according to court documents.

The Professional Golfers' Association filed a motion to dismiss the complaint as well as a motion to change venue, both of which were denied by judge Thomas Coffin.

Martin was competing in the third round of the Hooters Tour, which made him eligible for the Nike Tour, the next step in qualifying for the PGA Tour. Should he finish in the top 35 on the Nike Tour, he would receive his PGA Tour card, said his attorney.

At press time, a trial date had not yet been set, but attorney Wiswall said he expected the trial early in 1998.

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Give the Ransomes Greensplex 160, E-Plex or GS 55 a try, and we'll give you a free pair of leather work gloves. Call 1-800-228-4444 to arrange a demo or for the name of the dealer nearest you.
Ladies and gentlemen, golf’s First Spokesman, Bill Clinton

At a great idea for your New Year consideration: When Bill Clinton steps down as president, hire him as the spokesman for the golf industry. Hey, no sneers and jeers, please. Hear me out!

Here’s a guy — better still, a golfer — who has maintained public support, even stayed out of jail, in the midst of all this chaos. So, just think what he could do working for an ethical, clean sport like golf.

I mean, our head of state has managed to keep his job despite Filegate, Watergate, Travelgate, Troopergate and Indogate, as well as Jennifer Flowers and Paula Jones. He has survived, Jocelyn Elders, Dick Morris, Web Hubbell, Craig Livingstone and Hazel O’Leary.

For crying out loud, he has attained 60-percent approval rates despite Somalia, Haiti, Bosnia and name-your-blunder; despite terrorists, drug dealers and spies being guests at the White House; despite his promise of a middle-income tax cut followed by a retroactive tax increase.

Heck, he even stayed afloat after it was revealed he and Hilary claimed tax deductions for underwear they had given away.

Who better, I ask, than the man who will be the World’s Most Famous Golfer (outside Michael Jordan, that is) — the ultimate spin-doctor-cum-golfer — to represent golf?

Beyond his political bent toward high ethics, never again would anyone in the industry need to be concerned about, say, some sort of environmental accident, charge of elitism or racism, or any other politically incorrectness.

Speaking of gaining good standing within the community, how about those folks at Belgrade Lakes Golf Club (BLGC)?

When an association of Belgrade Lakes residents needed another $25,000 to be able to buy a mountain property and prevent its development, BLGC dropped the money in the can. It was more than a gesture, said managing partner Kyle Evans.

Beyond their innate bent toward high ethics, never again would anyone in the industry need to be concerned about, say, some sort of environmental accident, charge of elitism or racism, or any other politically incorrectness.

Golf course architect Rick Jacobson had an interesting take on whether there are enough good golf course builders to handle the boom in development. Featured in this month’s Q&A (see page 47), Jacobson said:

“There is a concern at our end with the proliferation of new development. I guess, our rallying cry to developers would be: Consumer Beware!”

Not only from the construction standpoint, but the design standpoint. Half the world’s 50 million golfers are here in the U.S. and they are all armchair architects. People in every related field to golf course architecture are hanging out a shingle saying they are architects.

We’ve seen some unbelievable designs that were ready to proceed that had trouble written all over them.

Canadian golf management gets environmentally proactive

By Mark A. Scenna

BURLINGTON, Ontario, Canada — In today’s world, perception drives our society’s opinion. Consequently, due to the lack of environmental initiatives, the golf course management industry has faltered.

It is no surprise that the public does not often equate the golf industry as environmentally proactive. Public-opinion polls suggest finely manicured turf is the result of an abundant use of pesticides and nutrients, unnatural to their surroundings.

This public perception can and has driven some government policies and regulations, some of which have created unnecessary burdens on the industry.

The industry’s developing and adopting standard environmental operating practices can go a long way in demonstrating to governments that it knows how to manage itself relative to environmental preservation.

Additionally, it assists members who may not be aware of current practices and procedures. Finally, if properly promoted, development of standard procedures can demonstrate the industry’s commitment to environmental preservation to the public, steering government policy in accordance with industry initiatives.

I am very pleased to report that the Canadian Golf Superintendents Association (CGSA) has recognized the benefits of developing a standardized set of environmental operation guidelines and has addressed them by creating an Environmental Management Resource Manual.

The primary objective is to create a directory of information sources that helps CGSA members (particularly course superintendents and assistant superintendents) address environmental management issues. In particular, the manual is to be created to ensure day-to-day operations comply with municipal, provincial and federal legislation, as well as current industry standards.

Additionally, the manual is being created to demonstrate industrywide due-diligence efforts that protect and enhance the image of the golf course management industry.

Most importantly, the Environmental Management Resource Manual... Continued on page 78

GOLF COURSE NEWS
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At Novartis, we’re committed to continually bring you innovative products. And now we’d like to introduce an entire series of products — the Novartis Total Turf Program.

Finally, all the tools you need to manage your course from tee to green and all season long can be found in one total program.

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**Yellow Tuft**

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Ohio show hits hot buttons

President stresses green ‘marriage’

By Mark Leslie

COLUMBUS, Ohio — Calling the relationship of the state’s golf course superintendents, sports turf managers and lawn-care operators “a beautiful marriage,” new Ohio Turfgrass Foundation (OTF) President Joe Duncan said the different groups are learning more and more from each other as times passes.

“That relationship has existed for a long, long time, but we depend on each other more than ever before,” said Duncan, owner of Evergreen Lawn Care Inc. in Troy, who succeeded Hank Chafin at the OTF Conference and Show here, Dec. 8-11. “We’re learning that everything we do is an integral part of each other’s work. Things that happen on sports turf are on golf courses, and the research they are fostering, affects us all.”

Continued on page 35

Tackling unreasonable expectations

By Ron Dodson

It’s interesting how jobs seem to define who we are. For instance, when we ask, “What is a golf course superintendent?” we’re really asking what job does he or she do, and, believe me, everyone’s got an answer about what they’re supposed to do.

First of all, everyone seems to agree that a superintendent’s primary job is to manage the golf course (meaning turfgrass). And it follows that every golfer has an opinion about how a golf course should be managed. They’ve played a lot of golf, they have a lawn, they have a lot of money, and they know how their greens ought to look and play. That makes them experts on how turfgrass ought to be managed. Right?

Sometimes that’s how it sounds when I talk with golfers about superintendents. Well, I’m here to tell you that good golf course superintendents do a whole lot more than manage turfgrass. In addition to all of the work and expertise it takes to manage turf, they manage water, and from this environmentalist’s perspective they also manage wildlife, wetlands, lakes, streams, forests, landscape ecology, insects, the weather, the media, the government, their staff, and the biggest challenge of all: the unreasonable expectations of golfers.

What do I mean by unreasonable? From an economic and environmental perspective, think about wall-to-wall manicured turfgrass, both in terms of man and machine hours as well as in loss of habitat. Think about fertilized turf right down to the edge of water bodies, both in terms of cost of fertilizers, man hours to spread it, and the potential damage to water quality.

Continued on page 23
Pursell's POLYON® is the only controlled-release fertilizer that isn't affected by excessive rainfall. It releases gradually over time, not overnight. So it virtually eliminates surge growth and excessive clippings.

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a measured amount of nutrients to your turf each day, as needed. Giving you greener turf for a longer time.

So if you're tired of worrying about your fertilizer being caught out in the rain, try Pursell's POLYON Technology. While you can't always count on the weather, you can count on POLYON fertilizers. Call (800) 334-8583 for the formulator or distributor nearest you.

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Global mapping to make (golf) life easier

Continued from page 19
closely with the original design, requiring few changes. And when construction does deviate from the plans, the designer sees it immediately on the updated maps and can fine tune the design as needed.

GPS AND GIS EXPLAINED
GPS and GIS are separate technologies that work together in creating digital maps. GPS pinpoints the locations of objects, and GIS contains information about those objects.

"Imagine it like this," said Rodgers: "GPS gives the house address, while GIS gives a description of the house."

The U.S. government developed GPS as a navigation and positioning tool. Orbiting satellites emit signals picked up by small GPS receivers which determine exact latitude, longitude and elevation positions on Earth. Receivers are small enough to be carried in a pocket or backpack. The GPS receiver can record the location of a single point, such as a tree or sprinkler head, or the location and length of a linear feature, such as an irrigation pipe or fairway edge. It can even determine the area of a large spatial feature, such as a green or bunker, by collecting points along the perimeter.

Those GPS points can be loaded directly into the GIS, which is a multi-layered map database. Besides containing attributes of features, the GIS also displays those features geographically in their correct absolute and relative positions. In other words, a bunker is mapped in its correct latitude/longitude coordinates, as well as its exact position relative to the green, fairway, tees, shrubs and irrigation equipment.

Rodgers spent about $30,000 for his GPS/GIS system, which includes a Trimble XRP backpack GPS, Fujitsu Pentium Pentop computer and mapping software. He has tailored the software to map golf course features.

"This system locates points with an accuracy of less than one meter," said Rodgers.

In a typical project, a member of Rodgers' field crew walks the golf course with the GPS backpack and computer, stopping at each feature to collect a GPS point with the press of a button. For spatial features, he walks their perimeter, recording points every few feet.

These collected points are fed directly into the pentop computer which creates an immediate on-screen map of the features as the associate walks. In addition, the associate uses a point-and-click interface on the computer to acquire database information.

For instance, he plots the location of a tree, he chooses "tree" from the screen menu. Additional pull-down menus allow him to click on the type of tree, its age and condition. Back at the clubhouse, the course superintendent can add notes about when the tree was planted, when it should be fertilized and other information.

"This is how we build the course map and collect information at the same time," said Rodgers. "And because it's so quick, we go out many times and map each phase of construction, adding accurate information on sod, greens, tee boxes, irrigation pipes, layer by layer as they are built."

Depending on how many features the course manager wants mapped, Rodgers collects from 30,000 to 100,000 points on any given mapping project.

"Thanks to the digital map, we have few change orders on existing projects and very happy owners and designers at the ends of our projects," said Rodgers.

Kevin Corbley is a Denver-based freelance writer specializing in GIS, GPS and remote sensing. He may be reached at KCorbley@aol.com.

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Comparative Disease Spectrum Provided by Turfgrass Fungicides

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HERITAGE®--An Ounce of Prevention...
Conservation-minded Crystal Springs Golf Course.

BURLINGAME, Calif. — Crystal Springs Golf Course, managed by CourseCo, Inc., has won the prestigious Business Environmental Award for Land Use Planning/Management from the Peninsula Conservation Center Foundation (PCCF), the first golf course program ever honored by the organization.

In a separate announcement, the California Integrated Waste Management Board named Crystal Springs a winner in its 1997 Waste Reduction Awards Program for voluntary reuse and recycling of materials that improve the surrounding habitats of native species and wildlife.

Situated on San Francisco-owned property in the Crystal Springs watershed along Interstate 280, the course was singled out for CourseCo's efforts in water conservation, pest and chemical management, recycling, wildlife habitat management, education and training.

CourseCo, a Petaluma-based golf course development and management company, was among seven businesses honored at PCCF's awards luncheon Nov. 14 in Redwood Shores.

Eric Montgomery, PCCF awards director, said CourseCo's management of Crystal Springs GC has "helped lead the way to a higher level of environmental awareness and responsibility."

The two honors are noteworthy in the context of an ongoing public debate over the environmental impact of both existing and proposed public golf facilities on the San Francisco Peninsula.

"We know that under the right circumstances and with the will, golf courses can be managed in a sustainable fashion with negligible, and even beneficial, environmental impact," said CourseCo President Tom Isaak. "It's very rewarding to be recognized for our efforts by public and private organizations alike."

"Crystal Springs is a unique environmental trust in a beautiful location that serves thousands of public golfers in a diverse community," Isaak added. "Our goal is to be a model for environmental management, and to achieve excellence in all other areas of the operation as well."

PCCF established the Business Environmental Awards in 1990 to recognize small and large organizations that go beyond compliance to excel in environmental leadership, benefits and commitment.

Among the particular activities at Crystal Springs praised by the foundation are frequent testing for chemical levels, limited use of chemicals, localized treatment for pests, use of mulched landscape waste, construction of nest boxes and dust baths for birds, use of scrap wood to create habitats for field mice and other animals, extensive recycling by the restaurant, office and clubhouse, and public education. CourseCo last year signed a 20-year operating lease with the city.

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CIRCLE #110/GCSAA BOOTH #3359

SWEDA SCHOLARSHIP PRESENTED

COLUMBUS, Ohio — The first Don Sweda Memorial Scholarship has been awarded to Ohio State University turfgrass student Jason Bunnard. Bunnard received the $1,000 scholarship during the Ohio Turfgrass Foundation Conference and Show here in December. It is given in memory of the former OTF president who died just two years ago.
HERMITAGE, Pa. — Rick Kerins had been "raising the bar" in the environmental friendliness of his maintenance program at Tam O'Shanter Golf Course here even before taking the reins as superintendent in 1983. Growing up on the course owned by parents Jack and Mary Lou Kerins, Rick "got a feel for the environment" early on.

That "feel" has translated into Kerins taking aggressive environmental steps that have earned him the national Environmental Steward Award from the Golf Course Superintendents Association in 1995, a Certificate of Appreciation from the Pennsylvania Game Commission in 1995, and the post of steward for Pennsylvania for Audubon International and its Cooperative Sanctuary Program for Golf Courses.

His love for the environment, Kerins said, is "something that's in you. I may take it to the extreme sometimes. I take it to heart what I do. I want the course to be environmentally friendly. It's not one thing you do. There are a lot of things you can do to make it more friendly."

Here is a man who uses Garlic Barrier in his pond to repel mosquitoes; who uses an all-natural fertilizer; who uses green lacewings and lady bugs to attack aphids, diatomeaceous earth (groundup seashells) to control earthworms, and nematodes to control grubs.

Here is a man whose recycling program runs the gamut from grass clippings to cardboard and batteries; who is on a gradual program to incorporate the turf with more ryegrass which is easier to care for, both culturally and chemically; and who, when underground storage regulations began to take force, had a local company build him an above-ground containment system that has now been duplicated many times over elsewhere. "You wouldn't be in the profession unless you enjoyed the challenges," Kerins said.

Co-operating the course with his brother Ron, the golf pro, Kerins nevertheless was far ahead of the curve when he joined the Cooperative Sanctuary Program. It took him only one year to achieve full certification. "We were able to zip right through it because we had already met most of the criteria," he said.

A professor who saw his Integrated Pest Management Program said it was the best he had ever come across. "We're hoping to be pesticide-free," Kerins said. "I don't know if that will be a total reality, but we want to have the very least possible. We respect the environment and don't want to abuse it in any way. We live here."

His real joy, Kerins said, lies in getting others involved in environmental programs — either at Tam

Continued on next page
The 1st-tee sign discusses Tam O’Shanter mentors. Another talks about the irrigation management shop has been well landscaped. Audubon Cooperative Sanctuary System just enjoy helping other people, too.”

Tam O’Shanter. They are committed to taste for the environment.

"feel for the environment."

The course will be up to the kids. We’re grooming butterfly garden.

"And growing up on a golf course, you want to learn more about butterflies and nature in general.

"One of my main goals is to help others, but also to set an example," Kerins said. "I give a lot of talks to superintendents, schoolchildren and others who want to learn more about butterflies and nature in general.

Education of the masses is being accomplished in another way at Tam O’Shanter as well.

At each tee, a sign emblazoned with the Audubon Cooperative Sanctuary System symbol informs golfers about one of the projects on the course, or the history of the land, or the facility’s recycling program.

On the 12th hole, the nearby maintenance building, place and maintain bird boxes. Tam O’Shanter. The next year a young operation. She is also participating in the Audubon organization and the business end of the facility's recycling program.

"I was in Boy Scouts and other people gave me opportunities while I was growing up. I thought I could return the favor, but I just enjoy helping other people, too."

Two women are doing Master Gardener projects working on butterfly habitat at Tam O’Shanter. They are committed to spend 100 hours apiece at the course this year, and 50 hours a year afterwards.

And Kerins intends to build a trail for Scouts, schoolchildren and others who want to learn more about butterflies and nature in general.

Kerins eco-friendly

Continued from previous page

O’Shanter or elsewhere.

With his wife Paula ("my right-hand person") at his side, Kerins has involved two students in Pennsylvania State University's Master Gardener Program, Boy Scouts and schoolchildren in the golf course property.

An Eagle Scout himself, Kerins approached area Scout Troop 16, and enlisted the Scouts to monitor bird boxes at Tam O’Shanter. The next year a young man pursued the monitoring as his Eagle Scout project and organized the Troop to build, place and maintain bird boxes.

"He's done it for a year now," Kerins reported. "This year we will have the Scouts work in hollows, make small brush piles for animals, and increase wildlife habitat.

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LOUDONVILLE, N.Y. — Peter Salinetti, club manager and superintendent of Schuyler Meadows Club here, has received Audubon International's John James Audubon Environmental Steward Award.

The award was presented to Salinetti for "outstanding dedication, energy, enthusiasm, and leadership in improving the quality of the environment, his profession, and the lives of those who follow."

AI President and CEO Ron Dodson presented the award, citing Salinetti for innovative leadership and his connection to the community by joining in a partnership between Siena College (a private college that borders Schuyler Meadows) and Audubon International to become the first Audubon International Research Center. In conjunction with Siena College, college faculty and their students are conducting a variety of research projects on Schuyler Meadows. The research is focusing on the wildlife and habitats of the course and the relationships between course management and use with those biological resources.

Dodson said: "Peter is a perfect example of the frequently unsung environmental leadership efforts that can be found throughout the United States in a variety of businesses and industries. Through his stewardship activities, he has not only conserved natural resources, he has favorably impacted the biological diversity of the land. He has maintained wildlife inventories, reduced pesticide use, monitored water quality, enhanced habitat, and increased the naturalized areas of the property."

In 1995 Schuyler Meadows Golf Club became the first fully certified Audubon Cooperative Sanctuary in New York. There are only 120 fully certified golf courses in the United States. They are among over 2,000 golf courses that belong to the Audubon Cooperative Sanctuary Program for Golf Courses.

Somerset Hills earns Audubon full certification

BERNARDSVILLE, N.J. — Somerset Hills Country Club has achieved designation as a Certified Audubon Cooperative Sanctuary by the Audubon Cooperative Sanctuary System (ACSS).

Somerset Hills Country Club in 1993 joined the program which helps golf courses preserve and enhance wildlife habitat and protect natural resources.

"Somerset Hills Country Club has shown a strong commitment to its environmental program. They are to be commended for their efforts to provide a sanctuary for wildlife on the golf course property," said Marla Briggs, senior staff ecologist for Audubon International.

"The Audubon Cooperative Sanctuary System has been a positive experience for me as a golf course superintendent," said superintendent Bob Dwyer, "and for my assistants, Rick Krok (who has recently moved on to be a head superintendent at another facility) and Eric Neville, who were largely responsible for Somerset Hills becoming certified.

"Our continuing goal is to enhance a beautiful golf course into an even more beautiful and attractive golf course. By becoming a certified member of the Audubon Cooperative Sanctuary System we are telling our membership, our community of Bernardsville, and the state of New Jersey that Somerset Hills Country Club cares about the environment and that we will do all that we can to protect it."
**MAINTENANCE**

Unreasonable expectations of golfers

Continued from page 19

for humans and animals alike.

How about greens cut so short
for speed that the grass itself is
nearly killed, and that if they
actually lose a green, they lose
their job. These are only a few of
the dilemmas faced by superin-
tendents every day — only a
small balancing act.

We all need to face the fact
that the game of golf is designed
and managed for golfers. They
are the revenue and they want
what they paid for. But the trends
are changing.

Federal, state and local govern-
ment agencies are increasingly
regulating and permitting the con-
struction of new courses, as well
as making major impacts on the
way existing courses are man-
aged. All golfers need to under-
stand this. If they care about the
game, particularly its future, they
need to be much more reasonable
in their expectations and much
more supportive of superin-
tendents who are trying very hard
to deal with the conflicts arising from
all those who have a stake in the
game — golfers, governmental
agencies, turfgrass, habitat, wild-
life, and the environment at large.

On the other hand, people
have told me that organizations
such as AI, the Golf Course Sup-
erintendents Association of
America and the U.S. Golf Asso-
ciation are not doing enough to
promote superintendents as pro-
fessional land managers. I can
only speak on behalf of Audubon
International in this regard.

AI is a not-for-profit environ-
mental organization with a mis-
sion to improve the quality of life
and the environment through re-
search, education and conserva-
tion assistance. That’s our job; it’s
what we do. We’ve always main-
tained that we will work with anyone
if it advances our mission to im-
prove the environment.

What we’re not in the business
of doing is promoting anyone’s
job, including that of golf course
superintendent. We do, however,
publicly recognize anyone who
demonstrates a commitment to
protecting and enhancing the en-
vironment through their jobs. We
recognize school teachers, farm-
er, corporate executives,
homeowners and, of course, golf
course superintendents.

As a matter of fact, Audubon
International’s highest environ-
mental achievement award, The
John James Audubon Environment-
mental Steward Award, has only
been given twice, and both times
to golf course superintendents —
Tim Hiers of Collier’s Reserve and
Peter Salinetti of Schuyler
Meadow Club — not because of
their job, but because as they per-
form that job, they have demon-
strated their commitment to funda-
mental environmental principles.

At AI, our job is to provide the
information, framework and op-
portunities to help people rise to
the highest levels of environmen-
tal accomplishment. Although it
is not our job to recognize golf
course superintendents as a group,
we will recognize superintendents
who take up the mantle of managing their courses
with the environment in mind.

This is, in fact, the challenge
that we all must face in life. No
one else will do it for us. Audubon
International will continue to
publicly recognize those in the
golf course industry who demon-
strate environmental dedica-
tion in the construction and
management of golf courses and
we will continue to recognize su-
perintendents who rise to the top
of the profession in this regard.

We hope golfers, and others
in the industry, will do the same.

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Killington Golf Club
joins Audubon

KILLINGTON, Vt. — Killington Golf Course has
joined the Audubon Cooperative
Sanctuary System (ACSS), a na-
tional program designed to help
landowners preserve and en-
hance the environmental qual-
ity of their property.

"It’s a great program to make
people aware of the environ-
ment on the golf course," said
superintendent Chris Voutas.
"We’re putting out bluebird
and bat boxes and encourag-
ing wildflower growth. We’ll
also cut down on water and
pesticide usage."

The ACSS provides an ad-
visory service to help golf
courses develop effective con-
servation and wildlife en-
hancement programs.

Now you can control grubs preventatively or
curatively. With a single application. Only with
new MACH 2™ Turf Insecticide.

MACH 2 is a powerful killer with a new
chemistry that accelerates the molting process of
target insects.

Just hours after ingesting MACH 2, the insect
stops feeding. Then it dies beneath the surface
in 2 to 3 weeks. It’s that simple.

With MACH 2™ Turf Insecticide, you’ll kill
target enemy insects all season long. Grubs.
Plus, odorless MACH 2™ is easy to apply.

You don’t even have to water it in immediately.

So don’t let grubs control your grounds, or your
schedule. Depend on MACH 2™ Turf Insecticide.

It’s all you need to prevent or cure.

For more information or for the distributor
nearest you, call 1-888-764-6432.

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New insecticides introduce new options for superintendents

By RICK BRANDENBURG

One statement that should hold true for superintendents who like to stay current with the newest pest-management products is that they should not be bored.

The last few years a number of new products have been introduced to the marketplace for golf course use. Many have been insecticides and many represent a departure from some of the conventional types of products we have been using. This includes new classes of products, materials I'll classify as natural products and some biological materials.

The exciting part of this is that many of these new products are very effective and offer superintendents a lot of new options for dealing with pest problems. In particular, they offer new opportunities for pest control in environmentally sensitive areas.

One product recently introduced by Bayer is Merit (imidacloprid), which has gained wide acceptance in the market for control of several species of white grubs. It is not only effective, but also received an accelerated registration from the Environmental Protection Agency (EPA) due to its favorable toxicity profile. Merit's mode of action is somewhat different from other insecticides and is in a class of pesticides called chloronicotinyls. The receptor site in insects is very sensitive to these products, while mammals and other creatures are much less sensitive. However, for this product to have maximum effectiveness, it is necessary to apply it before or during egg-laying. Merit is not as effective when used in a "rescue" mode to clean up existing white grub problems.

Another product, Mach 2 (halofenozide), will be in the marketplace during 1998. Similar to Merit, its toxicity profile makes it desirable in many situations and it must be applied before the infestation gets well established. Mach 2 is a joint venture between Rohm and Haas and American Cyanamid (Roh-Mid). It works as an insect growth regulator, but in a somewhat different fashion than some other growth-regulator products.

A number of products have been labeled in the past few years for turf insect management that fit in the category of synthetic pyrethroids. These include Mavrik, Talstar and Scimitar. One attractive feature of these materials is that they are used at very low rates of active ingredient per acre. They generally have broad-spectrum control of a number of pests (although their activity against soil pests is often not too good). And they are low in toxicity to people, pets, birds and most wildlife, but are highly toxic to fish and should not be used close to water.

DowElanco has introduced Conserves SC. This is the trade name for its spinosad product for turf. It could be considered a natural insecticide since the active ingredient is the result of a fermentation process of a soil organism. Conserves SC has proven effective against a number of caterpillar pests.

Other natural products receiving more attention are made from the active ingredient azadirachtin, which is an oil found in the seeds and leaves of the neem tree which grows in the tropics. These products also act as growth regulators and cause the insects — primarily caterpillars such as sod webworms, cutworms and armyworms — to stop feeding.

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Dr. Rick L. Brandenburg is a turf entomologist at North Carolina State University.
Tolson and Clark move on

HAMILTON, Mont. — Don Tolson, the first public-sector winner of the national Environmental Steward Award from the Golf Course Superintendents Association of America, is relocating to his home state in February.

Tolson, a certified golf course superintendent, is leaving the 27-hole Fox Hollow at Lakewood in Colorado, where he has worked since 1990. "This has been such a great job I didn't think I'd ever leave," Tolson said. "But the opportunity came to return home."

His new home will be The Stock Farm, a Tom Fazio-designed track that is midway through construction. A project of Winchester Development, it sits in the foothills of the Sapphire Mountains in the southwest corner of the state, in the Bitterroot Valley five miles from Bitter River. The 3,000-acre site will contain the private 18-hole golf course and 104 home sites, said the 1972 Montana State University graduate.

SCOTTDALE, Ariz. — Mark Clark has accepted the position as superintendent at Troon Golf & Country Club here.

Clark comes to Troon via The Country Club of Green Valley, just outside Tucson, where he was the superintendent for the past 13 years.

A certified golf course superintendent, he received his bachelor of science in agronomy from the University of Arizona. He served as president of the Cactus & Pines Golf Course Superintendents Association in 1981. Clark was also named by the governor to the Arizona Structural Pest Control Commission.

New options

Continued from previous page

insect's development and good monitoring of insect populations is important. What is unique about these new "natural" products is that today's formulations have the shelf life and handling characteristics of conventional pesticides. This makes them much easier to use than some of the older products of this type.

True biological materials have been around for years, but research is constantly being done to improve them. Naturalis-T from Troy Biosciences is a formulation of the fungal pathogen Beauveria bassiana, a disease that attacks a wide range of insect pests. Mycotech Corp. is also working on a Beauveria product. To date, only limited testing data are available on these products, but plenty of testing is underway to determine the role this biological material will play in turfgrass insect management.

Entomogenous nematodes have also been around for years, produced by a number of companies and sold under a variety of trade names. One such product from Ecogen is Cruiser, which is directed against white grubs.

Success with these products has been quite variable, but they certainly have practical application in areas of environmental sensitivity. The bacteria Bacillus thuringiensis has been marketed for years against caterpillars and has limited use in turfgrass. New strains and formulations are constantly under development.

As new products are developed, it is important to stay abreast of how they might fit into a superintendent's insect management program. Equally important is an understanding of how to best make them work. Several of these new products must be used differently from more conventional products. Their success and/or failure will depend on a thorough understanding of proper use, the products' limitations, and knowledge of the pest to be controlled.

GOLF COURSE NEWS

UNTIL NOW, AN UNDULATING COURSE WAS AN ARCHITECT'S DREAM AND A MOWER'S NIGHTMARE.
Job board, directional chart improve crew's efficiency

By TERRY BUCHEN

LAS VEGAS — The job assignment board is crucial to "get the word out" to all employees about what specific duties they will be embarking on in their daily rounds. What better way to communicate to each employee what is expected of him or her and how important it is to the overall efficiency of the golf course management operation?

"We mounted our job assignment board in our employee breakroom/lounge. It has a white dry-erase surface, with individual names for all employees, that slide in and out, and which are engraved and made by a local sign company," explained Kim Byron Wood, superintendent at TPC at The Canyons here.

There is ample space next to each employee's name to list their first and second job assignments. The Canyons' first assistant superintendent makes out the job assignment listing by 10 a.m. each day, then hands it to the equipment manager so he knows which equipment will be used the following day. He than posts the following day's job assignments on the board just before he leaves so it is ready the next morning.

He usually does not post the second assignments until later that same day because priorities often change throughout the early-morning hours. The second assignments are usually posted just before the staff begins to come in off of the course from its early assignments.

"We can also be even more specific in writing down our second assignments if we wait until they are about to return to the turf care center," Wood said.

"We have ample room on the board to be quite specific with each job assignment," he added. "The more information we put down in writing, for all of our employees, makes the communication process that much better and more efficient."

Each morning the first assistant goes over every job assignment with all of our employees as a group, with the listing for each employee on the board also in plain sight. "A good example," Wood said, "is where we list the exact bunker raking sequence that we want to follow, on the board, which is easily understood by our employees."

"Except for obvious shotgun starts, our golfers begin play on the 1st tee only where we have an hour and one half lead time to prepare the course for them, usually 45 minutes before play begins when we encounter a frosty morning situation."

A mowing-pattern clock is used every day and each individual day's mowing pattern is listed on the job assignment board for further clarification, Wood said.

Instructions for the cleanup lap procedure are listed on the board as well. "Our routine for cleanup laps is at least every other day during the summer and twice weekly during the winter," he said.

"We never assume that an employee knows what to do, so we always write it down on the board for easy, definitive clarification."

Collier Miller, PGA Tour Properties' Southwestern regional director, and Cal Roth, director of golf course maintenance operations for its entire Tournament Player Clubs operations, "have standardized many of our successful operations that are proven winners in our industry," Wood said.
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Stick to News.
North Carolina Show
'Going for the Green'

CHARLOTTE, N.C. — The Turfgrass Council of North Carolina will co-sponsor its 36th Annual Turfgrass Conference and Show on Jan. 7-9 at the Charlotte Convention Center.

"Going for the Green" is the theme of the conference, which features an educational program for turfgrass managers and a trade show.

Nine workshops and two days of educational sessions will deal with golf turf, lawn and landscape care, grounds maintenance, pesticide training and regulation, irrigation, sod production, sports turf management and business management. Workshops will be held Jan. 7 and educational sessions will be held Jan. 8 and 9.

The Golf Course Superintendents Association of America, Professional Lawn Care Association of America and the Irrigation Association will offer certified classes Jan. 6 and 7, respectively.


For further information, contact Marsha Richardson at 910-695-1333.

WICHITA, Kan. — Trying to keep a quality turfgrass surface on a driving range teeing ground has always been difficult, especially with a warm-season turfgrass that is overseeded with perennial ryegrass.

Brett Conrad, long-time superintendent at Wichita Country Club here has a unique concept to quickly grow in the new grass where once there were ugly divot scars: low-pressure sprinklers that do not disturb golfers.

“Our low- to medium-humidity and many days with a big blue sky throughout the year cause our driving range tee surface to dry out during the day,” Conrad said. “We fill in our divots daily with fresh topsoil and perennial ryegrass seed and feed these areas with a starter fertilizer once a week to speed up recovery.”

The tee surface used to have the traditional large overhead sprinkler system, and Conrad could not water the area during the day when golfers were present.

Because the practice tee is used frequently, Conrad met with first assistant superintendent Nancy Turner and second assistant and irrigation technician Dave Hogan to discuss how to modify the system so it could be watered anytime. They rotate the tees, using bag racks as tee markers and roping off the areas that need watering. They move the ropes and bag racks toward the rear of the tee surface, so that divots will land on the areas that have already been used.

Hogan installed individual rows of Rainbird #1804 PRS sprinkler heads, operating them on individual station timers.

“These sprinklers operate on a consistent pressure of 30 PSI,” Conrad said, “and we are able to water anytime during the day while the golfers are practicing with no interference to them.

So our grass seed germinates much faster. Our climate dictates that we must water throughout the day, or the seed will dry out and die.”

He said the golfers hardly notice the small spray heads when they are being used and “our turnaround time is three weeks before each tee area can be used again.”

“It is so nice to be able to irrigate each individual row totally independent of each other during the daylight hours while not bothering our members and their guests whatsoever,” Conrad added.

Golfers can still practice while the driving range tee is being irrigated.

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In fact, as this chart shows, nutrient release from Terra fertilizers with GoldCote can be accurately predicted based on temperature. That means you’ll get the performance you expect – when you expect it. You can count on it.

**GoldCote Release Rates**

<table>
<thead>
<tr>
<th>% Released/Days/Soil Temperature</th>
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<tr>
<td>100%</td>
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<td>(DAYS) 20 40 60 80 100 120</td>
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Working with you.
On ‘thin edge’ with sand greens? Rieke presents nutrient strategy

By MARK LESLIE

COLUMBUS, Ohio — Declar-
ing that superintendents “are on the thin edge” by putting high stress and low mowing heights on turfgrass, Dr. Paul Rieke pro-
posed a nutrient strategy for sand greens.

Although unknowns abound concerning such things as mi-
cronutrients, and the impact of iron, manganese and fertility in general, the Michigan State Uni-
versity professor warned superin-
tendents “you’d better know what’s in the ground.”

Soil and tissue tests are be-
coming staples in modern greenkeeping, helping superin-
tendents control fertility, water, turf growth, thatch or pests, Rieke said during a session at the Ohio Turfgrass Conference and Show here.

“Sand greens are unique and must be controlled differently,” he said. And, he stressed, on many older courses where the top 2 to 3 inches are sand, the superintendents are actually managing sand greens during the colder months because the roots are often only growing in the sand.

“At that time,” he said, “you basically will be managing the greens fertilitywise as you would a sand green.”

“That when the roots are only in the sand layer, and the soil below is no longer impacting the plant,” Rieke added.

Rieke told superintendents tending sand putting greens:

• They need to be top dress-
ing more in the spring and fall, when thatch accumulates, than during the summer.

• Higher phosphorus levels will not enhance poa annua (“I’ve seen no data to substantiate that claim.”)

• A rate of 30 pounds per acre is best for phosphorus, which is required for root growth.

• Surface application of phos-
phorus is as good as injection.

• During the first couple of years after establishment of turf, apply 6 to 8 pounds of nitrogen annually, including some organic sources with the application. Reduce the annual nitrogen as appropriate in subsequent years.

• Consider a late-fall applica-
tion of nitrogen as part of the fertility program.

• On most sand greens, superin-
tendents are not able to get by with less than 5 pounds of nitrogen a year.

• Follow soil tests for phos-
phorus levels, applying it throughout the season.

• Apply potash regularly at a rate related to the nitrogen rates.

• Use soil tests to determine the annual potassium needs for sandy loams and finer soils.

A Few Plugs For A Zoysiagrass That Doesn’t Even Need Any.
Genetic engineering: Patents a key

Continued from page 1

Meier explained that to succeed in genetic engineering, researchers need:
• a gene of interest, whether for its herbicide-, or disease-resistant or another trait;
• a way to put the gene into the plant cell — such as the gene gun, which has proven the easiest, fastest and surest method;
• a "promoter gene," one which "turns on and off the main gene in the plant" — whether in the roots, leaves, flower, or seed; and
• a selectable marker gene, one with antibiotic resistance.

For instance, he said, in genetically engineering a certain bentgrass cultivar, a company would deal with Scotts, which has exclusive rights to the gene gun for all turfgrasses; AgrEvo, which owns a herbicide-resistance gene and the selectable marker gene; and Monsanto, which owns the promoter gene.

Underlining the importance of owning the patent to any of the parts of the whole, Meier pointed out that AgrEvo spent nearly $1 billion to buy PGS, which owned the selectable marker gene.

"A lot of people have been involved in this research. It seems to double every year," Meier said. "Some have found and patented genes and feel like they own them. And there are people who have invented the gene gun and other methods of technology that they have patented. The people patent things they want to keep them and to sell them.

"To come up with a new, fantastic variety you have to have all four parts. It so happens that different people have different parts, and each person or company feels their part is the most important. They feel they deserve most of the benefit from that new variety."

Therefore, he said, the hardest part of genetic engineering is the negotiations to determine who gets what when a variety gets into the marketplace.

Meier predicted a lot of extensive genetic research. And this research circumvents much of the work inherent in standard plant breeding. "Somewhere in nature," he said, "you find a gene that has a resistance to, say, dollar spot, and you can put that gene into a variety to improve it. As a result, you don't have to test the cultivar as extensively as the other because you know the variety and you only have to test for the dollar spot resistance."

He said the timeframe in developing a herbicide-resistant bentgrass and getting it into the market, for instance, will be a minimum of four years, or more likely six. New bluegrasses will be available in seven to eight years, he said.

"It takes three years to build up a seed supply," he explained. "So, new varieties can be expected in two to three years, but not available for four to five years."

The near-term potential of genetic engineering will include new grasses with herbicide-, insect- and disease-resistance — perhaps some coming from 16 genes in corn and cotton that might be used in turf.

In the long term, people are working on heat-, cold- and drought-tolerance; and grasses that require lower water use and less mowing, produce fewer clippings, use nutrients more efficiently and yield higher seed counts.

On the one hand, Meier said, genetic engineering will make it easier to grow better turf. "If you have herbicide resistance, you will be able to control all weeds instead of just a few," he said. "You won't have to worry about pre-emergent herbicide in the spring, or broad-leaf dithane in the summertime. You won't have to worry about what time of year you spray, because it will be a non-selective herbicide except for the turfgrass variety that has resistance to it."

"When you get into disease..."
Agriculture controls the release of transgenic organisms and this is one criteria it looks at. "We feel they better serve their constituents in the administration and business aspects. What we're doing in gathering and disseminating information and research is the beauty about the marriage. It's what makes the green industry in Ohio so successful. Both groups are very viable and important to all the people involved," Duncan, who has been in the lawn-care industry since 1975 and started Evergreen Lawn Care in 1985, said extraordinary advances have been made in technology and the use of computers. "These things will come more naturally to the next generation," he said. "Some of us in this industry are dinosaurs. Look where we've come in the last 20 years, in the way we managed turf then and now. It is the difference between night and day. I can't imagine where we're going to be 20 years from today. "It's exciting because what we're doing now is so much better for the environment, for our clients, and for the turf."

Duncan: Mutual help in green industry

Continued from previous page

Duncan noted that the first day of the OTF conference was filled with joint sessions of the three disciplines, dealing with topics common to them all. "It's a sign of the times," he said. "It's amazing what we [lawn-care industry] have learned from the golf course guys. We don't have structures of golf greens on lawns, but what they do filters down to us, and vice versa. "Going into the 21st century, we will be learning more and more this way."

Saying the lawn-care industry is "constantly being thrown curve balls with regulations, such as composting and yard waste," Duncan added that ideas coming from the golf course industry have helped cope with the new rules.

Referring to the $250,000 in grants and scholarships OTF donated to Ohio State University this year, he said he hopes to continue, and even improve, this performance, "especially with the addition of turf plots and new professors [recently added to the staff]. "We have more good reasons...

Genetic engineering

Continued from previous page

...to support their research," he added. "None of us individually has the funds, or the staff to do this research. We appreciate what OSU does for us."

The OTF function, Duncan said, is the research and technology of products and services. "We feel we are the education arm of all the other groups - the golf course superintendent associations, Ohio Lawncare Association and Professional Grounds Management Association. We feel they better serve their constituents in the administration and business aspects. What we're doing in gathering and disseminating information and research is the beauty about..."
Boehm: Much to learn in bio-ecology

Continued from page 33

sound chemistry — whether it's synthetic or from a natural origin — and to better understand and increase the use of biologicals."

Composts add nutrients and micro-organisms to soil that have been shown to control or counter pathogens, he said. The focus of research at OSU and other universities is understanding how and why diseases are suppressed.

"We know that if you increase the nitrogen level on turf you can suppress dollar spot nearly 60 percent," Boehm said. "But there are still lots of issues. Is the nitrogen in the form we are applying it directly toxic to the pathogen? Or is the nitrogen giving the plant the ability to outgrow the pathogen? Or is the nitrogen somehow changing the physiology of the host, thereby making it less susceptible?"

"Those are all very valid questions that we'd like to address."

From a plant pathologist's perspective, he said, mechanisms of biocontrol are:

- competition between the biological control agent, or the organism that is suppressing the pathogen for space or nutrients;
- antibiotic production, since the biological control agent produces antibiotics that are toxic to the pathogen;
- hyperparasitism, wherein the biocontrol agent uses the pathogen as a food base or energy source; and
- induced resistance — an area, Boehm said, "we don't understand very well, but the presence of these beneficial organisms brings about a physiological, or biochemical change in the plant that renders the plant resistant."

He likened this to spraying Crenshaw bentgrass, which is prone to dollar spot with a chemical and finding it is resistant to dollar spot.

Boehm released some findings from a compost study that is in its second year.

Asking what a single application of compost does to the turf, he said it gives the turf "a huge swell in growth and clipping yield. Depending on what kind of compost you use, that lasts anywhere from six to 10 weeks. If an epidemic occurs during that period of enhanced nitrogen fertility, we see a significant decrease in the amount of dollar spot. If, however, like last summer, we make our compost application in May — even though we get nice fertility and green-up effect on the turf ... we did not see any appreciable effect on disease management."

The OSU professor hopes to discover the effect of continued use of compost dressing incorporated in spring and fall, along with spring and fall aeration, over a four-year period.

He mentioned studies at Cornell University by Dr. Eric Nelson, in which compost top dressing has suppressed pythium root diseases in sand putting greens.

In one his own projects, Boehm has established bentgrass greens to compare compost and peat in the root-zone mixes.

"It's a pretty striking difference when you look below the ground," he said, adding that, while using take-all patch as a test pathogen, he found that compost was good, peat was not.

Speaking of the U.S. Golf Association Green Section's greens construction specifications, Boehm said he would like to see, over the next several years, a section incorporated on the pros and cons of altering the organic matter in the root-zone mix from a biological and microbial standpoint.

"It might take another 20 years before we're ready to do that," he admitted, adding, "We are isolating lots of organisms, adding organisms, challenging the systems in the field and in the greenhouse, and trying to get a better handle on microbial populations that affect disease suppression."
Biologicals & biorationals: An emerging world in turf

By MARK LESLIE

COLUMBUS, Ohio — You may not find the "neem tree" in your dictionary. Nor the words "biorationals" and "naturalites." But they will be playing increasingly important roles in golf course maintenance, according to Dr. Parwinder Grewal, an assistant professor of turfgrass entomology for the Ohio State University (OSU) Extension Service.

Speaking at the Ohio Turfgrass Foundation Conference here, Grewal said some biological controls have succeeded and some have not, but their use has increased tremendously in the last decade — a harbinger of the future.

Piecing together research from OSU, Cornell University and other colleges, Grewal updated the audience on research done on biologicals and biorationals. He defined biological control as the use of a living organism — such as insect-pathogenic nematodes, bacteria or fungi — to control a pest insect.

Biorationals — a new word in golf course lexicon — are products of natural origin that are safe to non-target organisms. The Environmental Protection Agency calls them pesticides with different modes of action than conventional chemicals, with higher selectivity and lower risks to humans and wildlife.

Researchers are delving into these fields in response to concerns about human health and safety, environmental and ground-water contamination, and the impact of chemicals on wildlife, fish and beneficial organisms.

Biorationals include botanicals, microbial elements and synthetic chemicals with alternative modes of action.

Grewal spelled out various findings of research into biologicals, including:

• Nematodes of the genera steinernema and heterorhabditis fight armyworms, webworms, black cutworms and white grubs that feed near the surface. They can become part of the environment if not exposed to toxins.

• The fungi beauveria bassiana infects chinch bugs under hot, humid weather. The product, named Naturalis-T, had limited success in 1997 trials.

• The bacteria bacillus popillae (the milky disease) is a natural pathogen of white grubs. It is highly specific and different strains infect different grub species. Infected grubs die in a month. The products are Doom, Japidemic and Milky Spore. Grewal said the quality of current products is questionable.

Among biorationals, Grewal said:

- Of the microbial derivatives, bacillus thuringiensis delta endotoxin is the most widely used microbial insecticide on the urban landscape. New products with encapsulated toxins have become available, Grewal said, and research is continuing to incorporate delta endotoxin genes.

- The bacteria bacillus thuringiensis strain japonensis provides excellent control of the Japanese beetle and white grubs.

- Naturalites — a new class of insecticides — are active on lepidoptera, diptera, hymenoptera, siphonoptera and thysonoptera.

- Conserve SC, a product from the microbial derivative spinosad, has performed well against cutworms, armyworms and sod webworms.

- DiTerra, a new biological nematicide, has not been tested yet at OSU, but is widely accepted for turf nematodes.

- Among plant derivatives, azadirachtin, from the neem tree, acts as a growth regulator and as a feeding deterrent to some insects.

- Of the phenyl pyrazoles, Fipronil is effective against mole crickets and fire ants. The product: Chico Choice.

- The product Merit, from Japidemic and Milky Spore.

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Panel on disabled scheduled for GCSAA Conference and Show

By Bob Spiwak

The Golf Course Superintendents Association of America (GCSAA) has scheduled a round table discussion entitled "The Americans with Disabilities Act (ADA) and Golf Courses" for its February convocation in Anaheim, Calif.

Set for 2:5 p.m. on Friday, Feb. 6, the panel will include Greg Jones, president of The Association of Disabled American Golfers; Jerry Coldiron, superintendant at Lassing Pointe Golf Course in Kentucky; and Peggy Greenwell of the U.S. Department of Justice.

According to Cynthia Kelly Smith, government relations counsel for GCSAA, several other participants have been invited. Smith said that she gets a call each week from a superintendent somewhere about the ADA.

The GCSAA convention program notes, "This government relations program will feature a panel of experts discussing the ADA and its impact on golf... compliance issues, advice on handling complaints and the status of the government's draft golf access guidelines are a few of the topics that will be covered in this interactive, topical session."

Smith noted that the ADA involves not only superintendents, but architects, the rules of golf, and the way golf is played.

"More superintendents need to be aware (of ADA ramifications) and they need answers," he said. "We are hoping to work with the disabled community and we all agree this forum will be a good way."

Biologicals and biorationals are emerging

Continued from page 37

chloronicoxylin, imidacloprid, is very effective as a broad-spectrum, long-residual insecticide.

- The chloronicoxylin, Mach 2, a molt-accelerating compound, gives excellent control of white grubs, billbugs and beetles.

The synergism between the Cruiser nematode and Merit (used at 1/4th the recommended rate) provides 100-per-cent control of Japanese beetle grubs, Grewal said.

Grewal warned that flonval had an adverse effect on the natural population of nematodes.

The OSU professor said more work needs to be done in a number of areas, especially on fungi and bacteria biologicals as well as to develop products to control white grubs.

"We need to try to understand the naturally occurring biocontrols that are already there and easy to establish... They save water, the environment, money and much more," Grewal said.

Rieke: Are your roots in sand?

Continued from page 33

a micronutrient package.

He suggested that superintendents look at soil-ratio tests. Calcium (Ca) should have a 60- to 85-percent saturation in soil test reports, magnesium (Mg) 8 to 12 percent and potassium (K) 5 to 8 percent.

The ratios, Rieke said, should be less than 6.5:1 for Ca:Mg; less than 13:1 for Ca:K; and less than 2:1 for Mg:K.

"Are we overfertilizing?" Rieke asked. "Maybe we are."

He said granular fertilizer should be applied to sand greens in the spring and fall, including some slow-release material; and the turf should be spoon-fed during prime playing season, using mostly soluble fertilizer with sprays through the irrigation system.

Finally, he said superintendents should "do all you can to get oxygen into the soil," adding that is an important factor that has been overlooked.

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ADA decision from the super's view

Continued from page 1

Coldiron, 41, also oversees the county's other course, Boone Links, 11 miles away. Lassing Pointe was recently involved in a situation involving a golfer, Don Duckworth, who requested, but was denied permission to deviate from the path in his golf car because of a heart condition which precluded walking on hilly terrain. (GCN-Nov. 1997.) His complaint with the Justice Department, under ADA, led to the course allowing him off the path in 1998. Lassing Pointe, which opened in 1994, had refused because the turf was not yet seasoned.

Coldiron feels that when the ADA was passed in 1991, golf cars were probably not a consideration. "The law," he says, "was never meant to allow a golfer to drive to his ball." Obviously, the Justice Department, through the National Park Service of the Department of Interior, disagreed when it pressured Lassing Pointe on behalf of the golfer last fall.

Interpretation of the law is the bugaboo which bothers Coldiron. "Just what is a disability?" he asks. "We asked three federal agencies and got three different answers. I have had two surgeries on my knees, and I know my doctor would proclaim I had a disability if I asked."

"My livelihood depends on the condition of the course," he stated emphatically. "With Mr. Duckworth going off the path, I am going to have to deal with more golfers off the paths next year. Will they all be disabled?"

Lassing Pointe's insistence on not deviating from the paths is based on the threat to its new turf. According to Coldiron, a study by Dr. Robert Carrow of the University of Georgia proves that golf cars indeed injure turf, especially in its early years.

As the amount of litigation based upon golfers' disabilities is sure to increase, pressure on courses and superintendents will likewise grow. There appear to be no easy answers, and, as each disability is unique, rulings and accommodations will likely be arbitrated on a case-by-case basis.

For all concerned, it is not going to be a walk in the park.

Related Story, Page 38

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<td>Treated</td>
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*DAT = Spray applied, DAT = Day After Treatment
1995, Ohio State University, Pennisutri Bentgrass
Keeping super position visible: Renault's challenge

By PETER BLAIS

Incoming Golf Course Superintendents Association of America President George Renault is no stranger to the members of the international organization. The head superintendent at Burning Tree Club in Bethesda, Md., is a 26-year GCSAA member and has been a national director since 1995. He served on numerous committees and as vice president for the past year. The 49-year-old father of two will replace Paul McGinnis as the organization's leader during February's International Conference and Show in Anaheim, Calif.

Renault said the biggest change he's seen since first becoming a national director five years ago is the board's increased accountability to its membership.

"We instituted the committee processes and got member input from the process," he said. "Everything we do is under scrutiny back to the members. We have an open dialogue between the national and local chapters and from the chapters down to the members."

Renault praised current President Paul McGinnis as having done "an outstanding job. His theme is that he is the bridge between the prior boards and the current board. He's not just a bridge, he's a rock, and a good solidifier. He has a good perspective and open mind. He's a good friend and a good worker, too."

Renault said the major accomplishments during the McGinnis administration have been formation of the Member Standards Resource Group; progress on environmental concerns; and enhancement of the headquarters staff and business activities.

The incoming president said his biggest challenge will be keeping the superintendent's profession as visible as it has become in recent years. "The more we get involved, the more we are in demand to perform additional duties," he said. "That's not a burden, it's just an additional challenge we have to meet."

Renault has traveled extensively as vice president, meeting with fellow superintendents and leaders of other golf industry organizations. "The allied associations enjoy seeing our involvement at these other functions," he noted. "I am amazed at the type of respect the GCSAA receives as a whole. Our message is getting out there and we are making inroads. I've noticed a big difference in the past four years. It's a combination of a lot of things, but in particular how we do business."

According to Renault, GCSAA required all its local and state chapters to meet certain criteria and sign reaffiliation agreements by Dec. 31, 1997, or lose their affiliation with the national organization. Only eight chapters that were expected to remain in the fold had not completed their paperwork as of mid-November, he explained. Renault said all should either have their reaffiliation approved by the Dec. 31 deadline or would become international chapters.

Renault said the organization will have lost 13 chapters, down from 113 to an even 100, resulting from the reaffiliation process. Most were turfgrass or international associations that don't have the correct board of director composition [enough certified superintendents], he said.

Those superintendents who were members of chapters that lost their GCSAA affiliation were likely also members of an association that is still affiliated with GCSAA, or should have access to one that remains affiliated, Renault added.

"We want to continue to grow," Renault said in reference to his upcoming year in office. "The hard decisions will be deciding what programs to abandon. As you grow, if you want to continue offering new programs you have to abandon those that aren't successful, or aren't viewed as successful, or aren't up to current times."

Asked about balancing the responsibilities of being GCSAA president with obligations to his home club and family, Renault...
ANAHEIM, Calif. — The breathtakingly scenic Pelican Hill Golf Club overlooking the Pacific Ocean features two of the six Southern California golf courses that will host the 1998 GCSAA Golf Championship, a highlight of the annual gathering of golf course superintendents from around the world.

The tournament, part of the 69th International Golf Course Conference and Show, will be held Feb. 2-3. For the fourth consecutive year, The Toro Co. is a co-sponsor of the event. The field is limited to 720 entries.

Defending champion Michael Suess, superintendent at the Woodbridge Golf Links in Kings Mountain, N.C., will head up a field of as many as 700 golfers who will be divided into several flights based on handicaps. Suess won the 1997 tournament in Las Vegas in dramatic fashion, holing a 15-foot birdie putt on the final hole at Sunrise Country Club's Hawk Course to edge out Bill Martin, superintendent at Marbella Golf & Country Club in Hemet, Calif., by a single stroke. Todd Barker, the 1995 GCSAA champion and superintendent at Fore Lakes Golf Course in Taylorsville, Utah, finished third just two strokes back of Suess. In a classic finish, Suess, Martin and Barker were tied with two holes to play. Defending chapter team winners are Carolinas "A" team in gross and California No. 7 net.

Tournament activities start with practice rounds on Friday, Jan. 30-31, with a four-ball championship on Sunday, Feb. 1. For the first time, awards will be handed out in both two-person and four-person teams in the four-ball event. A welcoming reception will follow the four-ball in the evening and post-round 19th hole receptions will be held each night of tournament play. Official tourney play gets underway, Monday, Feb. 2, with different flights playing at different courses.

Following is a brief rundown on the courses that will host the 1998 GCSAA Golf Championship:

— Cypress Golf Club (host superintendent, Pat Gradoville/course rating 72.7, slope 140). Cypress Golf Club is a 6,510-yard par-71 high-end daily-fee layout designed by Perry Dye and featuring a natural look, severe mounding and water hazards. The sloping, undulating course was opened in 1992 on the site of an abandoned park-style golf course. Buffalo grass and other low-maintenance native grasses make up rough areas. Of more than passing interest, a certain young phenom named Tiger Woods lived near the course while in high school and played here regularly. Woods holds the course record with a 63.

— Dove Canyon Country Club (host superintendent, Eric Lover/course rating 75, slope 140). Set in a canyon near the base of Saddleback Mountain, Dove Canyon is a Jack Nicklaus signature-design golf course that's part of a 650-acre upscale development. The par-71, 6,902-yard layout sits adjacent to Cleveland National Forest and the Audubon Society Nature Sanctuary, which provides a rich natural setting full of wildlife (mountain lions, bobcats, coyotes, black-tailed deer), a waterfall, canyon features and native plants and trees. Dove Canyon features some tough carry shots and the course overall puts a premium on good golf management skills — a real "keep the ball in play" challenge.

— Pelican Hill Golf Club (host superintendent, Juan Franco Silva)

The Ocean North Course (course rating 71.7, slope 129) One of two Tom Fazio-designed ultra-high-end daily-fee championship courses at this gorgeous California coastline venue. Both Ocean North and The Ocean South courses were built among a series of coastal plateaus and canyons. The Ocean North course is a par-71, 6,656-yard links layout peppered with California coastal scrub. Generous fairways. Stunning scenery.

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CIRCLE #103/GCSAA BOOTH #809

January 1998 41
GCSAA candidates at a glance

**PRESIDENT**

Name: George Renault  
Age: 49  
Course: Burning Tree Club, Bethesda, Md.  
Former head superintendent at: Chevy Chase (Md.) Club; Penderbrook Golf Club, Fairfax, Va.; Goose Creek Golf Club, Fairfax, Va.; Goose Creek Golf Club, Fairfax, Va.; Goose Creek Golf Club, Fairfax, Va.

Years GCSAA member: 20  
GCSAA posts: Board of director member since 1993; chairman of tournament, scholarship, chapter relations, certification and government relations committees; vice chairman of publications/TRAC, industry advisory council, membership standards resource group, scholarship and government relations committees; eight-year voting delegate; member of federal Americans with Disabilities Act Golf Advisory Commission, Watson Fellowship Selection Committee and Responsible Industry for a Sound Environment [RISE] government issues committee.

Other associations: Past president of the Mid-Atlantic Association of Golf Course Superintendents and Greater Washington Golf Course Superintendents Association; past member University of Maryland Turf Advisory Committee and Maryland Turfgrass Council advisory committee; member of Maryland and Virginia turfgrass councils.

Education: Certificate in golf and turfgrass management, University of Maryland.

Family: Wife, Lucinda; children, George, 20, Lucy, 16.

Goal: “It’s my way to return something to the profession that’s been so good to me.”

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**VICE PRESIDENT**

Name: David Fearis  
Age: 51  
Course: Blue Hills Country Club, Kansas City, Mo.

Former head superintendent at: Country Club of Peoria (III.); technical representative for O.M. Scotts Company for 4 years.  

Years GCSAA member: 30  
GCSAA posts: Board of director member since 1993; currently secretary/treasurer; chairman of the government relations, industries, partners, research, certification, information services, education, public relations and curriculum review resource committees; vice chairman of the conference and show, certification, government relations and technical information resource committees; International Conference and Show speaker and session chairman; member of finance, public golf resource, association planning, magazine, ethics, nominating, standards and integrated pest management committees; charter and lifetime member of the Golden Tee Club.

Other associations: Past president Central Illinois GCSA, Heart of America GCSA and Illinois Turfgrass Foundation; director Midwest Regional Turf Foundation; member Missouri Valley Turfgrass Association, Midwest Turf Foundation and Kansas Turfgrass Foundation.

Education: B.S. in agronomy, Purdue University.

Family: Wife, Lynn; children, Blaise, 18.

Goal: “We are moving up, but we still have a ways to go. We've got the four mandates. Chapter relations, and I feel we've done real well with that with the affiliation agreement; the meeting [with chapter representatives] in September; the chapters feeling a part of GCSA; and GCSA feeling a great benefit from that relationship. The environment, which is ongoing and where we've made great strides. We've done very well with [improving the superintendent's professional image. And the newest one, job security. That's a toughie that we've brought on ourselves. We've raised the conditions at these courses so high that other superintendents, but especially those in golf's large clubs, want to see what we've given them. They expect almost perfect conditions at these courses so high that we are dealing with Mother Nature and Mother Nature throws curves. If I had a singular goal, that would be it — employer/influential golfer education. The better they understand our job, the better off we'll be in terms of job security.”

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**BOARD MEMBER**

Name: Joseph Emanuel  
Age: 44  
Course: Hurstbourne Country Club, Louisville, Ky.

Former head superintendent at: Lexington (Ky.) Country Club; Talon Country Club, Fort Washington, Md.

Years GCSAA member: 22  
GCSAA posts: Member of membership, chapter relations and education committees; Bluegrass Golf Course Superintendents Association chapter delegate since 1989.

Other associations: Past president of Bluegrass GCSA; director of Kentuckiana GCSA; director of Kentucky Turf Council, member of Mid-Atlantic GCSA; member of Ohio Turf Foundation.

Education: Associate's degree in turfgrass and golf course management from University of Maryland.

Family: Wife, Peggy; children Allison, 19; Dennis, 15.

Goal: “I have been heavily involved in local and state associations throughout my career. Working on national committees I've gotten a flavor of the association. I want to give back to the industry, promote the image and professionalism of the golf course superintendent.”

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Name: Jon Maddern  
Age: 39  
Course: Elk Ridge GC, Atlanta, Mich.


Years GCSAA member: 21  
GCSAA posts held: Member of GCSA education, government relations and elections committees; chapter delegate.

Other associations: Immediate past President of Michigan Turfgrass Foundation; secretary/treasurer of Northern Michigan Turf Managers Association; past secretary/treasurer of Greater Detroit GCSA; member of Western Michigan GCSA and Golf Association of Michigan; board of director member of the Michigan Golf Foundation.

Education: Certificate in Turfgrass Management, Michigan State University.

Family: Wife, Bev; children, Brad, 15, Heather, 11.

Goal: “To represent all superintendents, but especially those in golf's largest growth area — public, daily-fee and resort operations — and to help GCSA into the next millennium.”

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January 1998 43
GCSAA Golf Tournament team champions: 1946-97

- 1946 Cleveland GCSA
- 1948 Cleveland GCSA
- 1949 Cleveland GCSA
- 1950 Cleveland GCSA
- 1951 Cleveland GCSA
- 1952 Central Ohio GCSA
- 1960 Michigan & Border GCS
- 1962 Philadelphia Ass. GCS
- 1963 Michigan & Border GCS
- 1968 Heart of America GCS
- 1969 Michigan & Border GCS
- 1970 Southern California
- 1971 Southern California
- 1972 Midwest Assoc. GCS
- 1973 Connecticut Ass. GCS
- 1974 Connecticut Ass. GCS
- 1975 Michigan & Border GCS
- 1976 Midwest Ass. of GCS
- 1977 Michigan & Border GCS
- 1978 Old Dominion GCSA
- 1979 Iowa GCSA
- 1980 Florida West Coast
- 1981 Florida GCSA
- 1982 Florida GCSA
- 1983 Carolinas GCSA
- 1984 Carolinas GCSA
- 1985 Carolinas GCSA (Beach Bums)
- 1986 Carolinas GCSA
- 1987 Carolinas GCSA
- 1988 Carolinas GCSA
- 1989 Carolinas GCSA
- 1990 Carolinas GCSA
- 1991 Carolinas GCSA
- 1992 Carolinas GCSA
- 1993 Carolinas GCSA
- 1994 Carolinas GCSA
- 1995 Carolinas GCSA
- 1996 Carolinas GCSA
- 1997 Carolinas GCSA

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GCSAA tourney
Continued from page 40

(course rating 72.1, slope 130)
The 6,634-yard, par-70 Ocean South course features tumbling fairways dotted with stands of pines and acres of California scrub. A few of the hole names suggest what you face here: “Sudden Drop,” “Sidewinder,” “Canyon,” “On the Rocks.”

— Oak Creek Golf Club (host superintendent, Ken Coffman/ course rating 71.9, slope 127). The third Tom Fazio design in this year’s tourney, Oak Creek is a 6,834-yard, par-71 course with soft, smooth sloping and subtle elevation changes set amidst towering eucalyptus trees and mountain ranges. Flatter than the Pelican Hill courses — and about 10 miles inland — Oak Creek offers generous fairways, challenging bunkers and greens complexes that put a premium on good second (or maybe third) shots.

— Tustin Ranch Golf Club (host superintendent Steve Plummer/ course rating 72.4, slope 129). Recently named the best-maintained public course in Orange County by the Orange County Register, Tustin Ranch is par-72, 6,736-yard Ted Robinson design with plentiful wildlife including bluebirds, coyotes, mallard ducks and Egyptian geese. Not a lot of nerve-shattering shots required here, but there is an island-style par-3.

Renault
Continued from page 40
responded: "I got reaffir-mation from the club members that yes they have concerns, but yes I have their blessing to do whatever it takes to get the job done. That's nice, but at the same time, the guys are paying your salary and you've got to serve them first... And then when you get home it's tough to balance between work and home.

"I wouldn't do it [be on the GCSAA board] unless I enjoyed it. It's fantastic. I like being there with a finger on the pulse."
Spring Prep: There are few rules, if any

BY MICHAEL LEVANS

If there were one universal spring preparation rule that could be neatly stitched and framed to hang in the maintenance shed office it would probably read, "Do your fall work."

Other than that, no rules apply when it comes to getting a course up and running for the new season. Mother Nature takes over and your left to deal with the rites of spring — field mice making winter homes in sod-wall bunkers and irrigation boxes, deer damage, elk dung, frost heaves and those pesky early-season players.

"Everybody gets spring fever," said Terry Buchen, an agronomic consultant. "Then they watch The Masters and everybody goes nuts and wants to get on the course before it's ready."

"Our single biggest spring prep problem is keeping the golfers off the course until the frost thaws out," said Gerry Faubel, superintendent at Saginaw Country Club in Saginaw, Mich. "They can play when it's frozen, but when the frost is coming out of the ground it's imperative that they stay off."

Faubel said he's posted signs around the course, but that's never enough to keep the golf-hungry at bay.

"It's so easy for strangers to just park on the street and jump on, so we have to keep an eye out and politely ask them to leave."

Smaller springtime pests come in the form of voles for Kevin Ross, superintendent at the Country Club of the Rockies in Vail, Colo. The voles gnaw away at the grass under snow cover, which results in tiny piles of wet grass clippings after the thaw.

"They gnaw it down, cut it so short that we have to reseed or fertilize in those spots," said Ross. "It's our biggest problem."

But Ross comes back at the little creatures with a safe, homespun remedy which has yet to fail him.

"We spray hot pepper sauce on the grass to make the grass pungent, a little less appetizing," said Ross.

Ross starts his spring prep during the first week in April and aims to open the first week in May, after the elk dung has been shoveled and hauled away, of course.

Let's not forget the field mice. Buchen said he has seen many a top-notch irrigation system go down due to mice turning irrigation controller boxes into winter retreats.

"They eat the insulation off the wires," said Buchen. "Supers can put rat and mice poison in irrigation controllers, but that's about all you can do."

Moisture is Gary Laliberte's greatest springtime foe.

For Laliberte, superintendent at Prout's Neck Country Club, Scarborough, Maine, it's water, water everywhere on the 3rd and 16th fairways, which are both at sea level.

"Those two fairways are under 2 feet of water every spring," he said. "We have to pump for a couple weeks to get it completely out and there's nothing we can do about it."

And if the rodents, dung and flooding isn't enough to keep you busy, there's always the basic spring clean up — branches, leaves, etc.

"You can nip a lot of clean up in the bud in the fall," said Faubel.

Spring prep: New challenges in N.D.

GRAND FORKS & FARGO, N.D. — When the Red River flooded to a record 54 feet last spring, the golf courses along its banks in Grand Forks and Fargo were inundated. This year, spring prep promises to be a little less complicated for the courses that were ravaged by the silt and mud deposited by the raging waters.

Three of the courses contacted, Lincoln Park and the Country Club at Grand Forks, and Edgewood CC in Fargo plan to open on schedule this year. Continued on next page.
Smithco's new Sweep Star 48 is compact, highly maneuverable and designed for all-purpose use. It has a 4-foot sweep and employs the Smithco-exclusive single reel pick-up system. Available in both high lift and ground dump models, the Sweep Star 48 has an adjustable reel height which allows clean-up of both wind-rows and debris piles.

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Vermeer introduces 75HP stump cutter

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CIRCLE #213

Hakmet introduces Meri Crusher

The new Meri Crusher Hakmet Ltee/Ltd. provides superior crushing power for stumps, roots, branches, ice, soil and gravel roads. Special features include wear-resistant metal cutters, low-power demand compared to crushing capacity and crushing depth up to 25cm (10 inches) below ground level. Optional equipment includes support wheels, hydraulic controlled rear drum and felling frame. For more information contact 514-455-6101.

CIRCLE #214

N.D. getting ready

Continued from previous page

According to Lincoln Park superintendent Steve Mullally, all 18 holes opened on August 1. For a time before that, a make-shift nine hole course was available for play.

The big question for this year, said Mullally, is the fate of the course as it currently exists. The Army Corps of Engineers is considering building a dike along the banks of the river. If that proposal goes through, half of the course will be lost. Luckily, the parts department has other property on higher ground for the new course.

Overall, the fairways suffered the most. At Lincoln Park, six to nine inches of silt on 75 acres were dragged off, disked and reseeded, according to Mullally. The greens were hosed off, then scraped. The irrigation came through with few problems, but three tees had to be rebuilt.

"The newly seeded areas took off in August...it's hard to believe the course was flooded, the way it's come back," said Mullally.

Seventy miles south, at Edgewood CC in Fargo, the turf

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Continued on page 78

GOLF COURSE NEWS
GRAHAM, PANKS SPLIT
Player consultant David Graham and architect Gary Panks are terminating their 10-year association in golf course design. Graham is concentrating on a full PGA Senior Tour schedule, while Panks will continue to focus on course design and share more of the credit with his staff, including senior designers Gary Stephenson and Michael Rhoads. The firm will continue to operate its Phoenix and Dallas offices under the name of Gary Panks Associates.

DOAK HIRES PLACEK
TRAVERSE CITY, Mich. — Renaissance Golf Design has named Don Placek as a design associate. With a degree in environmental design from the University of Colorado at Boulder, Placek has joined the firm to assist primarily to develop concept drawings, construction documents and other graphic-related areas. He has been in the golf course design and construction field for nearly eight years, spending six years at Dye Designs in Denver. His responsibilities will include various levels of involvement with new construction, restoration and consulting.

PUTTING CHALLENGES GO FORWARD
ORLANDO, Fla. — Classic Golf Group, Inc. has been hired by Golf Challenge Corp. to design a "putting challenge course" along International Drive here. Len deBoer, president of Classic Golf, said the course will feature challenging Tifdwarf greens and will give golfers an opportunity to win prize packages, including a $25,000 cash grand prize. Construction is under way. A spokesman for Golf Challenge Corp. said the Orlando Putting Challenge Course could be the first of many such projects to be located in high-traffic, resort destination areas.

OSU HONORS ALUMNUS HURDZAN
COLUMBUS, OHIO — Golf course architect Dr. Michael Hurdzan was recognized with the Distinguished Alumni Award by the College of Food, Agricultural, and Environmental Sciences Alumni Society in November at Ohio State University. This award recognizes alumni who have brought distinction to themselves, their college and OSU through participation, commitment, and leadership in their profession and community.

BRIEFS
One of nation's best 9, Rolling Rock Club, goes 18

IGNION, Pa. — After 76 years as perhaps the best nine-hole course in America, Rolling Rock Club has expanded to 18 holes. The original Donald Ross-designed loop was joined last year by nine new holes from the hand of architect Brian Silva.

A partner with Uxbridge, Mass.-based Cornish, Silva and Mungeam, Silva worked to match the unique architectural style embodied in the original hole. While Silva is an experienced interpreter of vintage design — he just finished the restoration of 185 bunkers at Ross' Seminole Golf Club in North Palm Beach, Fla. — the original holes at Rolling Rock Club (RRC) proved a tough act to follow.

"Donald Ross was no fool. He used all the good land back in 1917," Silva explained. "The site we worked with was very difficult; it was essentially the side of a mountain. It took us close to a dozen route plans to make it work. While Ross was able to gently lay his golf holes onto design-friendly terrain, we were forced to stair-step the holes up and down the side of this mountain. In doing that, we knew right from the start there would be hard edges to the new holes, unlike the comfortable edges of the original nine.

"Our greatest efforts in matching design styles can be found in the green and bunker designs. We consciously set out to do all we could, but we had to accept that we could only do so much. There's no going back in time to Ross' original design, but we tried our best to keep with his vision."

Continued on page 55

Palmer to get Rossi Award
ANAHEIM, Calif. — Golfing legend Arnold Palmer will receive the 1998 Don A. Rossi Humanitarian Award here during the annual Golf Course Builders Association of America (GCBAA) banquet, Feb. 6.

"The award honors individuals who have made significant contributions to the game of golf and its growth, and who have inspired others by their example," said GCBAA President Paul Eldredge. "I don't know who we could possibly give the award to who fits that description any better than Arnold Palmer."

The award is named for Don Rossi, who served as executive director of the National Golf Foundation from 1970 to 1983 and of the GCBAA from 1984 until his death in 1990.

"I am very pleased to receive this award," said the 68-year-old Palmer. "I knew Don Rossi and appreciated the role he played in building the industry around our game. To receive an award named for him from the golf course builders — who are the backbone of our industry — is indeed an honor."

Palmer will, however, be unable to attend the GCBAA banquet. Ed Seay, his partner in Palmer Course Design, will accept the award on his behalf.

The son of a golf course superintendent in Latrobe, Pa., Palmer
Borrego Springs reminiscent of ‘Palm Springs years ago’

By Mark Leslie

BORREGO SPRINGS, Calif. — Desert-type waste bunkers, early-1900s-style putting surfaces that subtly flow and affordable greens fees were the aim of course architect Cary Bickler and developer Cameron Brothers Construction Co., when they built Borrego Springs Country Club and Resort here.

They believe they have captured the look and presented the cost when the 18-hole public course opened for play on Jan. 2.

Borrego Springs is “like Palm Springs years ago,” said Bickler from his headquarters in San Diego, where brothers Bill and John Cameron live. The Camerons, whose golf course work included rough grading for Torrey Pines and LaCosta Country Club in the 1960s, have built much of the town over the years. Having built subdivisions, roads and other projects, the Camerons plan to intersperse homes throughout their new golf course. They have just finished a 100-room hotel as well as a clubhouse and dining facilities, tennis courts, pool and a spa in this spot, which sits 100 miles from San Diego and a one-hour drive from Palm Desert.

Situated on 175 acres, Borrego Springs Country Club is “a very unique golf course,” Bickler said. Taking advantage of the 1,000 acres of mesquite trees and date palm groves the Camerons own, golf course builder Park West of Irvine transplanted 300, 40- to 50-foot palms, spreading them around the property for a finished look.

Four lakes were created — one 4-acre and three half-acre ponds that border three other holes. “It was a flat site,” Bickler said. “But we moved about 400,000 cubic yards of dirt and were able to create a lot of movement. Fifty-five bunkers are artistically designed and shaped, and strategically located with a combination of out-of-play areas and waste bunkers.”

Targeting a 4,800- to 6,600-yard course, he said: “We wanted to make it look challenging and interesting and beautiful, but we wanted to address affordability and create a course the average golfer could play and enjoy. There’s nothing tricked up about it — just straight-forward, fun golf.”

The affordability translates to $49 to $59, which includes cart and is far below many area courses.

The greens average 6,300 square feet and Bickler said, replicate the early-1900s style. “There’s enough interest in them,” he said. “They have up-and-down contours and two to three breaks, but everything flows and blends together. If you can see it you can make it.”

A signature hole? “We’ve got six,” Bickler said, pointing out several par-3s — a couple of medium length and a couple more than 200 yards; one demanding a 150-yard forced carry over water. “But I give everybody a way in out of case they want to shoot alongside the water,” he said.

Meanwhile, Bickler’s design at Encinitas Ranch in Encinitas will display landscaping of unique magnitude when it opens March 1.

“The property is covered with red poineettas, and will remain so to a large degree, until they are harvested each year for the holiday market.

Part of thousands of acres owned and farmed by the Paul Ecke family about 30 miles north of San Diego, the 180-acre Encinitas Ranch was donated to San Diego County by the Ecke heirs. Sitting on a high mesa, the entire property displays views to the west, northwest and southwest of the ocean a mile and a half away.

The city owns the course and it will be managed by JC Resorts, a local operator. The greens fee will range around $30 weekdays, with local residents getting a discount.

“The property has been tucked away and hidden for decades,” Bickler said.

“It has a 2-1/2 percent slope to the west, perfect for ocean views. At the northern hole, the 16th, you look straight down on LaCosta Country Club. And Avia is to the south 100 feet below it... When it’s clear you can see 80 miles up and down the coast.

“It will be wonderful for the public.” As well as constructing roads and a bridge, builders moved 450,000 cubic yards of dirt on the golf course. The track will play from 4,800 to 6,700 yards over five sets of tees.

“I wanted to accomplish an old seacoast ranch look,” Bickler said. “Trees were strategically positioned, but we left open viewing corridors to the ocean. The bunkering looks timeless. I want a style that looks like it has been there 100 years.”

Since the community anticipates 65,000 rounds the first year and expects that to climb to 90,000, the greens average 7,100 square feet, which, Bickler said, allows 21 pin positions.

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Ross' Overhills gone but not forgotten

By W. Pete Jones

Time has claimed yet another historic Donald Ross-designed golf links. In the spring of 1997, the U.S. Army at Fort Bragg, N.C., purchased Overhills, a 42,000-acre nature retreat once owned by Percy Rockefeller. In 1912 Donald Ross was told he could have any section from 3,500 acres of Great Trinity Forest to incorporate into his design. The course would actually be built in two stages, the first nine in 1914 and the second nine in 1916. The golf course tract would be known as the Overhills Country Club.

The location of Overhills was a well-kept secret for decades. The only access to the golf course was by invitation granted by Rockefeller management. Those who tried to enter the retreat were politely turned away. The Donald Ross Society felt history could be served if somehow the now-defunct course could be examined and its features recorded. There was also an opportunity to study the remains of sand putting surfaces. The society found the cooperation from course architect Mike Gleason of Pinehurst, Ricardo Uriarte of North Carolina State University, U.S. Army representative Glen Prillaman and the Rose Engineering Group of Fayetteville, who helped recover detailed information about the course. Unfortunately the 1912 Ross plans were nowhere to be found.

The Army and Rose Group provided copies of an early 1930s aerial photo and a topographical map. Gleason had the hardest job. He took pictures of each hole and surveyed the now-defunct 3,000-square-foot grass green sites. It was his first study of a turn-of-the-century layout. After all, what other course could claim having only 80 rounds of golf per year? Gleason remarked: "This pristine golf course lies in a completely natural ecosystem which has not been tinkered with. I wanted to analyze the routing and how Ross used the land. Basically, I wanted to learn his thought process and how he created shot values from tee to green and then transfer those parameters onto paper.

"Also, here was a great opportunity to see bunker patterns of that time. Most had been disturbed, except for a few pine cones and some pine straw that had fallen into the bunkers. There were different style bunkers on the course and strange protruding fairway sand fingers not generally found in other Ross designs. For example; the No.1 bunker was a fore-bunker left which depth measured 5 feet and the overall run of sand some 66 yards in length. Gleason said he walked many times to Pinehurst No.2 and tried to capture Ross' thought process, "but until now I've never had an opportunity to study an untouched work of his."

The original 1914 green surfaces at Overhills were sand, which was a typical surface used on Southern golf courses. By the mid-1950s the caretakers rebuilt them with 328 Bermudagrass and later Penncross bentgrass.

Not much is known about Ross' recommendation for building sand greens, but here was an opportunity to take samples and examine them in detail. The society wanted to know if Ross specified oil for hardening of sand greens or did he recommend using water to keep the area around the hole firm. Ross' friend and associate, Frank Maples, wrote a method for implementing sand greens in the early 1900s.

In examining the greens, turf management expert Uriarte said: "The present greens are built over the original sand greens. I took core samples starting at No.1 but, due to the density of the greens, didn't get a good core sample until the 5th green. Our lab report showed a clay/sand layer which probably was the base of the original putting surface. The core samples did not show any PCB's, which meant the greens were probably not oil-hardened."

With this discovery, there is clear evidence that during the pre-grass green era in the South the methods used by Ross were the same as on his three Pinehurst courses. Overhills remains a paradise of sorts in the "Tar Heel" state, but no longer will it be the quiet repose of just a few. Under the direction of Rockefeller heir Christopher Elliman, Overhills provided a safe haven for native wildlife and several rare bird and butterfly species, all which have been considered as protected in future use of the land. The retreat is now officially an Army training area whose directive is to train soldiers but somehow maintain the integrity of a natural ecosystem as best it can. As historian for the society, I find it important to recover information of any Donald Ross course. It is one thing to draw a new course on paper, but to use the course itself as input is a unique challenge. The result of our work means preserving a 1912 design on Ross' original graphs. The plans and study documentation will be sent to the Tufts Archives Wing in Pinehurst.

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GOLF COURSE NEWS

CIRCLE #124

January 1998 49
Venerable Hannastown adding nine

GREENSBURG, Pa. — After 75 years of existing as a nine-hole course, the membership at Hannastown Golf Club has approved plans to expand its facility in this Pittsburgh suburb.

Rumored to be the course where a young Arnold Palmer learned to caddy, the club owns approximately 120 acres, 50 of which are occupied by its Emil Loeffler design.

The proposed nine holes, designed by Ault, Clark & Associates of Kensington, Md., will play through mature woodlands, and are routed to take advantage of a meandering stream, located in the lower portions of the site.

Overall, the earthwork is being kept to a minimum to accentuate the natural character of the land, and help the new nine blend in with the existing holes. When completed, and with minor adjustments to the existing holes, the course will play to a par 71 over approximately 6,800 yards.

A new maintenance facility will also be built.

Stryker, Hearn team in N.J.

LITTLE EGG HARBOR TOWNSHIP, N.J. — New Jersey developer Fred Stryker is building Sea Oaks Country Club here, expecting to open it in the spring of 1999.

"Sea Oaks is located on one of the few locations in southern New Jersey with elevation," said course architect Ray Hearn of Plymouth, Mich. "As such, the golf course will afford fantastic views of both the Atlantic Ocean and the skyline of Atlantic City. Plus, our site is all sand, with vegetation much like what you'd find inland at places like Pine Valley."

Hearn said he will use much of the windswept scrub pine and jack pine he's found in abundance at Sea Oaks, along with the more traditional oak growth.

Hearn's design strives for balance. Three short par-4s on the front nine will be countered on the back by a pair of long par-3s and the par-5 10th, which may ultimately prove to be the course's signature hole. With water surrounding the green on three sides, players will be faced with a daunting wood or long-iron approach if they chose to go for the green in two, or a testy short-iron shot if they favor a more traditional three-shot approach.

Sea Oaks will range in length from 5,140 to 6,950 yards.

An eight-acre practice range will offer five target greens. A putting course and two practice putting greens will be located near the clubhouse.

Along with approximately 250 single-family home-sites, the semi-private club will also offer tennis and swim amenities.

Four Points track going ‘Cayman’

SAN DIEGO — The 3 Par at Four Points executive golf course has opened at the Sheraton Four Points Hotel here. Designed and built by Agoura Hills-based Golf Projects International, the nine-hole course features a challenging experience for players ranging from the serious golfer to the most novice player, according to Nabih Geha, general manager of the Sheraton Four Points Hotel.

The eight-acre course has nine holes ranging from 60 to 130 yards long and includes sand and grass bunkers, and two-tiered greens built to U.S. Golf Association specifications. 3 Par at Four Points will be affiliated with the Southern California Golf Association.

Geha said the course has applied for membership in the Cayman Golf Association, an organization of golfers and member courses committed to playing golf with the Cayman short-distance golf ball. The Cayman ball is played on specially designed short courses, par-3 and executive courses, and practice ranges throughout the world.

"The introduction of the Cayman ball will be a nice option," Geha said.
Dry is good, and something new, at Legion Mem'!

EVERETT, Wash. — A mammoth subsurface remodeling that transformed city-owned Legion Memorial Golf Course from often-muddy conditions to one of the driest facilities in the Puget Sound area will open in mid-1998.

Completed last fall, the project was carried out by Burns Golf Design of Fernandina Beach, Fla., and builder Daylen, Inc. of Fresno, Calif.

The $4.7-million project includes more than $1.3 million for drainage. In the past, the course, which averages about 70,000 rounds a year, was plagued by extremely muddy conditions much of the time. Some 70 acres are being capped by a 6-inch sand layer over drainage lines installed on 50-foot centers.

The course dates back to the 1930s, and has basic greens, only a couple of sand bunkers, no irrigation and just a few tee areas. The course will play to par 72 from five sets of tees, ranging from 4,705 to 6,737 yards.

Holes 1 and 10 play downhill away from the clubhouse, while 9 and 18 work their way back uphill. The remaining 14 holes play over rolling terrain, around wetlands that Kay took great care to preserve. In particular, the designers created several "filter bunkers" designed to protect the wetlands from run-off. There are six of these special bunkers, some as short as 30 yards but some as long as 200 yards," said Kay, "They serve an important environmental purpose, but they're also quite appealing to the eye."

It measures just under 6,800 yards. "New York CC does not have the contemporary look that's become so popular," said Kay. "Its character is quite old-fashioned. However, there are a lot of memorable holes out here, in part because the risk/reward equation is evident on every tee."

Kay's New York CC design — vistas, elevation & more

NEW HEMPSTEAD, N.Y. — New York Country Club, a private 18-hole Stephen Kay design perched on the highlands west of the Tappan Zee Bridge, has opened for play.

"It's an interesting piece of property," said Bronxville-based Kay. "Because it's located at the parcel's highest elevation, the clubhouse has commanding views of Manhattan. It's a lovely vista, with the skyline in the distance and the course in the foreground."

Design 3 begins redo at Southfield

SOUTHFIELD, Mich. — The city of Southfield Parks and Recreation Department has begun renovations on Evergreen Hills Golf Course. The firm of Design 3, led by W. Bruce Matthews III and Victor Nethiebel, has rerouted the existing nine hole course to accommodate an anticipated 60,000 rounds a year.

The renovation will feature large greens and tees, bentgrass fairways, and barrier-free accessibility. A 1.5-acre pond and wetland which embraces the finishing hole will be created, and 1.3 acres of woodland mitigation area will be preserved.

Turf Drain Inc. of Novi is the primary contractor. Kevin Kehoe, who heads the city of Southfield Golf Program, is overseeing construction, which is expected to be done May 29.

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CIRCLE #140/GCSAA BOOTH #1205
Six men and a golf course — Pilgrim's Run comes to life for armchair architects

By MARK LESLIE

PIERSON, Mich. — Give a half dozen armchair golf course architects free reign over 800 prime golf-terrain acres, and you could have a recipe for disaster. Put at their disposal a couple of golf industry veterans to polish and execute, and you could have Pilgrim's Run Golf Club, which is earning excellent reviews even though only the front nine has opened.

"If I said Arthur Hills or Tom Fazio designed it you'd have a feel for it. When you know the design story of this course, that doesn't really help you. But the end product is nicer than I ever envisioned," said Glenn Karsten, one of the golf lovers and fledgling designers who each drew out of a hat three holes on the course to design.

Five months after the front nine of the daily-fee course opened, Shumaker said, "The Six drew their holes from a hat, and it worked out." The Six included the last remaining unfinished hole on the back nine — Pilgrim's Run stood in December as a testament to teamwork.

That team includes:

• The owner: venture capitalist Robert van Campen of The Van Campen Group in Chicago.

• The six arm-chair architects: David Wisen, Scott Pierre, Fred Croft, Jerry Tranell, Bill Duhm and Karsten, all executives with The Van Campen Group.

• The two veterans who prevented problems and kept the project flowing: Kris Shumaker, who left a post as superintendent at Clearbrook Golf Club in Saugatuck to be project director, and golf course architect Mike DeVries of Traverse City.

It all started when van Campen, who enjoys golf and the outdoors, discovered 820 acres for sale in this town a half hour north of downtown Grand Rapids.

Known for involving his employees in his endeavors, van Campen enlisted The Six to have some fun designing a golf course on that land. The project was first envisioned as a private club, perhaps for van Campen Group employees and their families. "But the way it evolved, it's too good for that," said Karsten. "We saw it needed to be open to the public."

They also saw they needed a professional on board.

They hired Shumaker, and for months he walked the huge property before drawing a routing.

"The property is ideal: gently rolling golf terrain," Shumaker said.

"The contour is more in some spots and similar to seaside links terrain in others. We wanted it to flow naturally, and since we had so much land to work with, we weren't hindered. We used 500 acres. We didn't have to force the land into the design."

"We moved less than 100,000 cubic yards of dirt. It has nice sandy soils that drain very well — ideal for a golf course."

Once the routing was complete and the front nine holes cleared, The Six drew their holes from a hat, did some "trading," and walked the site before starting their designs. None had design experience, just what they had observed as golfers.

"It could have been a disaster," Shumaker said. "But it went really, really well. They were very good to work with."

Working in-house — Shumaker manning a dozer to shape the layout, along with excavator and loader operators — the superintendent realized he couldn't commit the time to creating the intricate design of greens complexes.

Enter DeVries, who had worked with Fazio, Tom Doak and William Newcomb Associates and had formed DeVries Designs, Inc. in 1994.

"Essentially, I was there to build and design greens complexes," DeVries said. "That evolved into more complex involvement — eventually building bunkers and advising on the entire process. We made some alterations to the routing and design. Their emphasis has always been on doing a quality job. There was no time line because it was a golf course just for them. That has allowed flexibility to develop things in a comfortable atmosphere."

The result, he said, is "a sequencing of holes — a series of short par-4s and then longer, stronger 4s connected together, so there are swings within the round that provide balance and continuity. It can have a big psychological effect on people."

Karsten, who is also handling the business end of the project for van Campen, said he drew all three par-3s from the hat. But he traded two of them for a par-4 and par-5.

Is the finished product close to his designs?

"A couple of them are very much like I originally thought in talking through with Kris [Shumaker] and Mike [DeVries]... It's been exciting," said Glenn Karsten.

Karsten is also handling the business end of the project for Van Campen, who has been putting up the large wetland system. There is tremendous variety throughout the golf course."

"A small pond fronts the 2nd green and an irrigation pond was excavated around the 16th, giving that hole two bodies of water. A property also encompasses a large wetland system."

"The par-73 course will play from 5,000 to 7,000 yards from four sets of tees. DeVries is especially proud of the course's par-4s. "A lot of lip service is given to short 4s," he said. "We've built good short- to medium-length 4s at Pilgrim's Run, as well as a really good 4-1/2 par at 483 yards. It's a real challenge to design short par-4s and do it properly. Growing up working and playing at Crystal Downs taught me that. People think it's a short par-4, so it's a give-me birdie, or it's a driveable short 4.

I look at it as, you still have to have a lot of options to play it — not just from the perspective of the single-digit handicap but the high-handicappers as well. You have to demand everybody to play to their strengths. It can still be a wide-open green that you can hit from a driver to a 6-iron off the tee, depending on how you want to attack the hole."

A clubhouse is planned, Karsten said, and a range and practice area will be included.

The property's remaining 200-plus acres will remain undeveloped in a family trust, he said, left to the deer and wild turkeys that roam the site and the hawks and eagles that soar above it.
Lohmann christens Whispering Springs

FOND DU LAC, Wis. — Lohmann Golf Designs and its construction division, Golf Creations, have put finishing touches on Whispering Springs Golf Club, an 18-hole daily-fee track that opened for play in the fall along the shores of Lake Winnebago.

Marengo, Ill.-based Lohmann Golf Designs (LGD) completely transformed the property, which had featured a nine-hole course called The Ledges. Working for developer Ed Hack, LGD designed 18 new holes while creating lots for residential housing, upscale apartments and condominiums.

“Whispering Springs is a good example of our turnkey approach to golf development,” said Bob Lohmann, president of LGD and vice president of the American Society of Golf Course Architects. “We started by doing a land plan for 18 new holes in anticipation of keeping the existing nine open during development. However, when we started the first new nine, we just kept going. It doesn’t feel like a residential course at all, which we’re proud of. Because the original nine is gone, we were able to put 18 new golf holes on land that might have accommodated 27. Also, we managed to save some of the trees from the old nine.”

The new course at Whispering Springs plays over rolling terrain, around enormous oaks. The layout itself stretches from 5,500 to nearly 7,000 yards. Lohmann also used a creek that runs north to south through the property. On three par-5s — Nos. 4, 10 and 18 — players are required to negotiate the creek.

“In the summer, we have a lot of walkers on the 10,000-square-foot green and put a lot of depressions around it. The putting surface doesn’t look hard to hit. If you take a 10,000-square-foot green and surround it with water, it will appear very hard to hit. We’ve tried hard to make the player think out there.”

The rocky soil here in Fond du Lac presented significant challenges to Golf Creations. The Golf Creations team used the edge rock to line ponds and frame entryways all around the property. The Lohmann team even provided rock to neighbors for landscaping.

“The course is a real challenge, but it turned out to be one of the property’s most unique features,” said Lohmann. “As a style element, it ties the whole development together.”

Ontario resort getting course

SAN DIEGO, Calif. — Tri-National Development Corp. has entered into an agreement to purchase 159 acres for the planned Emerald Hills Resort located 60 miles from the Toronto, Ontario, Canada international airport. The resort is to contain a 18-hole golf course, competitive tennis facilities, a hotel, indoor pool and saunas, a recreation and health club, and approximately town homes. The property is zoned to accommodate all phases of the proposed plans. The resort would sit in the heart of central Ontario, which is well known for its seasonal tourist population and is an attraction for a large number of business and convention travelers, with annual visitors estimated at 16 million.

Upon completion it is projected that the development will have a value in excess of $75 million.

Intrawest marks $500M for Tremblant

MONT-TREMBLANT, Quebec — Intrawest plans to invest $500 million more at Tremblant (Quebec), in partnership with the federal, provincial and municipal governments, over the next five years. Counting the $467 million that was spent by December, Intrawest expects it will have spent nearly $1 billion on The Tremblant by the end of 2002. Two more golf courses will join the award-winning Le Geant, including Le Diable, a track that will welcome its first golfers in July.

“This investment is justified by a tourist industry that is in a major growth mode,” said Houssian. “Canada needs areas that can become true destination resorts — resorts that will attract international visitors. Canada now has that at Whistler/Blackcomb and unquestionably, we are building it in Quebec, at Tremblant.”

Intrawest expects that 2 million guests will visit Tremblant each year by 2002, which is why, between now and then, the company will spend $46 million on infrastructure, $88 million for the mountain expansion and the development of four-season activities, and a further $366 million for new tourism accommodation.

The development of four-season activities includes a golf academy, a themed mountain-top attraction, equestrian center, outdoor amphitheater, an expanded network of outdoor recreation trails, as well as new beach and tennis facility.

All three levels of government will take part in the project and provide financial support for infrastructure improvements. On hand for the announcement were Quebec Premier Lucien Bouchard, Treasury Board of Canada President Marcel Massé and Mont-Tremblant Mayor Andre S. Sigouin.

“As we began planning Phase 2 of Tremblant’s transformation, it became very clear that if we were going to build something of world-class stature, it was going to need the co-operation of all levels of government,” said Houssian. “We would need their financial co-operation as well as other forms of teamwork. We received their support because they saw what we saw - an opportunity to build something very special in a world-class location on a world-class scale.”

The economic impact of this project will be unprecedented in the Quebec tourism industry.
ABERDEEN, Md. — Construction is complete on Tom Doak’s latest design — Beechtree Golf Course here.
A high-end daily-fee design north of Baltimore, Beechtree is a golf-only project built for commercial developer James F. Knott, a Baltimore Country Club member.

The site, two miles off the I-95 corridor, was originally slated for industrial development, but plans changed when Knott realized wooded wetlands through the site would have required filling for large industrial buildings. Instead, the course has been routed around the wetlands, with two narrow creeks retained as features of the 7th, 10th, 15th and 16th holes.

Beechtree is also just six miles from the site of Bulle Rock Golf Course, recently completed by Doak’s mentor, Pete Dye. Both courses will open next summer, raising the stakes for high-end daily-fee golf in the Baltimore market. Doak took the coincidence as a friendly challenge.

“It’s always nice to work next to a great architect, to see how your own work measures up,” said Doak. “But I learned a long time ago that you don’t try to outdo Pete Dye. You compete by building something different, but hopefully just as worthwhile.”

Beechtree is more of a 1920s-style course, like Five Farms, with rolling greens and lots of bunkering to vary the holes, Doak said, adding, “I think the bunkering will set the course apart from anything else in the Baltimore area.”

James F. Knott Construction was its own general contractor on the course, with Bruce Hepner of Doak’s Renaissance Golf providing daily supervision and Jim Urbina doing the bulk of the shaping work under a separate contract between owner and designer.

Talking Stick, two 18-hole golf courses considered a taste of Scotland come to Scottsdale, have opened here — the most recent designs of two-time Masters champion Ben Crenshaw and partner Bill Coore.

Built on Salt River-Pima-Maricopa Indian Community land, Talking Stick’s $70 to $90 greens fee makes it one of the most affordable upper-end venues to come on line in Arizona in a decade. It will be augmented by a golf school and clubhouse. A 1,000-room conference center and resort is also planned.

The North and South courses are a study in contrasts.

The North Course, which opened Dec. 5, is a grasslands track featuring gentle rolling terrain with many angular holes reminiscent of Scottish courses. Its bunkers are wild and jagged, its fairways very wide, with no rough, and its subtle greens open to approach shots. It measures from 5,530 to 7,133 yards.

The South Course, which opened Dec. 15, is an American-style layout from the 1920s and ‘30s, highlighted by lakes and streams.

Its panoramic views encompass Camelback, Pinnacle Peak, the Four Peaks and Red Mountain.
Rolling Rock goes 18 with Silva 9

Continued from page 47

to copy features from the old course. The 18th green is a mirror image of the 8th green, for example, right down to the grades. The 1st green is folded so the middle is lower than the front and back; at the 10th, we did the same thing.”

Founded early in the century, Rolling Rock is far more than a golf club. RRC maintains its own trout hatchery to stock its streams, raises duck and pheasant for drive and field shooting, operates a four-season clay-bird shooting facility, offers tennis and swimming during summer months; not to mention dining and lodging year round: Golf is not the focal point. Indeed, the club’s nine-hole track was deemed sufficient for more than 70 years.

When the membership decided to expand, it turned to Silva, whose restoration portfolio includes a sizable Donald Ross section. Yet all his familiarity with Ross had not prepared Silva for the flamboyance of RRC’s original nine, not to mention the challenge of creating a companion nine.

“I still can’t believe how severe the original greens are,” said Silva. “You often hear that Ross was ‘the master of subtlety.’ But he designed a 220-yard par-3 at Rolling Rock [no. 3] with about four elephants buried in the green. … When you’re standing in fairway bunkers 8 feet deep, the last thing you’re thinking about is subtlety.”

The new nine — measuring just 3,200 yards to complement the 3,000-yard original — was built by Ranger Construction of Ellington, Conn. Silva was a constant presence on site, visiting Rolling Rock every week for more than a year.

The membership rewarded Silva’s dogged efforts by placing his name on the scorecard, beside that of Mr. Ross. “We thought Brian should be so recognized because the reaction to his work has been most favorable,” said RRC Club Manager John Douglas. “Brian did a wonderful job carrying the Ross flavor over to the new nine, on very difficult terrain.”

Silva’s many trips to Pitts- burgh detailed with work at Seth Raynor’s Fox Chapel Golf Club, which he is restoring in anticipation of the USGA’s Curtis Cup matches in 2002. CSM is no stranger to USGA tournament preparation: Silva partner Mark Mungeam recently renovated Chicago’s Olympia Fields CC, which hosted the 1997 USGA Senior Open and was recently named site of the 2003 U.S. Open.

PGA Southern Cal to build courses

CALIMESA, Calif. — The PGA’s Southern California Section (SCPGA) has announced plans to build two 18-hole golf courses across Interstate 10 from Oak Valley Golf Club here. Section Executive Director Tom Gustafson said the builders hope to begin construction in the fall and open the course in the summer of 1999.

The section needed to negotiate with Oak Valley Partners L.P. to create a formal development agreement for the 400-acre site. The entire Oak Valley project includes 6,700 acres that were once designated nine years ago for golf, residential and commercial development.

The acquisition “will allow us to run our own tournaments … and provide us with another source of income,” Gustafson said.

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You also learn a lot about the
know what the impact will be —
have a tremendous amount of
Continued from page 47
design decisions on site you
working day by day, and the artis-
tic ability they have to maximize
GCP: After a couple years with
Packard, Jack Nicklaus Golf Ser-
vice offered you a job in 1985.
You worked on some great prop-
erties with Nicklaus, no doubt.
RJ: Yes. It was the opportu-
nity of a lifetime. I started in
the Scottsdale office during de-
velopment of Desert Mountain,
and worked on plan production
and documentation for propos-
als for government agencies for
the Renegade Course.

Coming from the Midwest, I
hadn't had a lot of exposure to the
desert-type setting. It was inter-
esting and certainly had an im-
pact on the design character of
the golf courses, as far as layout
and handling of transition areas,
working with the desert. There
are fantastic contrasts and beauty
in those desert courses. They are
unsurpassed, in my estimation.
A year later they transferred
me to the corporate offices in
North Palm Beach, Fla. That year
a significant occurrence cata-
pulsed the office into design and
building opportunities, Jack won
the Masters.
The office staff started to grow.
I was working as a design associ-
ate and on-site coordinator at Bear
Lakes Links Course in West Palm
Beach and coordinating plan pro-
duction and specifications for
other projects. We had PGA West
going at the time, as well as
English Turn, Pawley's Plantation,
Long Bay Club, Governor's Club,
Wynstone, Sycamore Hills.
GCN: Was it exciting working
with Jack?
RJ: Yes. When I was 10 years
old and teeing it up with buddies
and coming down the 18th fair-
way, you'd pretend you were Jack
Nicklaus. And then I found my-
self working with him. It was a
special honor.
That's where I got my master's
degree in golf course architec-
ture. Seeing a golf course through
the eyes of the greatest player in
the history of the game, I did a lot
of listening and learning, and ask-
ning a lot of questions.
Jack takes a vested interest in
a project — as much as humanly
possible with the number of
projects he has going. It's truly
amazing how he can recall finite
details of each project.
GCN: What was your impetus
for starting your own design firm
in 1991?
RJ: We were going through a
lot of changes. It seemed like the
appropriate time. I think that's the
natural evolution in this field, to
work under an architect in an ap-
renticeship to get the back-
ground and knowledge required
to execute a project from start to
finish. Some people have the en-
trepreneurial inner makings to
start out on their own. I don't re-
gret it every day's a new day with
new challenges and its exciting
and rewarding.
GCN: Who has had the great-
est impact on your design phi-
losophy?
RJ: I think every golf course
architect studies some of the great
architects of the past. That's golf
course architecture in its purist
form: when you look at [Alister]
MacKenzie, [Donald] Ross and
[A.W.] Tillinghast and C.B.
Macdonald. They all had qualities
architects try to emulate. Maybe
they like different qualities that
were presented through each of
those architects' styles. A lot of
people try to emulate the bunkers
of MacKenzie, or the greens of
Ross, but I think you have to learn
both the positives and negatives
from those forefathers. Trying to
build a Ross convex green on a
public golf course that does 40,000
to 50,000 rounds a year is prob-
ably not the right application for
that design style, but maybe you

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Q&A: Jacobson  
Continued from previous page

do use his strategic bunkering philosophy. You might take the Tillinghast greens that were more concave and his fairways that were more receptive and apply them, or the strategic school of design from Macdonald. So I think it’s a matter of schooling yourself in those designs and picking out the features that apply to the type of facility you’ve been hired to do for your client.

As I walk through a site, I formulate what the developer is looking for in design to accommodate the player profile they are targeting and their operational costs as far as maintenance. Studying the old classic designs gives you a knowledge basis to tap into when you’re formulating a design approach for different projects in different parts of the country.

And I’ve combined those old-school architects along with a guy like Jack Nicklaus. Certainly he gave me the knowledge of being able to design for lower-handicap golfers as far as setting up holes, pin placement and landing areas that challenge better golfers as well as designing for higher-handicappers like myself.

That’s what everybody attempts to do today. To what degree they succeed, the public golfers tell you through the success of the project.

From a business standpoint you have to respond to your developer’s mission statement. Define their goals and objectives and then modify the design to accommodate the budget, the level of difficulty they want, or the lack of difficulty. We’re doing some work now on a golf academy, a shorter 9-hole course geared toward beginner golfers. We don’t want 60 bunkers 8 feet deep.

GCN: Did Michael Jordan have any input into your design of the Michael Jordan Family Golf Centers?

RJ: Not from a design standpoint. He was very involved from the promotional standpoint and with developing programs for inner-city kids and people who don’t have access to golf. That is a key in today’s golf environment. We have to cultivate the youth in golf. They’re our future — the next wave of golfers once you look past the Baby Boom generation.

GCN: How many Jordan Golf Centers are planned?

RJ: Beyond the first one that is open in Chicago, another is in planning in Charlotte. AMF bought them, but we’re still working with them and have looked at other sites around the country. I don’t know if they are going to pursue them.

GCN: You are designing quite a mix of daily-fee, resort and private courses. Have you seen a trend in any direction?

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First Tee gains massive backing

Related stories, page 58

Casino Beach: 'We can make it work'

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a partnership consisting of several members of the Atlanta Athletic Club bought the East Lake No. 1 course with the idea of preserving the historic No. 1 venue. The less-famous No. 2 course was sold to another group of private developers, which developed the East Lake Meadows public housing project on the property. While their intentions were good, the owners of East Lake operated the club with limited funds and the course suffered. In 1993, the East Lake Community Foundation, a philanthropic organization, purchased East Lake No. 1 with the idea of making it the centerpiece to redevelop the entire East Lake community, according to Foundation Executive Director Greg Giornelli. The foundation spent $25 million to acquire and renovate East Lake and its clubhouse. Architect Rees Jones oversaw the renovation and the No. 1 course reopened to rave reviews in August 1995. East Lake will host the PGA Tour Championship in late 1998 and the U.S. Amateur Championship in 2001, according to Greg Muirhead, a designer in Rees Jones’ office. Jones rebuilt the greens, tees and bunkers; relocated the 17th hole; changed the 4th and 16th holes to par-4s and the 5th and 10th holes to par-5s.

The private East Lake club has become intertwined with the restoration of the entire neighborhood, which includes the tearing down of the existing East Lake Meadows public housing project across the street from the golf club, and rebuilding it as a mixed-income residential community and recreation center. The new community will include a public, 18-hole, executive-length course named the Charlie Yates Golf Course after the Atlanta-bom golfer and one-time British Amateur champion. Jones also designed the Yates course.

How did this get done?

The East Lake Community Foundation, led by Atlanta developer Tom Cousins, formed a partnership with the Atlanta Housing Authority and residents of the existing East Lake Meadows project to rebuild East Lake Meadows. The old 650-unit public housing project consisted of badly deteriorated, barricks-style apartments. Like many inner-city housing projects, the neighborhood was plagued by a high crime rate and tremendous poverty. For example, three years ago, Giornelli said, the average earned income for an East Lake Meadows family was $1,000 per year. Of the 450 families living in East Lake, there were just 16 two-parent families as of two years ago.

"It was 100 percent African-American and totally segregated from the surrounding area," Giornelli said. "There were not literal walls around it. But people who didn’t live there didn’t know the community.”

As of mid-December, 70 percent of the existing community had been torn down. The remaining 30 percent was scheduled to be completely gone by the end of 1998. In its place, the new community will consist of 500 to 600 units — townhouses, duplexes, garden apartments and townhouses. Half of those units will be set aside for families on public assistance and the other 250 will be available to anyone who cares to rent there. There is no visual or quality difference between the public and private units.

"Within the context of a rental community, it is as nice as anything that exists in Atlanta," Giornelli said.

The housing authority paid to build the public housing units and the foundation financed the market-rate units. The old East Lake Meadows community sat on 60 acres. The foundation purchased additional acreage and the city contributed some additional acreage giving the new community 175 acres.

"Interestingly, the footprint of this new community is being built exactly on the old East Lake No. 2 course," Giornelli said. In addition to the 500 housing units, elementary school, YMCA, park, ball fields and tennis facility, there is the new 18-hole Charlie Yates course and practice range.

The community is being built in two phases. Phase I includes 200 housing units, the first nine holes of the Yates layout and practice range. The first nine will be sprigged in the spring and should be ready by late summer. Phase II, which includes the remaining 300 residences and final nine holes, should start in late 1998 and be completed by mid-2000. The cost of the entire project will be upwards of $100 million.

The private East Lake club, Giornelli said, is an economic engine that helps drive the rest of the project and will help close out the partnership with the existing private club. The private East Lake club generates revenue in two ways. First, as the golf club makes money, excess profits go to neighboring projects. Second, memberships are sold only to corpora
tions, so the club can contribute $200,000 to the East Lake Community Foundation when they pay their $50,000 to join the club.

"We are a year into the effort and we have 35 companies aboard," Giornelli said. "We expect to fill it out within the next two years and at that point we'll close it out. Once we get to 100, the whole thing works. The bottom line is that with 100 companies on board, each one contributing $200,000, we'll have raised $20 million to help fund the charitable side of what's going on.

Programs at East Lake are aimed at long-term benefits for kids, particularly education. A golf academy for neighborhood children runs five days a week for 3 1/2 hours per day at school. Enrichment, reading and computer classes are offered and run by Georgia State University's education department. Golf is also a component of the program. All 100 kids in the program receive golf instruction two days a week and the opportunity to play golf. The program has run out of the private East Lake club the past two years. In the future, the new Yates course will be the site of the junior golf academy, allowing the program to be expanded to include many more children.

"Every child from that neighborhood who is a part of the junior golf academy will be able to play that [Yates] course any time they want," Giornelli explained. "We want it to serve as an incentive. They’ll have to know the rules of the game, pass an etiquette test, know how to repair ball marks and things like that. Hopefully it will act as an academic incentive so that you’ll have to have certain grades in order to play.”

A handful of neighborhood residents work at the golf courses, although job creation wasn’t a major reason for renovating East Lake or building the Yates courses. "East Lake is a caddies-only club, we don’t allow golf carts," Giornelli pointed out. "From a jobs standpoint, that’s the most significant we have. More than 300 kids have worked as caddies the past two years. As an after-school or summer job for a high school or college standpoint, you can’t beat it. It’s wonderful to have a successful business person and a 14- or 15-year-old inner city kid spend 4 1/2 hours together. That doesn’t happen very often in our society.”

East Lake is also part of the Evans Scholarship Program, run by the West- ern Golf Association, which provides full-four-year scholarships to caddies. The East Lake Community Foundation also provides college scholarships of its own. "Mr. Cousins hopes that this project can be used as a model for other cities where they can go back and reinvigorate a neighborhood that has fallen on tough times," Muirhead said.
**BRIEFS**

**LEEK APPOINTED TO OWNERS BOARD**

MT. PLEASANT, S.C. — Meriam Leek has accepted a nomination to become a member of the National Golf Course Owners Association board of directors. She is the owner and chief executive officer of Old Channel Trail Golf Course near Grand Rapids, Mich., and an amateur golf champion who made the 36-hole cut in three straight U.S. Women's Opens.

**LASALLE BUYS MARRIOTT COURSE**

NEW YORK—LaSalle Partners Inc. has acquired the Marriott Scaview Resort in Galloway, N.J., on behalf of an investment partnership. Marriott International, Inc. will continue to manage the resort and its two courses under an existing management agreement. Terms of the transaction were not disclosed. Plans are underway to invest over $5 million to restore the resort. The hotel’s golf courses will also receive significant renovation capital. Work is commencing to restore The Bay Course to architect Donald Ross’ original course design. This acquisition brings LaSalle’s hotel portfolio to 16 upscale and luxury full-service hotels, with over $170 million invested in 1997.

**COBBLESTONE RETAINS DLJJ**

DEL MAR, Calif. — Cobblestone Golf Group, Inc. has retained Donaldson, Lufkin & Jenrette to assist the board of directors in evaluating its strategic alternatives. Formed in 1992, Cobblestone Golf Group, Inc. owns, operates or manages 24 private country clubs and daily-fee courses located between San Diego, Phoenix, Dallas, Houston and Austin, Texas, Atlanta, Tampa, Fla., and Richmond, Va.

**MARTTY TAKES OVER MISS. STATE TRACK**

BATON ROUGE, LA. — Martty Golf Corp. has announced that Martty Takes, former superintendent at the Mississippi State University agriculture experiment station, is the new course manager. Takes is a native of Mississippi and has been involved in golf course maintenance for 30 years.

**GOLETA, Calif. — The Dec. 7 opening of Glen Annie Golf Club here marks a new direction for Environmental Golf course ownership.** The Calabassas, Calif.-based firm is a subsidiary of 4,000-employee Environmental Industries Inc., a leading national landscape, nursery, maintenance and site-development contractor. Environmental Industries has built more than 400 courses since 1954.

Today, Environmental Golf is building or remodeling 15 to 20 courses annually. It also has maintenance-only contracts at another 30-plus courses nationwide. But it was just last year that Environmental Golf entered course ownership. In May 1997, the company assumed part ownership of Arnold Palmer-designed Cherokee Run, which Environmental Golf built for the city of Conyers, Ga., and opened in October 1995.

The first planned build/own course is the first course that Environmental Golf built, manages and owns. “We’ve been building courses for 40 plus years for other owners and maintaining them for more than 20,” explained Director of Golf Mike Dingman of his firm’s recent move into ownership. “We just made the decision that it was an industry we were familiar with as far as construction and maintenance and thought it would be a natural progression to get into [overall]

**N.C. super realizes career dream**

GRIFTON, N.C. — Brad Brooks, 39, has recently realized the dream of many golf course superintendents, to own his own course.

Brooks and his three partners purchased Indian Trails Golf Club, a 28-year-old course located between Kinston and Greenville, N.C., a 90-minute car ride south of Raleigh.

The ownership at Indian Trails is a tight-knit group. Brooks is the superintendent and his wife, Margaret, is the administrator. Partner Ed Wheeler was the pro before and after the purchase. Wheeler’s wife, Debra Bryant, is a certified public accountant and serves as controller. Together they are the four equal stockholders and “provide the synergy that we think is special,” Brooks said.

The foursome formed an S-Corporation. Fortunately, they had to obtain little financing and purchased the course from a construction company whose owners were ready to sell the facility. Brooks group negotiated a price and had a sufficient down payment to get a loan.

“IT isn’t as complicated as you would think it is,” said Brooks, who took the GCSAA course on owning a golf facility and availed himself of National Golf Foundation reports on course ownership.

“Ninety percent of the work you have to do to please a bank is just legwork and number crunching. There is no secret formula you have to know. If you can

**Management firm sees rosy future in ownership**

By PETER BLAIS

GOLETA, Calif. — The Dec. 7 opening of Glen Annie Golf Club here marks a new direction for Environmental Golf course ownership. The Calabassas, Calif.-based firm is a subsidiary of 4,000-employee Environmental Industries Inc., a leading national landscape, nursery, maintenance and site-development contractor. Environmental Industries has built more than 400 courses since 1954.

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Continued on page 63

**Palmer adds to mgt. portfolio**

ORLANDO, Fla. — Arnold Palmer Golf Management has signed an agreement with Paloma Golf Group, acquiring four golf courses in the process — two in Buffalo, N.Y., and single courses in New Jersey and Oregon.

"This is the beginning of a great relationship between Palmer Golf and Paloma," said Peter Nanula, chief executive officer of Palmer Golf. "This strategic alliance is the first of many we are currently negotiating, and Paloma and [Paloma Chairman] Garth Chambers are exactly the kind of progressive partners we’re seeking to help grow our network.

"Garth appeals to us as a ‘merchant developer.’ He believes in our vision for bringing a new level of service to

Continued on page 62

**Brassie realigns organization**

TAMPA, Fla. — Brassie Golf Corp.'s Joseph R. Cellura, chairman and chief executive officer, announced that the company has completed its downsizing and restructuring program that began July 1, 1997. Brassie owns and operates golf courses and holds certain golf-related development, licensing, and marketing rights internationally.

Outstanding issues relating to previous management have been resolved, including the resignations from William Horne and Lance McNeil from the board of directors.

Clifford Bagnall, chief operating officer and chief financial officer of the company, has been named vice chairman of the board of directors.

Continued on page 65
USGC, Golf Ventures complete merger

ORLANDO, Fla. — U.S. Golf Communities and Golf Ventures Inc. have completed their definitive reorganization, in effect a reverse merger, of the two companies. The new company is to be known as Golf Communities of America, Inc. and its corporate headquarters have been relocated to Orlando.

Under the terms of the agreement, Salt Lake City-based Golf Ventures has issued 7.7 million Series D convertible preferred shares which represents 81 percent of the post-transaction shares outstanding; and the assets of privately held U.S. Golf Communities have been merged into Golf Ventures.

The agreement calls for Warren Stanchina, president and chief executive officer of U.S. Golf Communities, to assume the position of chairman of the board, president and chief executive officer of the new company, Duane Marchant, chairman, president and chief executive officer of Golf Ventures, will become a vice president of the company and manager of its western region.

Golf Communities of America, Inc. is principally engaged in the acquisition, development and operations management of public, private and resort golf properties and adjacent residential real estate throughout the United States.

Shortly after the merger became official, Golf Communities purchased a controlling interest in The Club at Pelican Strand, a residential and country club community located in Naples, Fla. The property consists of a 27-hole, Gordon Lewis-designed course, 50,000-square-foot clubhouse, 1,200 residential units and 30 acres of commercial space. The purchase included a combination of cash and stock.

"Golf Communities of America's purchase of Pelican Strand, valued at a total of over $50 million, marks our first major milestone since our merger last month," Stanchina said. "This unique real estate exemplifies the type of high-quality property we own and operate, and it fits perfectly into our strategic plan of aligning ourselves with quality local developers with strong track records."

ClubLink course receives Best New Course in Canada award

KING CITY, Ontario, Canada — ClubLink Corporation's Lake Joseph Club property in Muskoka, Ontario has been awarded Canada's Best New Golf Course in 1997 by Golf Digest magazine.

"We are very pleased that the first course developed and built by ClubLink Corporation has received this kind of recognition," said Bruce Simmonds, president and chief executive officer of ClubLink Corporation.

Another Thomas McBroom design previously won the award in 1995 for The Links at Crowbush Cove, located on Prince Edward Island. ClubLink is currently constructing a 45-hole, Thomas McBroom-designed private golf course named Rattlesnake Point Golf Club in Milton, Ontario. It is scheduled to open in June 1999.

ClubLink's corporate development plans include expanding upon its presence in Muskoka, Ontario's premier resort and conference area, continuing its growth in the Ottawa market, and building upon its market share in the Greater Toronto Area by way of introducing daily fee clubs under the trade mark of DAILY MEMBER GOLF(TM).

ClubLink has completed the purchase for $6.95 million of the Aurora Golf & Country Club and is now revitalizing the property, which includes two 18-hole courses, the East and West Courses, and property contiguous with the East Course which is suitable for redevelopment. ClubLink also sold to Armadale Properties Limited and Verdiroc Holdings Limited a 50-percent interest in a joint venture for the redevelopment of a portion of the contiguous property and also sold just over half an acre of the contiguous property.

ClubLink recently announced third-quarter and year-to-date results. Revenue for the third quarter ended Sept. 30, 1997 was $14.8 million, up 51 percent over $9.8 million recorded during the same period in 1996. Income before depreciation, interest and taxes was up 79 percent to $8.5 million for the three months ended Sept. 30 compared to $3.1 million for the third quarter in 1996.

Completion of ClubLink's previously announced acquisition of 36-hole Aurora Golf and Country Club was scheduled for Nov. 18.

Simmonds also said, "ClubLink continues to increase its investment in GolfSouth through secured loans to GolfSouth for its recent acquisition and current renovation of the 36-hole Foxfire Resort and Country Club in Pinehurst, N.C., and its construction of several new GolfSouth courses in the Washington, D.C. area and at Louisiana State University."

Continued from page 61

golf, and will now continue to purchase and develop golf courses with the support of our entire organization."

The courses acquired include Tan Tara Country Club (CC) and Fox Valley CC in Buffalo; Minebrook Golf Club (GC) in Hackettstown, N.J.; and Emerald Valley GC in Eugene, Ore.

In other news, Orlando-based Palmer:
• Reached an agreement with the city of San Francisco to manage Harding Park and Lincoln Park pro shops and guest services, leaving course maintenance to the city.
• Signed a lease and management agreement with Penderbrook Golf Club in Fairfax, Va., the company's first Virginia operation. Palmer will fund a multi-million-dollar renovation program over the next few months.
• Officially opened Strawberry Farms Golf Club, an 18-hole, Jim Lipe-designed layout in San Diego, the fourth golf facility to come under the Palmer banner in Southern California. Sand Canyon LLC, headed by Managing Partner Doug DeCinces, is the developer.
• Inked a franchise deal with White Hawk Country Club in Crown Point, Ind., a Tim Nugent, 18-hole design scheduled to open this summer.

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He made golf history.
Environmental Golf
Continued from page 61

Dingman said the goal of Environmental Golf is to continue concentrating on building and maintaining courses and look at ownership deals as they arise. "Our goal is to do two to three [build and own] situations a year," he added.

Environmental Golf provides specialized maintenance for private and public courses. It has maintenance-only contracts with the following facilities:

- **Arizona**
  - Estrella Mountain Golf Course (GC), Goodyear
  - Alhambra Municipal GC, Alhambra
  - Bernardo Heights Country Club (CC), San Diego
  - Canyon Lake GC, Canyon Lake
  - Creekside GC, Modesto
  - DeBell GC, Burbank
  - Diamond Oaks GC, Roseville
  - Dryden Park GC, Modesto
  - Municipal GC, Modesto
  - Silver Lakes CC, Helendale
  - Tracy Golf & CC, Tracy
  - Woodcreek Golf Club, Roseville

- **California**
  - Cross Creek Golf Club, Atlanta
  - Lakes of Taylor, Taylor
  - Birkdale GC, Huntersville
  - Oyster Reef Golf Club, Hilton Head

- **Georgia**
  - Georgia Cross Creek Golf Club, Atlanta

- **Michigan**
  - Lakes of Taylor, Taylor
  - North Carolina
  - Birkdale GC, Huntersville
  - South Carolina
  - Oyster Reef Golf Club, Hilton Head

- **New Jersey**
  - Bay Head GC, Bay Head

- **South Carolina**
  - Oyster Reef Golf Club, Hilton Head

While Environmental Golf has offered maintenance-only contracts for two decades, it will also offer full-service management arrangements beginning this year.

Asked what would distinguish Environmental Golf from other management firms, Dingman replied: "Probably our overall resources. We have numerous facilities across the United States, which allows us to maintain courses anywhere geographically. Because of those resources and 2,000 employees on the maintenance side, it allows us to have regional experts, horticulturists, agronomists, extremely high-level people. That probably gives us a technology edge and an ability, through technology, to manage labor and quality."

Environmental Golf’s fee schedule is “extremely competitive” with other management firms, Dingman said. "That’s still a primary concern of every owner. The quality and other issues are important, but price is still a driving factor. "Every deal is different," he continued. "We do things from straight management for a fee to packages where we go in and take over all the employees and buy all the equipment to provide owners with some additional capital at the time we take over the program."

General Manager of Golf Maintenance Alex Marshall heads the golf maintenance division from his Orlando, Fla., office. Dingman leads the overall course management division from Calabassas.

Vegas’ Rio casino opens its own course

LAS VEGAS — Rio Hotel & Casino Inc. announced that its subsidiary, Rio Development Company Inc., has opened the Rio Secco Golf Club.

Located in Henderson, approximately 15 minutes south of the Rio Suite Hotel & Casino, the Rio Secco Golf Club is an 18-hole course designed by Rees Jones. The limited-play course will have at least 15 minutes between tee times, to provide an enjoyable experience for all players.

President James A. Barrett, Jr. said, "The Rio Secco Golf Club was developed by us as an additional amenity for customers of the Rio, a destination resort."

The fee for Rio customers will be $190 per round, and for others $300 per round.
A little diplomacy goes a long way

By VINCE ALFONSO

My Dad used to say, "Buddy [he called me Buddy], always remember you catch more flies with honey than you do with vinegar." This old cliche ranks right up there with 'You can bring a horse to water, but you can't make him drink,' and 'You can't make a silk purse out of a sow's ear (Miss Piggy's favorite).'

Little did I know way back then that someday my Dad's old saying would save my neck and increase my business.

It all happened on a soggy, very soggy, Tuesday morning at The Rail (my former golf course). It was the day of a big outing and it had rained several inches overnight. The course was soaking wet. With no golf car paths, days like this could be my worst nightmare.

After a long talk and inspection of the course with my superintendent, we decided to let the event go on as scheduled. But, and this was a big but, we would have to route the golf cars around all the super trouble areas and avoid the fairways at all costs.

I made a passionate appeal over the public address system for all players to follow our directions carefully so we would minimize damage to the course, and then, turned them loose.

My golf guides (rangers) were always reminded, before an outing, that they did not have to take abuse from any customer, ever. I told them, in no uncertain terms, to avoid confrontations with customers, and to report any belligerent customers to me.

Not 15 minutes after the shotgun start, Colonel Bishop, one of my guides, found me at the clubhouse and proceeded to tell me about an irate customer on No. 10 green. Bishop told me exactly what the man had said about me and my blankety-blank rules, and then he gave me a message from my customer. Basically, the message, somewhat ungracefully, related where he wanted me to put my blankety-blank rules.

Well, my Italian temper began to boil and I said, "Take me to this guy."

We got to the No. 11 tee box right before they hit their shots. As they pulled up to the tee box, I approached the man the Colonel had pointed out to me as the irate customer.

"Excuse me sir," I started. "The Colonel said you had something you wanted to tell me."

"This guy only got out of his car, looked down at me (he was at least 6'4" and I'm 5'10") and said exactly what the Colonel had said he said.

As I looked past his shirt placket and up into his eyes, I said, "That's exactly what the Colonel said you said."

Although I knew the guy could break me in half, for a few nanoseconds I contemplated the obvious. And then my father's words rang in my brain, "honey, use honey." So I very politely explained that I was sorry he felt the way he did. I further explained that I could see on the faces of the other members of the foursome that they were also very unhappy with the golf car policy for the day. I encouraged them to come back to the clubhouse where I could refund their money and try to secure them a tee time at another area course with either golf car paths or one that didn't get the rain that we had gotten.

After some discussion (that revealed a long-standing dispute one of the gentlemen had with my predecessor), they elected to keep playing. I reiterated that my offer stood if they changed their minds.

As the Colonel and I drove away, I instructed him to tell all guides to be especially courteous to that foursome, and to trust my judgment on this.

By the end of the day, the gentleman apologized for his behavior and, over time, became one of my best customers.

Tell your staff, and tell them often, Mr. Vince Alfonso Sr. says, "You catch more flies with honey than you do with vinegar." It might just sweeten your bottom line.
Brooks
Continued from page 61

make a few calls and ask the
right questions, you can provide
the information any bank would
want to know to help you."

Originally from Elizabeth City,
N.C., Brooks is a certified golf
course superintendent (CGCS).
He is a graduate of the Univer-
sity of Arkansas, where he played
on the golf team and earned a
bachelor's degree in agronomy.
Before purchasing Indian Trails,
Brooks spent three months
at Foxfire Resort & Country Club
in Pinehurst and 10 years at
Benvenue Country Club in Rocky
Mount. He was director of golf
and grounds at Foxfire when he
and his partners closed the deal
to buy Indian Trails.

But most of his professional
career was spent at Benvenue,
where Brooks helped renovate the
Donald Ross-designed facility:
upgrading irrigation, converting
greens from Bermudagrass to
bentgrass, enlarging ponds, con-
structing tee boxes and improv-
ing drainage. "That's where my
real hunger for wanting to develop
my own place really started," Brooks
said.

The change from employee to
employer has been about what
Brooks expected. "I've always
been fairly hands-on, so the transition of
going from a supervisor to a super-
visor/owner hasn't been as dras-
tic as I had thought. One of the
things I had always prided myself in
as a superintendent was being fairly
cost conscious. Now that I'm spend-
ing my money that has proved fairly
beneficial."

Another change was the con-
version back from the bentgrass
greens he'd groomed elsewhere
to the Bermudagrass greens at
Indian Trails.

"It's [Indian Trails] low bud-
get," Brooks said. "We are oper-
ating on an as-needed basis. Irriga-
tion will be the next phase. I'm hav-
ing to learn about food and beverage.
With that as a major income, food and bever-
age is something I need to have
a background in.

Brooks' said he and his part-
ners are fortunate to be in a good
market. Greenville is the home
of East Carolina University, with
numerous factories and rural
golfers nearby. There is little
competition in the public mar-
et. "We appeal to a market de-
mand that isn't provided from
any other source," Brooks said.

It was while at Benvenue that
Brooks realized he needed some-
thing beyond being a superintendent. After 10
years at the upscale, private club,
Brooks said he had reached his
earning and professional limits.
The percentage of turf students
flooding the market also made
him realize that he was approach-
ing the upper end of the age
group for his profession. Finally,
the time required on the job left
too little time to spend with his
children.

"At Indian Trails I can have
the privilege of having my chil-
dren come out on the course with
me if I so choose," he said.

As for his future goals, Brooks
said he is not interested in owning
or building a lot of courses. "I'd
like to make a real mark with this
course here," he said.

GOLF COURSE NEWS

Brassie Golf
Continued from page 61

Haran Logan, Jr. joined the management
team as director of golf course properties and
destination management. Jerry Daly was named
president of the company and a member of the
Board of Directors. Management also stated that
it had resolved, in entirety, all remaining disputes
with the holders of its convertible debentures.

Definitive terms have been reached, whereby
Brassie will acquire certain assets of Divot Golf
Corp. Brassie will issue to Divot warrants to
purchase 10 million shares of Brassie common
stock with a one-year holding period. The trans-
action is subject to execution of definitive docu-
mentation, approvals of both boards, and
Brassie's shareholders. Divot holds certain de-
velopment rights and license agreements at the
World Golf Village, a destination resort currently
being developed south of Jacksonville, Fla..

SUBJECT: Milestones in the Development of
Laboratory Support for the Construction of USGA Greens

1. Which commercial laboratory developed the use of water release curves to
   select USGA rootzones and shallow depth sandbased turf systems for optimum
   agronomic and environmental performance?

2. Which commercial laboratory in 1992 pioneered the industry to shift to the
   use of organic matter by weight versus volume blending, which is the most
   significant change in the testing for USGA Greens and sand based turf systems
   in the last 30 years?

3. Which commercial laboratory pioneered the use of variable tension rootzone
   evaluation for sand based rootzones which minimizes the chance for turf failure
   and demonstrated that the use of 40cm tension testing requirement was
   inappropriate for the evaluation of USGA Greens?

4. Which commercial laboratory pioneered the use of the uniformity
   coefficient of sand as an evaluation tool to select rootzone construction
   materials for perched water table golf greens?

5. Which commercial laboratory developed and field tested in 1992 the industry
   standard for quality control of the construction of sand based perched water
   table systems?

6. Which commercial laboratory shared five years of documented commercial
   laboratory and field development research with the USGA Green Section, which
   represented the bulk of the new changes in the 1993 Recommendations, in an
   effort to improve the quality of golf greens and minimize the environmental
   impact of golf courses?

The answer to all of the above questions is Turf Diagnostics & Design

FACT: The answer to all of the above questions is Turf Diagnostics & Design

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CIRCLE #146
St. Joe's purchases Riverside Golf Management

JACKSONVILLE, Fla. — In a move with significant implications for golf course growth in Florida and the southeast, St. Joe Corporation has purchased the Riverside Golf Management Company, a Jacksonville-based golf development, operation and management business founded by former U.S. Amateur Champion, PGA Tour pro and ABC-TV golf analyst Steve Melnyk.

Melnyk will continue to direct Riverside as part of St. Joe, a publicly-held company and and major Florida land owner with interests in real estate, timber and railroads. St. Joe recently acquired the assets of Arvida, one of the country's most respected community developers. Riverside has managed eight upscale semi-private golf courses in the Southeast while teaming with some of golf's foremost architects. Riverside currently operates three courses at Clemson in Jacksonville and Atlanta. Riverside and St. Joe have plans to develop or acquire a large portfolio of new courses over the next five years.

"The addition of Steve Melnyk and his team of experienced professionals at Riverside Golf to the St. Joe Corporation will be great for our company, for Florida and for golf," said Peter Rummell, St. Joe chairman and chief executive officer.

"We plan an ambitious program of building and operating stand-alone, high-quality, daily-fee golf courses as well as teaming Riverside with other St. Joe divisions to jointly design, develop and operate both independent golf courses and courses within integrated communities. Riverside will enable us to meet the growing demand for top quality recreational and residential opportunities, as well as take advantage of St. Joe's huge land holdings."

Melnyk said Riverside would continue to meet the rapidly growing demand for championship-caliber, semi-private golf courses. "For many golfers, private club membership is not practical," said Melnyk. "We're going to develop high-quality facilities within a semi-private structure to provide a better alternative."

"I'm excited about joining the St. Joe team," said Melnyk. "For those who love golf it is more than a game - it is a way of life. The growth potential for golf, driven by strong demographics, has only just begun to be tapped. Together, St. Joe and Riverside will design and develop great tests of golf."

Melnyk, 50, played on the PGA Tour for ten years until 1982, when he joined CBS-TV as a golf analyst. In addition to his work at Riverside, Melnyk is also founding chairman of First Coast Community bank of Amelia Island, Florida.

Troon names new vice pres.

Troon Golf named John Easterbrook its vice president of operations and added Rams Hill Country Club in Borrego Springs, Calif., to its portfolio.

Easterbrook has 13 years of golf management experience with Hyatt Golf and Marriott Golf, including the past four years as Hyatt's director of golf operations.

"The move to Troon Golf will allow me to focus on my strengths in the areas of multi-facility management, along with becoming a part of our company's international growth," said Easterbrook, who once served as regional director for Marriott's golf division.

Rams Hill is part of a privately gated, 3,200-acre residential and resort community. The 18-hole course was designed by Ted Robinson. Troon's management and construction portfolio now numbers more than 20 courses.

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CIRCLE #123/GCSAA BOOTH #3327
Toro to help supers hunt the ideal "green"

By MICHAEL LEVANS

BLOOMINGTON, Minn. — In an effort to supplement its existing Near Infrared Reflectance Spectroscopy (NIRS) service, Toro has added its Universal Green Turf Scale that incorporates proprietary turf analysis equations designed to monitor the "greenness" of grass.

Toro said the new service, which is available to Toro's major accounts and key partners using its NIRS, offers superintendents a more accurate way to predict and maintain nutritional levels that result in "green" grass.

The ultimate goal, said Toro, is to arrive at a "universal green."

Since Toro launched its NIRS service three years ago, Dr. Syed Dara, Toro's leading researcher on turf tissue, has accumulated thousands of turf samples that he said enabled him to formulate these color comparison equations.

"Those samples allowed us to characterize a lot of color changes and the color variability in the turf compositions," said Dara. "That allowed me to write equations which relate growing turf color to dry and brown turf color, which NIRS sees."

The more samples that Dara can collect, the more accurate the reading will be.

In turn, superintendents are given an additional color number on their NIRS tissue analysis report that is based on the current composition detailed in the NIRS...
Alberta, hoping to capitalize on a growing vice and warehousing capabilities. Vehicles established the new branch office vice for Club Car's Western Canadian fleet market through improved customer service capacity, we will be able to more efficiently meet the needs of all our customers—directly, and through our distribution.”

Club Car has maintained a sales office in Calgary since 1992, but the lone-salesman-and-a-tech-rep approach fell short of meeting the needs of a growing Canadian market. In the past, most parts were routed either through Augusta or the company’s Cambridge, Ontario office, which serves Eastern Canada.

“Now, with a branch in Calgary,” said Ray Bentley, national sales manager-Canada, “we’re able to warehouse parts, and serve the Western Canadian customer base in terms of retail and distribution.”

Given the fact that Canada is starting to catch up to the United States both in terms of the number of golf courses on the drawing board for future construction as well as the number of emerging players, Bentley feels Club Car’s move to add the new branch office is a significant step in the right direction.

“The approach to selling golf cars over the past few years has changed dramatically,” said Bentley. “In the past, sales were more driven more towards the pros; now, it’s usually the club boards who are making the buying decisions.”

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CIRCLE #123

Vigoro expands distribution list
WINTER HAVEN, Fla. — IMC Vigoro announced an expanded distributor agreement with Tri-State Plant Food of Dothan, Ala., to represent Vigoro’s turf fertilizer products throughout the Gulf States.

The agreement calls for Tri-State Plant Food to market and sell Par ex fertilizers, containing IBDU slow release nitrogen and V-Cote controlled release nitrogen and potash, to golf course superintendents and lawn care/landscape companies.

Dennis Rich, vice president of Tri-State, will head the sales team.

“Tri-State...brings over 11 years of industry experience to our sales force,” said Bill Foster, director of the professional business unit at IMC Vigoro. “This agreement will strengthen our distribution capabilities in the Gulf and advance our relationship with Tri-State, who is a successful distributor of our Woodace brand products to the Nursery Industry."

Kerley begins construction in Eufala
PHOENIX, Ariz. — Tessenderlo Kerley is beginning the construction phase of a multi-product plant at its Eufala, Ala., location.

According to Jordan Burns, Kerley’s president, “This plant will have the capability to produce ammonium thiosulfate (THIO-SUL) and potassium thiosulfate (KTS) and products currently in the research and development stage. The ammonium thiosulfate production from this plant will meet the company’s original objective, to better supply the needs of our customer in the Southeast.”

The company said its total ammonium thiosulfate and potassium thiosulfate production capacities at Eufala will exceed 100,000 tons annually.

BECKER’S BIOPAK NOW BIOGAIN
AMES, Iowa — Becker-Underwood, Inc. has changed the name of BioPak WSP biostimulant to BioGain WSP and will continue to manufacture BioGain WSP at its facility here. "This is a product name change only, and our customers can expect the same high-quality formulation and water-soluble packaging,” said Cozette Hadley, sales manager for Becker-Underwood.

GOLF COURSE NEWS
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NAME-CARD
Golf Ventures, RapidTurf partner
JUPITER, Fla. — Golf Ventures Inc., a distributor to the golf course maintenance market, has formed an exclusive sales and distribution partnership with RapidTurf Inc., a supplier of natural grass grown on plastic, in Florida.

According to J.M. Sartain, Golf Ventures' chief executive officer, the alliance is a natural extension of the company's tradition of offering innovative products.

RapidTurf and RapidSprigs products and services include certified turf grasses (Tifdwarf), custom-grown new releases (Floradwarf and Tifeagle) as well as installation services. The company said that installing rolls of RapidTurf considerably reduces the time between planting and playing.

British Landscaping plans move across the River Welland
LINCOLNSHIRE, England — British Landscaping Equipment Co. (BLEC), having outgrown its original premises located next to the family home, have settled into a new, purpose-built factory and office/showroom facility.

The move, from the Deeping Gate, near Peterborough, to the next-door village of Deeping St. James, actually crosses the River Welland and therefore the county boundary from Cambridgeshire to Lincolnshire, where BLEC has acquired a half-hectare site, with excellent road access.

The company said the new facilities should ensure that BLEC is equipped for expansion into the next century, while maintaining its policy of continuous development of products particularly suited to landscapers, golf and sportfield developers and turfgrowers.

ITODA commits to Platinum Tee
NAPLES, Fla. — The Independent Turf & Ornamental Distributors Association (ITODA) unanimously passed a resolution to commit to membership in the Golf Course Superintendents Association of America's (GC-SAA) Platinum Tee Club, the GC-SAA's funding effort to advance environmental and scientific research developments in golf course management. The ITODA agreed to make this commitment at its annual fall meeting in Naples.

Pursell names new formulator
SYLACAUGA, Ala. — The Lange-Stegmann Co., a St. Louis-based fertilizer formulator, will now offer Polyon-coated controlled-release fertilizers throughout the central US.

According to J.M. Sartain, vice president of Lange-Stegmann, Polyon-coated nutrients will soon be available in many of the company's fertilizer blends, including various specialty formulations. Stegmann also announced that additional sales staff has been added to support the move.

David Pursell, president and chief executive officer of Pursell Technologies, said: "Lange-Stegmann is an outstanding company with an unparalleled reputation. Their expertise and experience will prove beneficial as we expand the availability of Polyon-coated products."

MMSD
Continued from page 67
Lennert, Milorganite's sales and advertising manager, said: "The plant will operate in the same manner and Milorganite will be the same product it has always been."

According to United Water Resources, Milwaukee-area customers are guaranteed to save in excess of $130 million as a result of the new contract. United Water already has agreed to hire all MMSD employees at current wages and benefit packages.

Jacklin Sheds Light On Shade Tolerant Bluegrass
Made For The Shade
Forget everything you know about bluegrass and shade tolerance. The second generation of Glade is here—the latest introduction from Jacklin's Five Steps Above Program. NuGlade grows well in moderate shade, making it the perfect bluegrass for tree-lined fairways and other low-light areas. NuGlade maintains its rich, deep color, even in shadows and at low cutting heights. This breakthrough variety better resists disease and stress even when cut at 1/2 inch. Plant NuGlade, and you'll never be afraid of the dark again.
Jacklin shuffles the deck, names new roles

POST FALLS, Idaho — Jacklin Seed announced the promotion of Hiromi Yanagisawa, Tom Stoeser, Myron Lightbody, Glenn Jacklin and Doug Brede, Ph.D.

Jacklin Seed continues to expand its departments to meet the needs of the growing market.

Formerly vice president and managing director of marketing, Hiromi Yanagisawa is now senior vice president of marketing.

Tom Stoeser is now senior vice president, finance, administration and acquisitions. Myron Lightbody is now senior vice president plant operation and Glenn Jacklin is now senior vice president production and grower services.

Dr. Brede is now senior vice president of research. Yanagisawa will manage overall responsibilities for domestic and international marketing as well as medallist America and Jacklin Golf divisions.

Stoeser will manage all financial functions for Jacklin Seed and affiliated entities. Lightbody will manage all plant operations in Post Falls and Nezperce, Idaho, as well as Albany, Ore., and Ritzville, Wash.

Glenn Jacklin will assume overall managing responsibilities for production and grower services in Post Falls, Nezperce and Southern Idaho as well as production in Oregon and the Washington Columbia Basin. Brede will manage all research functions for Jacklin Seed and Medalist America.

Woerner adds Dillard

WEST PALM BEACH, Fla. — Woerner Sports Turf International (WSTI) has named William Dillard as manager of production operations for the company’s Brookfield, Ga., turfgrass sod and production facilities.

Dillard’s responsibilities will include the coordination of all sodding and sprigging installation projects for Woerner Sports Turf clients.

Toro’s green scale

Continued from page 67 reading. The numbers range from 1 to 9, 1 being brown, 9 being a deep green.

"The benefit is that the superintendent knows what will enhance their color from wherever they are," said Dara. "To this point, they didn’t have a quantitative number to relate to.

"It’s the right thing to bring the whole course forward," said Greg Jacobs, marketing manager at Toro. "This is the ultimate test to tell whether your whole maintenance system — mowing, irrigation, nutrient application — is working together."

Toro rolled out its new turf scale at the recent Florida Turfgrass Association show with a set of equations based on Bermudagrass.

The company said it will use next month’s Golf Course Superintendents Association of America (GCSAA) show to launch the program nationwide by grass type and region.

Several Florida superintendents utilizing Toro’s NIRS service have been receiving the additional color number for the past two months. At this point, however, the jury is still out on just how the turf scale number can be incorporated into the maintenance routine.

"Say I’m prepping for a tournament and a member says the greens are absolutely perfect, I might go in and pull a tissue sample," said Darren Davis, superintendent at The Olde Florida Golf Club in Naples, Fla. "When greens are in terrible shape, I might pull a tissue sample for comparative reasons or to document good conditions. In that way I can see it being used.

"I don’t know exactly what it means for me yet," said Rick Tatum, superintendent at Forest Country Club in South Fort Meyers, Fla. "The few I’ve gotten back are in a range I feel comfortable with."

Sheldon Israelson, superintendent at the Royal Palm Yacht and Country Club in Boca Raton, Fla., foresaw using the color scale as a learning tool. "When we’re pulling our tissue sample we’re able to reinforce what we think we’re doing. We see that it could help us get more bang for the buck," said Israelson.

Dakota Peat and Blenders has been supplying peat for root zone mix and topdressing of golf courses across the United States and around the world for many years. Dakota Peat is the highest quality organic material available on the market according to testing done by laboratories and universities around the world. We take great pride in the work we have done to help construct and maintain some of the most popular golf courses on the planet. Our reputation is very important to us.

It has come to my attention that there are companies operating in the United States claiming to sell Dakota Peat that are not authorized representatives of Dakota Peat. We do have authorized dealers located around the country and would be happy to provide the name of the authorized dealer in your area. However, traveling blending companies headquartered in places like Wisconsin, North and South Carolina, Texas, Georgia, New Jersey, Maryland and Florida, and their affiliated sand companies, are not authorized dealers. Anyone who is not an authorized dealer and claims to be able to sell you Dakota Peat is making a fraudulent statement. You are welcome to use any organic material you wish. But, if you don’t actually use Dakota Peat, Dakota Peat and Blenders can not guarantee or be held responsible for any damage to your golf course by another organic material or blending company. We would be happy to answer your questions about Dakota Peat and its distributors. Please call us at (701) 746-4300 during regular business hours.

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Michael Pierce
President

DAKOTA Peat & Blenders
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CIRCLE #122/GCSAA BOOTH #1873

Attention Golf Course Superintendents and Owners

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Dakota Peat and Blenders has been supplying peat for root zone mix and topdressing of golf courses across the United States and around the world for many years. Dakota Peat is the highest quality organic material available on the market according to testing done by laboratories and universities around the world. We take great pride in the work we have done to help construct and maintain some of the most popular golf courses on the planet. Our reputation is very important to us.

It has come to my attention that there are companies operating in the United States claiming to sell Dakota Peat that are not authorized representatives of Dakota Peat. We do have authorized dealers located around the country and would be happy to provide the name of the authorized dealer in your area. However, traveling blending companies headquartered in places like Wisconsin, North and South Carolina, Texas, Georgia, New Jersey, Maryland and Florida, and their affiliated sand companies, are not authorized dealers. Anyone who is not an authorized dealer and claims to be able to sell you Dakota Peat is making a fraudulent statement. You are welcome to use any organic material you wish. But, if you don’t actually use Dakota Peat, Dakota Peat and Blenders can not guarantee or be held responsible for any damage to your golf course by another organic material or blending company. We would be happy to answer your questions about Dakota Peat and its distributors. Please call us at (701) 746-4300 during regular business hours.

Dakota Peat and Blenders and its distributors have served the golf and sports turf industries of the United States for more than a decade. Dakota Peat set the standard for golf course and sports turf root zones. We will continue to supply the products to take care of all your root zone mix and topdressing needs in the future. At Dakota Peat and Blenders we have worked hard to build a reputation of World Class Excellence and will continue to work to exceed your expectations. We appreciate the support you have given us through the years and look forward to servicing the needs of the golf courses of the United States and the world for many more years.

Michael Pierce
President

CIRCLE #122/GCSAA BOOTH #1873

January 1998 71
Turfline adds Quick Fit to vibrating greens rolling system

Turfline Inc., the manufacturer of the True-Surface vibrating greens rolling system, has developed the Quick Fit one-piece motor mount for its patented vibrating greens rollers. The Quick Fit allows golf course superintendents to change over cutting units to the vibrating rollers in minutes. The rolling system’s vibrator drive pulley is mounted in the new motor mount, eliminating the need to align it with the shaft pulley.

The new Quick Fit allows superintendents to convert their triplex greensmowers into one of the most modern greens rollers available today. Superintendents can utilize the patented vibrating greens rollers for topdressing, aeration and smoothing surfaces to achieve consistent ball-roll distance on greens.

For more information on the Quick Fit vibrating greens rollers, call Turfline at 800-443-8506.

CIRCLE #201

AG-AIR ready to blast

AG-AIR Mist Sprayer Technology Inc.'s new air-blast sprayers are ideal for spraying larvicides for mosquitoes, all types of pest and vector control, outdoor disinfection, plant insecticides and fungicides. The sprayers are more versatile than standard boom sprayers and are designed for use on small, medium and large tractors. The sprayers can also be used on 3-point, utility trailer units and truck pickup skid with engines.

For more information, contact AG-AIR Mist Sprayer Technology Inc. at 800-658-4471.

CIRCLE #202

Rodeo goes one-quart

Monsanto Company will offer its Rodeo aquatic herbicide in a new one-quart package for 1998, in addition to the 2.5- and 30-gallon containers already offered.

Ideal for small lakefronts, ponds, canals and creeks, the new one-quart Rodeo delivers one-time, roots-and-all control of over 190 tough aquatic weeds such as cattail, Johnsongrass, phragmites, torpedo grass, water lilies and water hyacinth. Because Rodeo moves throughout the plant foliage and roots, the plant will not regrow to require additional weed control efforts.

There are no irrigation, recreation or domestic use restrictions following labeled applications of Rodeo.

For additional information about the new one-quart Rodeo package, contact 800-322-3111. The package will be available this month.

CIRCLE #203

Swinger offers new versatile 3000

Swinger's new four-wheel-drive Model 3000 is an easy treading, maneuverable loader that can lift up to 3,000 lbs. It features no-skid steering for work on landscape, asphalt and other sensitive surfaces without rutting.

Ideal for contracting projects, the 3,000 has a 134" pin height, 105.5" dump height and 25-cu.-ft. bucket standard. Lift mechanism is a single lever “joystick” type. One lever controls lift, tilt and dump. Versatile quick-attach tool carrier accepts most skid steer attachments.

Auxiliary 25 gpm hydraulic system powers a variety of tools. Unique hydrostatic-over-mechanical drive system allows fast forward/reverse direction changes and simple mechanical drive from the drop box to the wheels efficiently distributes power from the 80 hp John Deere Power Tech diesel engine.

For more information, contact 715-835-6625.

CIRCLE #204

Micro-Trak introduces its new controller: MT2400

The new MT-2400 rate controller from Micro-Trak is designed to meet the growing need of accurate and consistent chemical and anhydrous applications. The MT-240 allows you to select between eight monitored functions: application rate, flow rate, total flow, speed, distance and area per hour, plus two separate area counters. The MT-2400 is designed for use with existing remote boom control switches and manual sprayer control systems.

The MT-2400 rate control system comes complete with console, 3/4" flowmeter, 1" servo valve, hall-effect speed and flow sensors and weatherproof connectors. Other features include a backlit LCD, lighted front panel for night operation.

For more information call Micro-Trak at 1-800-328-9613.
Alpine unleashes its roller/spiker/drag system

Alpine Engineering Inc. has introduced the roller/spiker/drag brush system for use on selected power bunker rakes. The system features hydraulic over spring down pressure with four pivot points, assuring consistent roller and spiker contact with the green, regardless of contours or terraces.

The AEI System quickly interchanges with bunker rake with no tools required. Product testing has shown an average gain of 12 inches on Stimpmeter readings, rolling 18 average size greens in approximately 2 hours.

The AEI roller attachment rolls behind tires eliminating tire tracks with 3-22 inch independent rollers, with a total rolling width of 64 inches. The complete system with rollers weighs 135 pounds.

The AEI spiker attachment will spike an average size green in five minutes spiking over 300 slices per foot, three times that of existing spikers on the market, making it ideal for re-seeding greens or damaged areas. Spiking depth is controlled by operator via hydraulics.

The AEI drag brush attachment can be used in place of the roller or the spiker for the ultimate drag brush system to meet all your top dressing needs, especially those hard to drag-tee decks. With the down pressure controlled by the operator, the brushes can be used to lightly lift grass blades prior to mowing to help eliminate grain, or to drag in the heaviest top dressing.

For more information, contact Alpine Engineering at 307-654-7428.

CIRCLE #205

Wilbur-Ellis launch Insist

Wilbur-Ellis Company has introduced Insist, a new adjuvant spray for turf. Insist improves coverage while it retards spray drift by encapsulating the chemical molecules. Encapsulation provides more uniform droplet sizes, which withstands shear and remains at a size that promotes on-target performance. Therefore, more chemical is delivered on the plant surface with less drift.

For more information, contact 209-442-1220.

CIRCLE #206

Ditch Witch introduces the new JT7020

Ditch Witch underground construction equipment has introduced the all-new JT7020 Jet Trac System. Designed from the ground up for maximum performance and productivity, the track-mounted JT7020 carries 360 feet (110 meters) of drill pipe, and features a 225 horsepower (168 kW) intercooled turbodiesel engine and enhanced hydraulics that deliver 70,000 pounds (31,752 kg) of pullback. Other productive design features include such things as a utility crane, an all-weather cab, power-assisted anchoring, hands-free pipe loading and dual-speed carriage. For more information, contact 800-654-6481.

CIRCLE #207

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January 1998 73
"Masters" proves that some things just never change

By Mark Leslie

So, you golf purists out there in Golf Kingdom think we should return to the Glory Days of the early 1900s. Those were the days, weren't they, when there were no squabbles about maintenance, "chocolate drops" along fairways, or carry shots to the green, or overwatered putting surfaces, or golfers who lamented hazards, or developers' cries of "More distance. I want more distance!"

GOLF COURSE NEWS BOOK SHELF

The Confidential Guide to Golf Courses

By Tom Doak

Written in the irritable style of Golf Magazine's golf course design editor, this book describes, uncovers, and from St. Andrews, Scotland, to Joondalup courses from Pebble Beach, Calif., to Kebo Valley, in Western Australia. The section on the subject in an easy-to-understand format. It is the reader through every phase of an irrigation system design and drainage covers every important aspect of effective irrigation systems, ensure appropriate capacity, easy installation, and practical operation and maintenance.

$59.95, 400 pages, hardcover.

Guide to Golf Course Irrigation System Design and Drainage

By Edward Pira

This is a fascinating collection of original articles and photographs on golf course design by one of the masters. A practical writer, Tillinghast delves into his philosophies on golf course design and maintenance, and his thoughts on what makes a championship course. It is laden with vintage photographs and original Tillie sketches of such of his creations as San Francisco, Winged Foot and Bethal golf clubs.

$79.95, Approx. 250 pages, hardcover.

Color Atlas of Turfgrass Diseases on Golf Courses

By Dr. Toshikazu Tani

This practical guide provides basic management principles and techniques which view irrigation as the most important asset in golf course management. Five basic management functions are detailed throughout the book, using everyday situations to illustrate the key points. Designed to serve as a quick reference, or as a self-teaching guide. Human Resource Management for Golf Course Superintendents

By Robert Milligan and Tom Moloney

This practical guide provides basic management principles and techniques which view irrigation as the most important asset in golf course management. Five basic management functions are detailed throughout the book, using everyday situations to illustrate the key points. Designed to serve as a quick reference, or as a self-teaching guide.

$34.95, 150 pages, hardcover.

Color Atlas of Turfgrass Diseases

By Dr. James B. Beard

The Captain — George C. Thomas Jr. and His Golf Architecture

By Geoff Shackelford

The creator of Riviera and Los Angeles country club and author of the classic book, "Golf Course Architecture in America, Its Strategy and Construction," George Thomas has deeply affected the golf industry even since his death in 1932. Thomas worked on single projects with Donald Ross and A.W. Tillinghast, learned from friends Hugh Wilson and George Cump, and designed more than two dozen courses on his own. At the same time he was recognized worldwide for his books about and leading of roses, his first love. Golf architecture, 'the shorter the shot, the smaller the green,' has been discarded as an accepted theory, on account of increased traffic on courses. The old adage of golf architecture, 'the shorter the shot, the smaller the green,' has been discarded as an accepted theory, on account of increased traffic on courses.

$35.00, 207 pages, hardcover, limited edition of 1,250 copies.

Turfgrass Management

Information Directory

By Dr. Keith Karnok

The directory covers academic programs and key contributors, including colleges, universities, businesses, governmental agencies, turfgrass research centers, and others. It also provides color photos of step-by-step guidance on diagnostic techniques for laboratory analysis which can be used by practitioners.

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Continued on page 78

GOLF COURSE NEWS

which will hold any kind of pitch, whether struck with backspin or not — I cannot say which induced the other or which came first. The close guarding, in many instances, makes a soft green necessary if the hole is to be playable, and easy pitching, on the other hand, makes it necessary to decrease the size of the target in order to supply any test. I quarrel with both ends of this proposition, whichever is to blame. These two are related reasons, I think, why ancient golf courses in the main lack the subtlety of the British links, and why our golf does not demand the strategy or the intelligent planning it should.

We are play and faster putting speeds, everyone says, are driving today's growing number of greens renovations and enlargements. So, you think it is a new problem? Think again, as told by George C. Thomas Jr. in "Golf Course Architecture in America, Its Strategy and Construction," George Thomas has deeply affected the golf industry even since his death in 1932. Thomas worked on single projects with Donald Ross and A.W. Tillinghast, learned from friends Hugh Wilson and George Cump, and designed more than two dozen courses on his own. At the same time he was recognized worldwide for his books about and leading of roses, his first love. Golf architecture, 'the shorter the shot, the smaller the green,' has been discarded as an accepted theory, on account of increased traffic on courses.

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GOLF COURSE NEWS

January 1998 77
This page contains an excerpt from a book discussing the history and evolution of golf course design. It includes a discussion about the problems faced by golf course constructors and the changes in golfing style. The text highlights the challenges of playing golf on modern courses and the difference in playing style from the past. It also mentions the experiences of notable players and the evolution of golfing equipment and strategies.
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