

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

A UNITED PUBLICATION
VOLUME 7, NUMBER 7
JULY 1995 • \$4.50

INSIDE

Course of Study

Siena College and Schuyler Meadows GC will cooperate on long-term environmental studies 3

Off the Record

Having decided to rethink its greens construction specs, the USGA solicits research proposals 13

15,000 and Counting!

GCN and the NGF have identified the nation's 15,000th course, which opened for play this spring 46

Top dressing breakthrough: Crumb rubber

By MARK LESLIE

WILMINGTON, Ohio — After five years of extensive study, Michigan State University (MSU) researchers are recommending crumb rubber, or finely chopped automobile tires, as a top dressing for high-traffic areas on golf courses and athletic fields.

"As much as we incorporated it into the soil profile, we never saw the panacea that people wanted. But we did find great results when top dressing it onto established turf," Dr. John "Trey" Rogers III of MSU said of crumb rubber.

"When we incorporated it, the rub-

Continued on page 25

Claims drain funding for UST clean-up

By PETER BLAIS

Nebraska recently delayed the clean-up of some 6,000 contaminated underground storage tank (UST) sites because its state-controlled cleanup fund is almost out of money. This spring, cash-strapped New Mexico diverted half the \$14 million in its UST clean-up and indemnification fund to other uses. Michigan declared its fund insolvent in April and went out of business for good June 29, forcing tank owners there to seek private insurance to meet the federal mandate of \$1 million in liability coverage per incident.

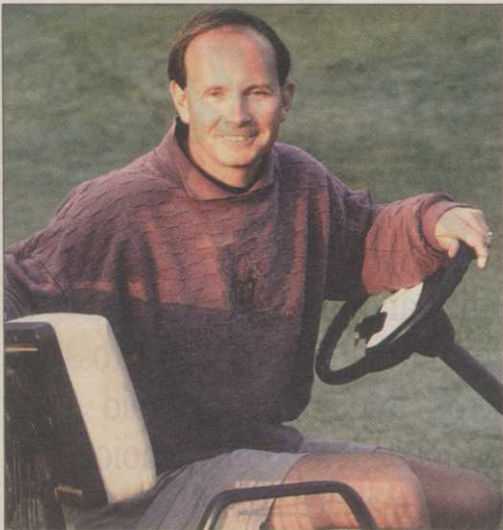
State UST funds in Florida and Illinois could soon run out money, according to Dennis Rounds,

Continued on page 37



HONORING OLD & NEW

The world of public-access golf marks two momentous occasions in July. New York City's Van Cortlandt Park Golf Course (above), the nation's oldest public-access course, celebrates its centenary this month. For the story on its week-long commemoration, see page 35. Meanwhile, the nation's 15,000th facility has opened for play: Poolsbrook Golf Course, a family-run daily-fee in Kirkville, N.Y. See story page 46.



FOCUS ON FRANKLIN HILLS' TOM GRAY, PAGE 16

COURSE MAINTENANCE

GCSAA adopts Audubon in-school program 13
Scientists rave about new breed of bents 20,21
Q&A with R&A Secretary Michael Bonallack 24

COURSE DEVELOPMENT

Q&A with Ohio-area architect Barry Serafin 27
Pearson leaves Golden Bear for solo career 28
ASGCA welcomes three new fellows 31

COURSE MANAGEMENT

Ocean Course sale hits yet another snag 3
Resorts recruit incentive-travel customers 35
Brassie moves headquarters to Florida 36

SUPPLIER BUSINESS

EPA promises to streamline label review 39
New digs for York Bridge Concepts 40
What's new in the marketplace? 42



NOT A CORNSTALK IN SIGHT

Cooks Creek, a collaborative effort between Dr. Michael Hurdzan and touring pro John Cook, used to be a cornfield. Now it's Ashville, Ohio's newest attraction. For story, see page 27.

Taxing setback in Florida court

By HAL PHILLIPS

NAPLES, Fla. — A precedent-setting battle is brewing here in South Florida where 12 Collier County golf clubs have challenged their property assessments in court.

For the moment, golf industry fortunes are flagging. Judge Ted Brousseau has upheld the municipal appraisal of Quail Creek Country Club in Naples, which argued the assessment was more than \$3 million too high.

However, the remaining 11 clubs have yet to have

Continued on page 43



Peter Whurr, Ransomes America

Ever-shrinking dollar posing problems for manufacturers

By HAL PHILLIPS

America's ongoing currency woes are beginning to affect golf course industry firms, some of which have discarded product lines dependent on overseas manufacturing agreements. Others continue to monitor the situation closely, recognizing the possibility that plunging dollar values may render those agreements unfeasible in the long-term.

"Anybody importing from Japan any commodity is impacted by the currency situation," said John Brozek, director of industrial Product Sales at Daihatsu, which will cease production of its Hijet utility vehicle in December.

Like Daihatsu, Mitsubishi manufacturers its Mighty Mit utility vehicle in Japan, but that will soon end, confirmed Bob Hertel, industrial vehicle man-

Continued on page 41



Number 18 Penncross green, Troon North, Scottsdale, AZ

Penncross Creeping Bentgrass ...the Favorite for Forty Years

Penncross greens are found from elite prestigious private courses to the most played public courses. It is still the most specified creeping bentgrass ever, and from all indications, it will remain the first choice of golf course superintendents, designers and architects the world over.

Developed by Professor H. B. Musser and Dr. Joe Duich and introduced in the fall of 1955 as an elite seeded creeping bentgrass for putting greens, Penncross' popularity was immediate and long-lasting. Penncross' reputation for rapid establishment and quick recovery from damage has made it a popular choice of developers who must open their courses in a timely manner as well as savvy superintendents who utilize it for tees and approaches where divot repair is necessary.

Over time Penncross has proved it can take the heat, the wear of 65,000 annual rounds and verbal potshots from envious competitors.

Penncross is grown to the same critical standards set by Professor Musser, and you can be assured we'll provide the world's most recognized creeping bentgrass as long as you demand it.

Penncross 1955-1995

CIRCLE #101

**Tee-2-Green
Corp.**

PO Box 250
Hubbard, OR 97032
USA

1-800-547-0255
503-651-2130
FAX 503-651-2351

©1995 Tee-2-Green Corp.

NEWS IN BRIEF

SOUTH BEND, Ind. — 1995 Masters champion and golf course designer Ben Crenshaw and his partner Bill Coore appear to be the choices to build a new golf course for the University of Notre Dame. Notre Dame's current 18-hole golf course is in the process of being torn up to make way for new buildings. Notre Dame would like to build a new course on wetlands it owns northeast of the campus.

ALBUQUERQUE, N.M. — In an effort to rid its golf courses of cigarette and cigar butts that litter greens and tee boxes, Albuquerque has launched a "Don't Leave Your Butt on the Course" campaign. Four city courses are distributing free pocket ashtrays at their pro shops. Their heat-resistant interior allows smokers to put out cigarettes inside the ashtrays. The ashtrays fit in pockets and purses and are reusable for up to a month.

PITTSBURGH — Major renovations have revived the formerly rundown inner-city Schenley Park Golf Course, which is owned by the city and managed by a non-profit subsidiary of Carnegie-Mellon University. The 4,860-yard, par-67 course got a big boost from a new automated irrigation system. It also now has artificial tees that look and feel like grass (they had been rubber), and top-dressed greens that are showing new signs of life.

MYRTLE BEACH, S.C. — A truck driver was killed in May following a freak accident at a Myrtle Beach golf course under construction. William Brayboy of Turbeville died when a tree limb came through the cab of his dump truck and hit him in the throat, authorities said. Horry County Coroner Robert Edge said Brayboy was pronounced dead at the scene from internal injuries.



CUPP'S CROSSWATER GIVES SUNRIVER 54 HOLES

Sunriver Resort opened its third golf course June 17, adding the prodigious 7,693-yard Crosswater Golf Course. The new 18-hole track, designed by Bob Cupp and John Fought, joins North Woodlands Golf Course created by Robert Trent Jones Jr. and South Meadows Golf Course designed by Fred Federspiel. Situated on 605 acres in a valley criss-crossed by the Deschutes and Little Deschutes rivers, Crosswater is enveloped by wetland meadows and forests of ponderosa and lodge pole pine. Because it sits at 4,500-foot elevation, "Golfers can really hit the ball a long way," said Cupp. "In fact, they might feel like Superman when they walk off the course."

Ocean Course sale delayed — again

CHARLESTON, S.C. — A problem involving ownership of a small piece of the Ocean Course led the federal bankruptcy court to adjourn June 12, without making a decision on the latest sale of the renowned Kiawah Island layout, site of the 1991 Ryder Cup.

Judge Falcon Hawkins ordered the Resolution Trust Corp. (RTC) to clear up the matter before he would rule on Virginia Investment Trust's (VIT) winning \$27,000,100 bid for the Pete Dye design.

"The RTC is moving to correct the situation," said RTC spokesman Mike Fulwider.

News sources have reported that

the controversy involves seven acres of land supposedly owned by Kiawah Resort Associates' President Charles Way, who developed most of the island's homes and the private River Run course currently under construction. Fulwider wouldn't speculate whether the ownership dispute would delay the closing on the golf course, which was scheduled to take place by mid-July.

VIT was the only qualified bidder for the Ocean Course at the May 19 auction conducted by the RTC. VIT owns Kiawah's other three resort courses. The RTC has controlled the Ocean Course since the original developer, Landmark Land Co., declared bankruptcy several years ago.

College, course collaborate on long-term study

By MARK LESLIE

LOUDONVILLE, N.Y. — In what its collaborators call a "natural" and "exciting cooperative agreement," Siena College, Schuyler Meadows Golf Course and the Audubon Society of New York have agreed to long-term environmental studies that could answer many questions concerning the effect of course maintenance on the environment.

"It provides our industry an opportunity to make a valid contribution to the science end of the spectrum," said Peter Salinetti, general manager and superintendent at the private Schuyler Meadows club. "I think it will be very beneficial as far as putting our finger on what, in reality, the golf course is doing to the environment."

While a handful of universities are using their own golf courses as laboratories, this is believed to be the first case of a school collaborating with an outside golf facility in this manner.

Dr. Larry Woolbright, dean of the Science Division at Siena, said nine PhDs from biology, chemistry and environmental studies have signed up to participate in the program. Fifty faculty teach more than 700 majors in the Science Division. Now they will have an outdoor classroom immediately adjacent to their campus.

"Faculty and students will scientifically study the effects of management practices at the club," Woolbright said, "and measure their impact on the environment, on species diversity, water quality and chemistry. Then we can try to improve those practices to minimize their environmental impact and maximize the course grounds' ability to support and sustain a natural diversity, specifically endemic local species."

The study's four phases will include:

- A site map and habitat inventory,

Continued on page 44

INSIDE INFO

Do your competitors know something you don't?

Subscribe to the

Golf Course News Development Letter

— and find out.

Who reads the **Golf Course News Development Letter**?

- 37% are suppliers
- 24% are builders
- 20% are course architects
- and almost 50% are owners and/or presidents of their firms

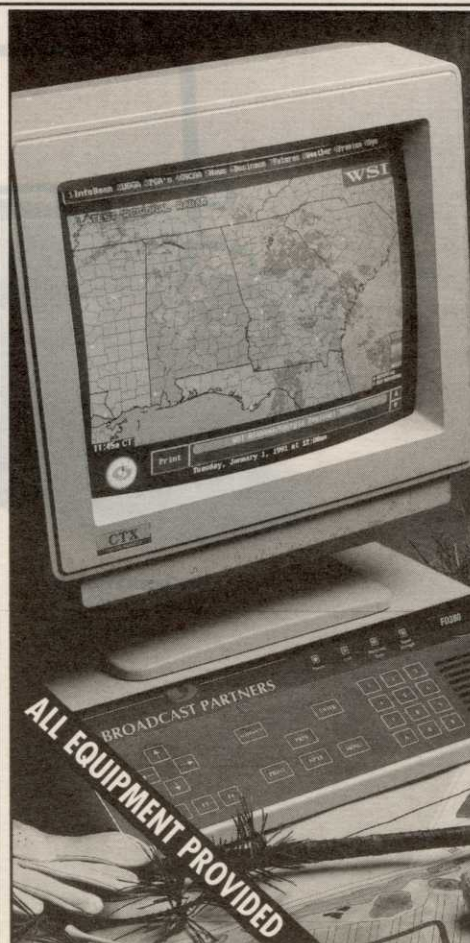
Why do they read the **Golf Course News Development Letter**?

- it tracks golf course projects planned or under consideration across the nation
- it provides names and telephone numbers of the key contact people associated with each project

Just \$195 for a year's subscription — 24 issues a year!

Don't be left behind.

Contact Editor Peter Blais at 207/846-0600.



INTRODUCING **GolfLink**, the industry's first complete weather, lightning, and golf information satellite service. Our unique satellite technology and easy-to-use format far outperforms any dial-up services you may have used. For under two dollars a day, GolfLink offers detailed lightning analysis, full color forecast maps, association updates, turf research, headline news, and sports and financial information.

We've put together for you all of the crucial weather information to save you time, money and to ensure the safety of the people on your course. Plus all of the sports, news, and financial information will keep you coming back for more!

Call 1-800-200-3810 for 60-Day Trial Offer*

*\$159 non-refundable fee includes two months service and shipping.

GolfLink
Golf Communications, Inc.
4811 Lebanon Road, Suite 107
Hermitage, TN 37076
615-883-8153

Texas park leapfrogs toad

BASTROP, Texas — The National Park Service has given in and decided to pay \$500,000 to help the Bastrop State Park golf course expand from nine to 18 holes despite being a prime habitat for an endangered toad.

Federal officials, who initially rejected the park's request for it to pay half of a \$1 million expansion, changed their mind after the expansion at the park east of Austin was changed to reduce its environmental impact.

A driving range was dropped

from the design, and the course will grow by 39 acres to span 135 acres, instead of by 54 acres as originally planned.

Environmentalists say the work could harm the Houston toad, an endangered species living in the area, and could affect the state's dwindling Lost Pines ecosystem, part of which is preserved in the park.

A coalition of environmental and tax groups are expected to sue to stop the expansion of the state park track.

S.C. layout to close until Sept. for renovations

AIKEN, S.C. — Palmetto Golf Club, the oldest golf course in South Carolina and recently ranked 20th in the state by Golf Digest magazine, is closed until Labor Day for a major renovation project that will restore greens, tee boxes and most fairways.

Richard McNabb, course superintendent, said three different contractors are working on specific areas of the course.

Because of poor soil composition and drainage problems, the greens no longer were responding properly to conventional aeration and chemical treatment. As a result, most greens were losing grass.

Second-class postage paid at Yarmouth, Maine, and additional mailing office. *Golf Course News* (ISSN 1054-0644) is published monthly by United Publications, Inc., 38 Lafayette St., P.O. Box 997, Yarmouth, ME 04096. Phone number is 207-846-0600.

The publisher assumes no responsibility for unsolicited material or prices quoted in the newspaper. Contributors are responsible for proper release of proprietary classified information. Copyright 1995 by United Publications Inc. All rights reserved. Reproduction, in whole and in part, without the written permission from the publisher is expressly prohibited.

Reprints and permission to reprint may be obtained from Managing Editor, *Golf Course News*, P.O. Box 997, Yarmouth, ME 04096. Back issues, when available, cost \$5 each within the past 12 months, \$10 each prior to the past 12 months. Back issue orders must be paid in advance either by check or charged to American Express, Visa or MasterCard.

Golf Course News is distributed in the U.S. without charge to qualified personnel of golf course facilities and to golf course builders, developers and architects. Subscriptions to Canadian golf facilities cost \$25 annually; other paid subscriptions to the U.S. and Canada cost \$45. All foreign subscriptions cost \$125 annually to cover air delivery. All payments must be made in U.S. funds drawn on a U.S. bank. **For subscriber services, please call 215-788-7112.** Send address changes to *Golf Course News*, P.O. Box 3047, Langhorne, Pa. 19047-3047.

Walk or be left behind at Mich.'s Treetops

GAYLORD, Mich. — Sylvan Resorts/Treetops is hoping to start a new wave in golf with an old golf tradition.

The Northern Michigan resort, with three championship golf courses, is opening a new course this fall that will allow a motorized riding golf cart only in special circumstances. Otherwise, walking the course, either with a caddy or a pull-cart, will be the rule.

Gerald Albert, Sylvan Resorts/Treetops general manager, said part of the reasoning behind the cart-less golf course is health-

related. "More and more people are becoming health conscious, and they want exercise," Albert said.

"For the real serious golfer, most of them find they can concentrate and play better when they're walking."

Treetops professional Rick Smith designed the new course, which is expected to be at least partially open in September.

Albert said Sylvan Resorts/Treetops will develop a caddy program next year for the cart-less course.

You have to start pretty early to get the pick of the crop at the orchard.

5:30...5:20...5am. Course Superintendent, Ted Woehrle, couldn't believe it. But shortly after the Workman® arrived at The Orchards Golf Club in Washington, Michigan, his staff started coming in earlier and earlier to get the Workman for the day. "We had other work vehicles," recalled Ted, "but everyone wanted the Workman."

Why's the Workman® vehicle so popular? Turf managers and their crews keep telling us the same story.

"It'll never be outdated. It can do anything."

It's always the first thing we hear: no other work vehicle puts in a harder day. The Workman vehicle's

extra-big box must have something to do with that. It can haul 25% more weight and bulk than other work vehicles you're used to. And

whether you use our attachments or yours, no other work vehicle can be configured to perform as many different tasks.

"Less back strain after riding it all day."

Take it from those who start and end their days with the Workman vehicle: its smooth ride is second to none. Its standard roll-over

protection package and the added stability of four wheels with the maneuverability of three, are other features crews can't say enough about.

"Our mechanics love it."

One mechanic said, "servicing the Workman is a breeze—everything's so easy to get to." Just what we like to hear. Because that means the



Workman vehicles now available in 2 or 4-wheel-drive.



City manager shows up police on NY golf course

TROY, N.Y. — Sand traps get built for all kinds of personal reasons, even political mudfights.

City Manager David Grandeau took his wage dispute with the Troy's local police union to the city golf links with a stunt that one City Council member called "so bizarre it defies description."

Grandeau ordered a city work crew to dig four small sand traps at the 7th hole at Frear Park Golf Course. He then spent \$5 of his own money for a sign that reads, "Dedicated to

Jack Rogers and the TPBA to honor their greed. 4 percent."

The sign was pounded into the turf next to the traps. Rogers is the president of the Police Benevolent and Protective Association, which has been deadlocked with the city for months over a city request that the union sacrifice this year's 4 percent pay raise.

Each trap represents one percentage point, according to Grandeau, who calls them "Rogers bunkers." Rogers is reportedly considering a lawsuit.

N.H. layout expands to 36 holes

KEENE, N.H. — Bretwood Golf Course is now as large as any golf course facility in New Hampshire.

The city planning board recently approved the opening of six new holes on about 45 acres to give the public course a total of 36 holes. The only other 36-hole facility in N.H. is Green Meadow in Hudson.

Bretwood owner Aubrey "Toby" Barrett has been planning the new holes—which were built on the site of a former sod

farm—for years, but he was held up by city officials' concerns that they would be built too close to wells located off upper Court Street.

The wells provide 2.6 million gallons of water per day for homes and businesses—about half the city's water supply. An ordinance passed earlier in the year allows the expansion, as long as course maintenance staff doesn't apply pesticides or other chemicals within 400 feet of the wells.

Conn. courses hole out profits

NORWALK, Conn. — Advertising has sunk to new depths at some 35 golf courses around Connecticut: the bottom of the cups on every green.

Forefront Marketing Co. of Rocky Hill launched the idea, under which it sells the advertising for the cups, provides the cups, and then gives 20 percent of the proceeds to the owner.

Under a proposal to the Norwalk, Forefront estimated selling \$10,000 worth of national and local advertising per year which would mean \$2,000 annually for the city.

Among the proposed slogans golfers could see as they retrieved their ball: "A Bank Without the Traps — Citibank," "Watch Your Speed of Play — Rolex."

Ohio course owner indicted

DELAWARE, Ohio — Thornton Nichols, owner of the Oakhaven Golf complex, has been indicted for grand theft by a Delaware County grand jury.

Delaware County Prosecutor W. Duncan Whitney said Nichols accepted a \$75,000 payment from a German man for walnut lumber that was never delivered.

Nichols operated a timber-trading business when he built Oakhaven, a complex on U.S. 23N with a driving range, clubhouse and nine-hole golf course. The charge is a third-degree felony that carries up to two years in prison.

OTTER CREEK OPENS NEW NINE

COLUMBUS, Ind. — Otter Creek Golf Course, a perennially top-ranked public course, recently opened a new nine designed by Rees Jones. Jones's father, Robert Trent Jones Sr., designed the original 18 in the early 1960s. Otter Creek now has 27 holes. The new Rees Jones-designed nine is expected to eventually replace the current back nine in Otter Creek's championship 18.



© 1995 The Toro Company The Toro Company, 8111 Lyndale Avenue South, Minneapolis, Minnesota 55420. "Toro" and "Workman" are registered trademarks of The Toro Company.

Workman vehicle is spending more time on the job and less in the shop.



"Unbelievable 'til you try it."

As impressive as your colleagues' comments might be, there's only one real way to sell yourself on the Workman vehicle: try it for yourself. Call your local distributor to set up a demo and

trial period for your key staff members. You won't find a better tool to help you keep your facility in peak condition - or one that gets your staff to work so early.



Helping You Put Quality Into Play.™

For a demonstration, call
1-800-803-8676, ext. 152

Nantucket could be home to new course

NANTUCKET, Mass. — Architect Rees Jones could soon be designing a new 18-hole golf course on the 252-acre Coffin Farm on this genteel island off Cape Cod.

The Nantucket Golfing Society, a partnership of approximately 50 golfers who frequent the island, has moved to purchase the sizable farm from the estate of Henry Coffin. Coffin died last year.

The Society plans to have Jones design a golf course reminiscent of those crafted during the early 1900s.

There are other potential developments for golf being discussed on the island.

The pending transaction between the Society and the Coffin family would also allow the society to lease, operate and slightly renovate the nine-hole Sjaconset Golf Course. The Coffin family has operated Sjaconset for more than 100 years.

The society has retained Colorado-based Golf Services Inc. and Connecticut and Colorado-based Links Acquisition Corp. to oversee planning and construction of the new course.

Rochester N.Y. adds public track

ROCHESTER, N.Y. — A city filled with outstanding private courses, like 1996 Ryder Cup venue Oak Hill, is about to get a public-access layout its builders say will fill a long-standing need that has gone unmet in this area.

Gardner Odenbach, vice president of the Dolomite Group in Penfield, and his father, John, are building the 27-hole Greystone Golf Club on 270 acres in nearby Walworth.

Nine holes are expected to open sometime this month.

Craig Scheiner of Kansas City, Mo., designed the upscale, daily-fee course.

Tim Hahn, the son of Oak Hill greens superintendent Joe Hahn, is overseeing construction of the golf course, which features many large, undulating greens.

Scottish-style grass mound-ing, pot sand bunkers and tall native grasses off some fairways. A large practice facility and Tudor-style clubhouse are also planned.

Neb. volunteers build new nine-hole golf facility

FULLERTON, Neb. — Two years after the Loup River flood destroyed the sand greens course in Fullerton, a new nine-hole golf course has been created with unusual community spirit and hard work.

More than 15,000 hours of volunteer labor helped make Pawnee Hills Golf Course a reality, according to Steve Nathan, a town businessman who is president and treasurer of the group that developed Pawnee Hills.

The course was designed by Marty Johnson of Sioux City, Iowa. Resident Bob Russell donated \$100,000 to build a two-level clubhouse in honor of his family's dedication to Fullerton.

Laborer dies in Houston golf course accident

KINGWOOD, Texas — A man was killed and another seriously injured when a trench caved in at a golf course construction site outside Houston in May.

The worker was killed when his body was engulfed by sand in a cave-in. Juan Lopez, 40, who survived, was dug out of chest-deep sand following the mishap.

The two men were in a trench digging a wet well when the earthen sides gave way and collapsed on them. Rescuers dug with shovels and hands to try to get to the men and freed Lopez who was transported by air for emergency treatment.

FURRY CADDIES DEBUT AT MINNESOTA LINKS

MIESVILLE, Minn. — Bruce Brage is opening a nine-hole golf course this month on his Dakota County family farm that will offer llamas as caddies. Brage, 37, figures using Andean llamas as caddies is just novel enough that it will persuade golfers to give his new Elmdale Hills Golf Course a try. He didn't say what they'd expect for a tip.

"It was the hottest, driest summer Atlanta has seen. But we had the best greens in the area with Crenshaw."

Joe Hamilton, Owner
Lake Spivey Golf Club
Atlanta, GA



These greens at Lake Spivey were renovated and seeded with Crenshaw Creeping Bentgrass in September 1993. These photos were taken 56 days later.



Joe Hamilton.



Lofts Seed, Inc.

World's largest marketer of turfgrass seed

Bound Brook, NJ 08805
(908) 356-8700 (800) 526-3890

Lofts Great Western

Albany, OR
(503) 928-3100 (800) 547-4063

Court rules against golf facility in liability case

LOS ANGELES, Calif. — An appeals court here ruled that a golf course owner has a duty to design and maintain a golf course to minimize the risk that players will be hit by golf balls.

William C. Morgan had filed a complaint against Fuji Country USA, the owner and operator of a golf course, after he was hit on the head by an errant golf ball as he walked from the 5th tee box to a nearby bench.

Morgan contended Fuji was negligent in removing a pine tree which had deflected or otherwise protected players from balls hit from

the 4th tee. Fuji asserted that Morgan knowingly assumed the risk of being struck with a golf ball.

A trial judge agreed with Fuji's assertion. But on appeal, Justice Daniel Kremer of the 4th District Court of Appeal found otherwise. Citing a 1992 case, Kremer found that being struck by a golf ball is an inherent risk in playing golf, but it does not remove all responsibility for a golf course owner or operator, especially if there are dangerous areas on the course caused by poor design or without adequate safety protection.

Fla. city evicts course operator

HOLLYWOOD, Fla. — An nasty feud between Hollywood officials and a private operator over who would run the Hollywood Beach and Country Club (CC) is over.

City officials were successful in evicting course operator James Duffin, whom they accused of ruining the course.

Duffin — who had operated the facility since 1993 — had vowed to stay. Eviction proceed-

ings began in February after Duffin failed to pay rent for nine months. The city received \$159,000 in back rent as part of the recent court decision but is

battling with Duffin over more money it feels he still owes.

Southern Golf will be the interim operator of the 18-

hole golf course. Hollywood Beach and CC also has a hotel and restaurant.



Els opens course design office in Palm Springs

PALM DESERT, Calif. — Golfer Ernie Els has fulfilled many ambitions on the golf course, but now he's into something else. "For a long time, I've had an ambition to design courses," he explained.

Els, playing largely in America, has launched a new design company and has an office here. He is joined in his company, Els Clark Design, by Olive Clark, a former Ryder Cup player and broadcaster, who has concentrated on design over the last eight years.

"Our philosophy will be to work only on two or three courses at once," Clark said. "We intend to give each course maximum personal attention, but our fees will still be extremely competitive."

Els' and Clark's philosophy is to provide "user-friendly" courses coupled with designs which reflect dramatic interest, enjoyability and great variety.

Clark may be contacted in the United States at 619-771-0400.

Agreement puts Minn. layout back on track

PAYNESVILLE, Minn. — The developers of a proposed nine-hole expansion at the Koronis Hills Golf Course and the owners of an abutting biological preserve have reached an agreement to allow construction: a 17.3-acre buffer strip of wetlands and woods.

The buffer strip between the golf course and the Highgrove Bio-Reserve Lands preserve owned by Larry Ellis and Linda Liestman will be placed in a land trust easement to give it perpetual protection from development.

Ellis and Liestman had opposed the 70-acre expansion until the particulars of the buffer strip were agreed on.

If all goes as planned, the second nine, designed by Joel Goldstrand, could be ready for play in 1996.



FACT:

ConSyst®, the All Purpose fungicide, cures and prevents more turf diseases for less money.

Leaf Spot . . . No Problem
Brown Patch . . . Gone - Nothing Better
Dollar Spot . . . Forget It

Because it's the All-Purpose fungicide, it has become the only fungicide needed.



ConSyst® fungicide truly is the "All Purpose fungicide". It exhibits superior performance over any other single fungicide to eliminate the worry in protecting your greens and fairways from deadly diseases. It has both contact and systemic activities to cure and prevent turf and ornamental diseases including pythium.

"For the lion's share of excellence."



Ask your local salesperson for results and cost comparisons.

Browner looking to put the kibosh on regulation as usual?



Hal Phillips,
editor

Believe it or not, the federal Environmental Protection Agency (EPA) is bending over backwards to make points with the American business community. How else can we explain the spate of market-friendly directives spilling forth from the desk of Carol Browner, who has changed her stance somewhat? After storming into office as one of the more visible FOBs, running to the agency rooftop and shouting all the traditional liberal rallying cries for all to hear, Browner's office is now talking about softening its labeling restrictions (see page 39).

Could it be that Browner and her agency have been dragged into the Clinton Administration's headlong rush to the center? Does this sea change have anything to do with... Politics!?!?

Call it what you like, but a little birdie in Washington has informed me that Browner has also announced a new policy allowing small businesses, like golf courses, to right past environmental wrongs. The Common Sense Compliance Policy, detailed by Browner in a speech to the White House Conference on Small Business (WHCSB) last month, sets guidelines for the agency to reduce or waive penalties for small businesses that make "good-faith" efforts to correct past violations under most EPA statutes.

"With this new program of incentives for small business," Browner told her WHCSB audience, "the Clinton Administration makes a commitment to reward their good-faith efforts to find and fix environmental problems. We aren't interested in giving irresponsible polluters a break. We do want to help honest business owners comply with the law and run their business as cleanly and efficiently as possible."

Apparently, this policy is part of Clinton's Executive Memorandum on the Waiver of Penalties and Reduction of Reports, which gives federal agencies the ability to waive penalties for violations by small businesses, under certain conditions.

Do you believe her? I say, it doesn't matter. If your course has

Continued on page 29

VIT bailed out on Audubon

I know my *New American College Dictionary* is 32 years old and that English is a living, evolving language. But something troubles me here.

My 1963 dictionary in part defines "commitment" this way: The act or state of giving in trust or charge; the act of committing, pledging or engaging oneself.

The modern revision of the word reads more like: "I will stay committed until it is no longer personally convenient."

Well, it looks like we have a case in point and, low and behold, it is right in golf's own camp. Virginia Investment Trust, the apparent buyer of the Ocean Course at Kiawah Island, S.C. (see story page 3), has

apparently reneged on a commitment with the Audubon Society of New York (ASNY) that the Audubon would be involved if VIT ever bought the property. VIT and New York Audubon were partners in a winning bid on the course last year, but that purchase was nixed this winter by a bankruptcy court judge. In the second go-around of the bidding process VIT dropped Audubon as a partner, won the bid and apparently plans to proceed with no outside environmental expertise.

"There will be no environmental organizations involved," said Beverly (Boody) Anderson, a spokesman for VIT which owns Hogan, ANS Sporting Goods and other Kiawah golf courses.

And although the Ocean Course had previously joined the Audubon Cooperative Sanctuary Program, when asked if VIT would follow through with that commitment, Anderson replied: "No, I don't think there will be any plans either way in that regard."

This all despite a written agreement which states in part that if VIT's The Ocean Course (TOC) acquires an ownership interest in the course "either pursuant to the RTC's



Mark Leslie,
managing editor

Continued on page 34

Letters

MOBILIZING THE INDUSTRY

To the editor:

Just a short note to thank you for running your article "Leslie Fund to Benefit Cleary Worker's Family" (May 1995) to publicize the Golf Course Superintendents Association of New Jersey's effort to solicit support for Bob Leslie's family after his tragic death. The emotional and financial assistance from turfgrass industry friends following tragic circumstances is very powerful when mobilized in such a fashion. As you know, our personal experience confirmed this. My family and I were strengthened immeasurably by similar industry support following our son's accident several years ago.

Once again, thanks for taking a supportive role.

Edward C. Horton
Vice President,
Resource Management
Pebble Beach Co.
Pebble Beach, Calif.

NETLON & TRAFFIC

To the editor:

In the article "Traffic control: Take your course to the next level, Otis urges", in your March, 1995 issue, the next-to-the-last paragraph mentions Netlawn fibers. It said Dr. Trey Rogers of Michigan State University states that he has found that using a mulched tire product as a soil amendment reduces traffic damage, as do Netlawn fibers.

While our product does indeed reduce traffic damage — along with providing a number of other benefits — the correct product name is "Netlon mesh elements". In Netlon Advanced Turf, the Netlon mesh elements are blended with a selected growing medium to form a stabilized turf rootzone.

The unique Netlon mesh elements act as "springs", with a flexing action that creates and maintains voids along the length of the mesh filaments. This "self-cultivating" action ensures that Netlon Advanced Turf root zones are healthier than those associated with ordinary turf, with a built-in resistance to soil compaction.

It is this combination of benefits that makes Netlon Advanced Turf an ideal solution for cart path and foot path wear, the heavy use of tees, spectator sites, surface parking areas and other problem areas of golf course turf.

Advanced Turf is well known and accepted in Europe. It has been used in many premier golf courses in England. Installation in the cart paths of St. Andrews is a prime example. Within the United States, Netlon Advanced Turf has undergone extensive successful testing by Dr. James Beard at Texas A & M.

Turf Management Specialist Noel Jackson of the University of Rhode Island is currently conducting testing in cart paths and tee boxes. In addition, the system is being installed in strate-

gic areas at golf courses across the country.

Stephen H. Guise
Sales representative
Netlon Ltd.
Fullerton, Calif.

Ed. We regret the error.

APPRAISE & CONSENT

To the editor:

I read with great interest the commentary in your May issue by Mr. James E. McLoughlin (p. 55) regarding the alleged shortage of qualified and credible consultants to perform feasibility analyses for golf course properties. As you can imagine, I strongly disagree and offer the following rebuttal:

It is my opinion that Mr. McLoughlin's opinion stems from the inability of many in the industry to consider appropriately designated and specifically qualified real-estate appraisers for feasibility assignments. As golf has become a "fad" industry to many, those with limited qualifications simply "hung a shingle" in search of feasibility consulting assignments. Real estate appraisers (good ones) perform the necessary detailed analysis on a regular basis. A comprehensive feasibility analysis is only part of a well done highest and best-use analysis done in every appraisal assignment.

Mr. McLoughlin should become familiar with my colleagues in the Society of Golf Appraisers (SGA). Those of us that are mem-

bers and have the SGA designation have submitted to rigorous qualifications and most of us have experience performing feasibility analyses, market studies, impact studies and highest and best-use analyses as well as appraisals. Each SGA member is an MAI member of the Appraisal Institute, which in itself identifies a high level of education and qualification in the real estate analysis profession. While there are "bad eggs" in any profession, I question Mr. McLoughlin's statement that there "may be fewer than five people across the country with the experience to generate a meaningful feasibility report." While the profession is a small one, I can immediately think of at least 10 individuals (not all of them SGA members) with considerable feasibility analysis experience.

I have not met with or spoken to Mr. McLoughlin and welcome the opportunity of doing so to see if I would qualify as one of the "fabulous five." Additionally, I welcome the opportunity to introduce him to SGA and its membership qualifications.

In a market where many users choose only the lowest fee, quality sometimes gets lost in the shuffle until it's too late. Like any quality product, professional and adequate consulting services take time and cost money. You can't buy a Cadillac for the price of a Chevy and you won't find one at the Chevy dealer's lot.

Continued on next page

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

Publisher
Charles E. von Brecht

Editorial Director
Brook Taliaferro

Editor
Hal Phillips

Managing Editor
Mark A. Leslie

Associate Editor
Peter Blais

Editorial Assistant
J. Barry Mothes

Contributing Editors
Terry Buchen, CGCS, MG
Vern Putney

Editorial Advisory Board
Raymond Davies, CGCS
Merced Golf & Country Club
Kevin Downing, CGCS
Willoughby Golf Club
Tim Hiers, CGCS
Collier's Reserve
Dr. Michael Hurdzan
Hurdzan Design Group
Mary P. Knaggs, CGCS
Hazelton National Golf Club
Roger Maxwell
Management Consultant
James McLoughlin
The McLoughlin Group
Kevin Ross, CGCS
Country Club of the Rockies
Brent Wadsworth
Wadsworth Construction

Production Manager
Joline V. Gilman

Circulation Manager
Brenda Boothby

Editorial Office
Golf Course News
Box 997, 38 Lafayette Street
Yarmouth, ME 04096
207-846-0600; Fax: 207-846-0657
hphillip@gcn.biddeford.com

Advertising Office
National Sales:
Charles E. von Brecht
Box 997, 38 Lafayette Street
Yarmouth, ME 04096
207-846-0600; Fax: 207-846-0657

Western Sales:
Robert Sanner
Western Territory Manager
2141 Vermont
Lawrence, KS 66046
913-842-3969; fax: 913-842-4304

Marketplace Sales:
Diana Costello-Lee
207-846-0600; fax: 207-846-0657

Golf Course Expo Sales
Douglas Oakford
207-846-0600; fax: 207-846-0657

Subscription Information
Golf Course News
P.O. Box 3047
Langhorne, PA 19047
215-788-7112

United Publications, Inc.
Publishers of specialized business and consumer magazines.
Chairman
Theodore E. Gordon
President
J.G. Taliaferro, Jr.

NGF CHARTER MEMBER
NATIONAL GOLF FOUNDATION

BPA INTERNATIONAL

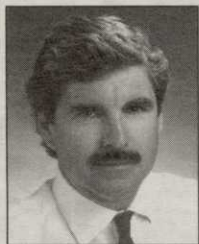
Copyright © 1995 by United Publications, Inc. All rights reserved and reproduction, in whole or in part, without written permission from the publisher is expressly prohibited.

Course owners must cooperate to survive & thrive

By MIKE TINKEY

Are you interested in an effective formula to improve your bottom line?

Golf course owners and operators are making a significant positive impact to their bottom line working together in cooperative marketing, purchasing, research and governmental and regulatory affairs. Also, cooperative communication is building strong and effective bridges to decision-makers in the public and private sectors that are yielding additional positive results.



Mike Tinkey

Clay Brittain, chairman of the board of the Myrtle Beach National Golf Co. — which owns 153 golf holes in Myrtle Beach, operates three hotels and is actively involved with his family in the travel, tourism and hotel industry — attributes working cooperatively with the local businesses in your industry as one of the keys to success.

"Working with others doesn't necessarily mean you don't compete," he says. "When you make the golf industry successful you have a better chance to be successful yourself."

He is proud to be one of the original organizers of the Myrtle Beach Golf Holiday, which is widely considered to be the largest and most effective golf marketing group in the country today. The Myrtle Beach cooperative effort attracts more than 2.5 million golf rounds a year and the number of courses in the area has grown from one in 1960 to more than 100 by 1997.

Each tax dollar spent on golf advertising produces \$74 in spending by golfers. Working together, owners have realized group health insurance savings of 18 percent per employee with increased benefits. These are examples of cooperative efforts in South Carolina.

Mike Hughes, the Executive Director of the National Golf Course Owners Association, noted that "the answer to how a small state like South Carolina can become a golf powerhouse, lies in

two words: mutual cooperation.

"Joint efforts have resulted in tens of thousands of added rounds, a positive environmental image, a common voice to defeat poorly researched legislation and regulations, effective purchasing programs and research on operations. Of course, the success of Myrtle Beach is legendary, all because they have worked together."

Examples abound and new projects are increasing rapidly due to word of mouth and the facilitating efforts of organizations such as the NGCOA, regional, state and local groups of course owners. Examples of

other marketing successes are the business development efforts of other destinations such as Pinehurst, Hilton Head, Jacksonville, the Great Smoky Mountains, Ocean City. Organizing is taking place in Wisconsin, Phoenix/Scottsdale, the Monterey Peninsula, Atlantic City, the Gulf Coast of Mississippi, and more.

A number of these areas are actively seeking to implement electronic tee time reservation systems. Also, state owners' efforts in Florida, Ohio and South Carolina have been successful in defeating proposed new taxes, implementing workers' compensation programs and public awareness campaigns of the economic impact of

golf operations to a state's economy.

On a local level for example, Hank Johnson, executive director of the Lowcountry Golf Course Owners Association (Hilton Head and surrounding areas), has been actively involved in representing owners' interests with regard to noise ordinances, wetlands legislation, water resource allocation, international marketing and purchasing.

Whether you are working cooperatively to book more golf business further in advance for an improved yield per round, or purchase goods and services smarter for your facility, or gather information to assist you in running your operation more efficiently, a systematic approach is essential. Important ingredients include

Continued on page 34

STEP ON IT

Kubota's GF1800 diesel front mower delivers more power with its easily engaged Foot-Control-4WD. This "on demand" 4WD locks in on-the-go by simply pressing a pedal.

The 18 horsepower GF1800, with its 3-cylinder diesel engine, is ideal for commercial mowing jobs that demand maximum performance and efficiency as well as outstanding maneuverability. There are three shaft-driven mower choices — 48" mulching rear discharge mower, 54" or 60" side discharge mowers — all with cutting heights from 1" to 4". The independent hydraulic PTO clutch ensures smooth mower engagement. The PTO brake stops the mower quickly and secures the PTO shaft when the PTO is disengaged. Hydraulic lift system is standard.

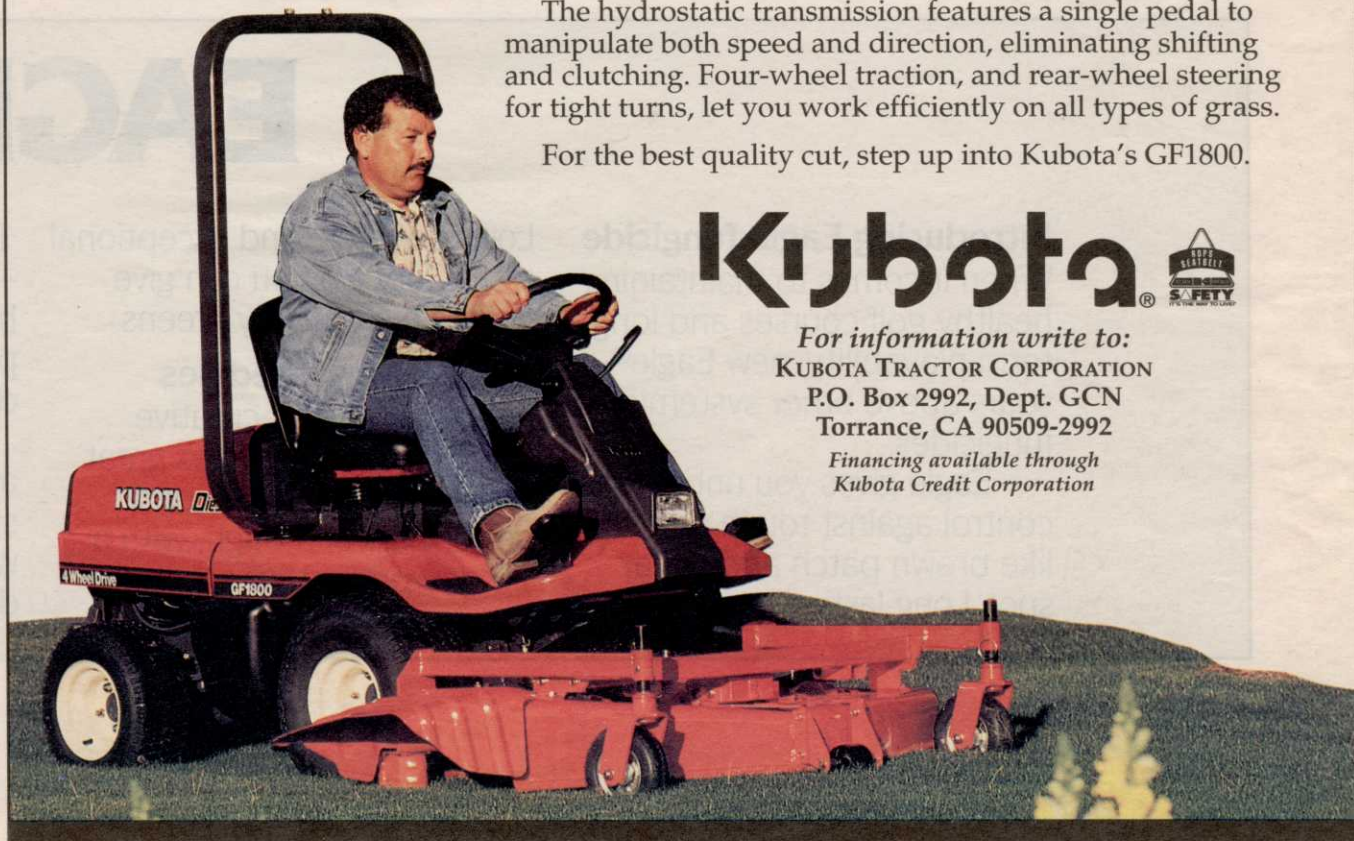
The hydrostatic transmission features a single pedal to manipulate both speed and direction, eliminating shifting and clutching. Four-wheel traction, and rear-wheel steering for tight turns, let you work efficiently on all types of grass.

For the best quality cut, step up into Kubota's GF1800.

Kubota

For information write to:
KUBOTA TRACTOR CORPORATION
P.O. Box 2992, Dept. GCN
Torrance, CA 90509-2992

Financing available through
Kubota Credit Corporation



Letters

Continued from previous page

Last, but certainly not least, Mr. McLoughlin suggests a national certification program for golf consultants. As we in the appraisal profession have learned all too well, more governmental intervention is not the answer. The answer is finding the right people and giving them the necessary tools to perform their job. These services require experience, independence, and objectivity. The best consultants will not "rubber stamp" a project and the smartest will not seek that rubber stamp. If this is done, the experienced people will become more easily identified and the industry will benefit as a result with better projects coming from better planning.

Laurence Hirsh, president
Golf Property Analysts
Harrisburg, Pa.



EAGLE® HAS

Introducing Eagle fungicide

When it comes to maintaining healthy golf courses and long-term playability, new Eagle® soars above other systemic fungicides.

Eagle gives you unbeatable control against tough diseases, like brown patch and dollar spot. Long-lasting performance.

Low use rates. And exceptional turf safety. So you can give golfers high-quality greens.

Fits 14-day schedules

For preventive or curative control, Eagle provides great results. You'll find the best performance, though, with a 14-day protectant schedule.

Even during July and August — when temperatures and humidity rise and disease pressure is highest — Eagle doesn't quit.

Eagle offers another big advantage over other systemics...turf safety. You won't see weakened roots, leaf damage or coarse turf blades.



LANDED.

So greens always look and play their best.

Other benefits

Eagle brings good news for applicators, too. Just six tenths of an ounce per 1,000 square feet gives you all the control you need. And mixing couldn't be easier. That's because Eagle comes in

premeasured, water-soluble pouches you can toss right in the tank. There's no measuring, no mess and minimal worker exposure.

To find out more, see your local Rohm and Haas distributor. But don't wait long; Eagle is taking off fast.



For top-flight performance.

ALWAYS READ AND FOLLOW LABEL DIRECTIONS FOR EAGLE FUNGICIDE.

Eagle® is a registered trademark of Rohm and Haas Company.

©Rohm and Haas Company 1995 TO-120 3/95



CIRCLE #108



Work Wonders.

Transport turf. Shift sand. There's very little E-Z-GO turf vehicles can't handle. Thanks to heavy load capacities. Spacious load beds. And a wide range of options and accessories to customize for virtually any job. So workers will be able to haul more. Handle bulkier loads. And get more done.

Call 1-800-241-5855. We'll put you in touch with your nearest E-Z-GO representative. You'll wonder how you ever got along without one.

EZGO TEXTRON

©1994 E-Z-GO Textron

E-Z-GO Division Of Textron Inc.

CIRCLE #109

BRIEFS



TOURNEY TO ENDOW DUICH FUND

OAKMONT, Pa. — Oakmont Country Club will host the inaugural benefit golf tournament for the Joseph M. Duich Turfgrass Endowment at Pennsylvania State University on Oct. 9. The endowment was started through the efforts of Dr. Duich and other professors in the turf project at the university. Interest from the endowment will fund projects crucial to continuing turfgrass research, teaching and extension, according to Oakmont superintendent Mark Kuhns, who is chairman of the tournament. More information is available from Kuhns at 412-828-5567.



Dr. Joe Duich

NO REGISTRATION REQUIRED

The governor of Nevada has signed a law redefining "golf cart" for the purpose of properly registering motor vehicles. Under the legislation, "golf cart" is defined as 1) having no fewer than three wheels in contact with the ground; and, 2) designed to carry golf equipment and not more than four persons, including the driver. According to the National Club Association newsletter, vehicles meeting those criteria do not have to be registered as long as they remain on golf courses and designated areas and are operated during daylight hours.

FAZIO TABBED FOR OLD TOM MORRIS

ORLANDO, Fla. — Course architect Tom Fazio will receive the Old Tom Morris Award from the Golf Course Superintendents Association of America at the GCSAA's international conference and show here next Feb. 10. The award



Tom Fazio

recognizes individuals who have made outstanding contributions to the game. GCSAA President Gary T. Grigg cited Fazio's "commitment to the game and to his community —

especially all the personal time he devotes to the Boys and Girls Cubs — is a great example of the spirit that Old Tom brought to golf."

CONFERENCES COMBINED

BOSTON — The Golf Course Superintendents Association of New England is joining forces with the Massachusetts Turf and Lawngrass Association to sponsor the Massachusetts Turf Conference in future years. The conference will move from Springfield to the Marriott Copley Plaza Hotel here, beginning next Jan. 15-17.

GOLF COURSE NEWS

GCSAA reaching out to educate through Audubon School Program

By MARK LESLIE

SELKIRK, N.Y. — The Golf Course Superintendents Association of America (GCSAA) has committed to sponsor the Audubon Society of New York's School Program, involving superintendents in educating their local schoolchildren concerning the environment, according to New York Audubon Executive Director John Santacrose.

Just as the U.S. Golf Association in effect adopted the Cooperative Sanctuary Program for Golf Courses, the GCSAA will be involved in the evolution and expansion of the School Program, said GCSAA Executive Director Steve Mona. The GCSAA board of directors voted in June to support the program.

"Over the next six months or so we

will get a lot of input from teachers and our members," said GCSAA Communications Director Pat Jones. "There is a menu of options for the superintendent to be involved. Most important is overall sponsorship of the program. We will do something good for the schools of this country and continue to support the Audubon movement. It's the right thing to do.

"It even gives us a stronger interest in helping to support and promote the Audubon Cooperative Sanctuary Program for Golf Courses. As more courses get involved in that program, that will likely increase participation in our program. The two are indirectly tied."

GCSAA officials expect to get the

Continued on next page



Golf courses like Anaheim Hills illustrate clean environment in California.

Calif. EPA: Air, water significantly better

By PETER BLAIS

Before anyone tells you the California environment is going to hell in a hand basket and golf is among the devil's legions leading the way, check out these statistics generated by the California Environmental Protection Agency.

The agency's first "Environmental Indicators Report" lists the impressive gains in cleaner air, less solid waste, improved water quality and significant reductions in the volumes of chemicals released into the environment.

The golf industry has contributed significantly to the clean up of the Golden State's environment, said David

Flaxbeard, head superintendent of Oakmont Country Club in Glendale and immediate past president of the Southern California Golf Course Superintendents Association (GCSA).

"Superintendents are much more aware about the environment than they were 10 or 15 years ago and we are communicating that knowledge to club owners and members," Flaxbeard said. "When I told my members that our underground storage tanks (USTs) were apparently leaking, they were out of the ground and new ones in within a couple months. Everyone is more aware of how golf can help

Continued on page 15



Pioneering research getting to the bottom of putting greens

By KIMBERLY ERUSHA

FAR HILLS, N.J. — As a result of the myriad technological changes, the United States Golf Association's (USGA) Turfgrass Research Committee will solicit pre-proposals for research projects concerning the construction and maintenance of golf course greens.

The committee made the decision during its meeting in Oklahoma City in May. Ten to twelve grants of \$20,000 per year for up to five years will be awarded to universities or non-profit research institutions.

After extensive investigation, the USGA first introduced its Specifications for a Method of Putting Green Construction in 1960. The method utilized sand as the principal component of the root-zone mix to provide adequate drainage and resistance to compaction, and incorporated a perched water table in the profile to provide a reservoir of moisture for use by the turf. When constructed and maintained properly, USGA greens have provided good results for more than three decades in most regions of this nation and the world.

But the game of golf has changed. The number of rounds played on courses continues to climb. Golfers continue to demand closer mowing and perfection in playing conditions. New grasses have been developed that have different maintenance requirements. Maintenance technology continues to improve and advance. And the environmental impact of maintenance practices has come under increased scrutiny.

During the past 10 to 15 years, changes have occurred regarding the way greens are maintained, and an increasing number of new products and technologies has been

Continued on page 17

Grass carp legislation falls short of supers' hopes

By PETER BLAIS

SACRAMENTO, Calif. — Water may be good for fish, but a watered-down legislative bill is of little use to the sterile grass carp or golf courses, according to the president of the California Golf Course Superintendents Association.

Peter Bowman and other supporters of the grass carp, or white amur as it is also called, had hoped the state Senate would approve a bill allowing use of the exotic, weed-eating fish in any golf

course pond not draining into the Sacramento or San Joaquin rivers, the state's two major watersheds north of Los Angeles.

The grass carp, which reaches weights of 80 pounds or more, eats massive quantities of weeds and algae. More than half the states have approved golf course use of the fish as an environmentally friendly alternative to herbicide use.

"Grass carp can be sterilized so that they won't breed," said Bowman, who

is head superintendent at Merced Hills Golf Club. "The sterilization is successful in more than 99 percent."

But it was that 1 percent of unsuccessful sterilizations that spooked lawmakers.

Fearing the possibility that fertile fish could somehow find their way into the rivers — where they could mate and produce offspring that would threaten the ecosystem of other fish — the Senate recently approved a revised bill that

Continued on next page

Victory over carp measure termed 'hollow'

Continued from previous page

would restrict the fish to ponds in the three southern counties of Imperial, Riverside and San Bernardino.

That's 5 percent of the state's 58 counties. And Bowman expects the bill to be further watered down by the general assembly, which is expected to act on the measure by November.

"It's kind of a hollow victory," Bowman said. "The fish is already available with a special permit in two of the three counties. The more-northern counties were where we really hoped they could be used."

With environmentalists pressuring golf courses to find ways to reduce or eliminate pesticide use, Bowman was disappointed that legislators weren't willing to accept the minimal

It's kind of a hollow victory. The fish is already available with a special permit in two of the three counties. The more-northern counties were where we really hoped they could be used.

— Peter Bowman

risk involved.

"They were afraid a fisherman might catch one and restock it into a river," he said. "Or a bird would snare one, try to carry it away and then accidentally drop it into the Sacramento."

"But even if that happened, that fertile fish would have to find a second fertile fish before it could mate. What are the odds of that ever happening?"

But Bowman knew his fish, er-r goose, was cooked when one legislator mentioned the movie *Jurassic Park*, which described how supposedly sterile, genetically engineered dinosaurs escaped from captivity and began to breed.

So, superintendents instead must continue to use pesticides and motor-driven weed harvesters to keep their ponds clean.

If a limited-use bill is finally passed, and there are no incidents of fish escapes the first few years, Bowman hopes the Legislature will eventually consider expanding the number of counties.

"Our worry now is that since the fish will probably be so rare [and thus valuable] one of the few courses that has the fish could sell some to one of the courses that shouldn't have it," said Bowman. He noted that overly restrictive legislation could establish a lucrative black market for the grass carp.

"I'd like to think all my fellow superintendents are honest. But you never know."

Schools the new arena for GCSAA's environmental movement

Continued from previous page

School Program operating in 1996. "It will grow slowly and superintendents will choose a variety of ways to get involved," Jones predicted.

GCSAA will financially support the program and promote its concept to its members, as well as have a hand in two training videos — one geared to superintendents and the other to teachers. The amount of financial support was not revealed.

"Critical from the teachers' perspective is realistic and justifiable educational goals.

Objectives must be stated that meet the teachers' curricula," Jones said. "The targeted grades are 3 through 6."

For the schools it will be a group effort, involving art, science, social studies, English and other teachers. "That's very important because it meets a broad range of education goals and lessens the burden on any one teacher," he added.

As in the South Florida and Chicago areas, where superintendents are already working with school systems, the program may include speakers, golf course tours,

building nature trails and implementing environmental measures similar to those in the golf course program. New York Audubon experts will perform a resource inventory for participating schools, similar to the surveys done for participating golf facilities.

"We couldn't be more excited about it," Jones said. "It will be an opportunity for our members to get involved in their children's schools, and hopefully educate children about the realities of golf courses. They are hearing *Ranger Rick* stories and the negative side and not getting the true picture."



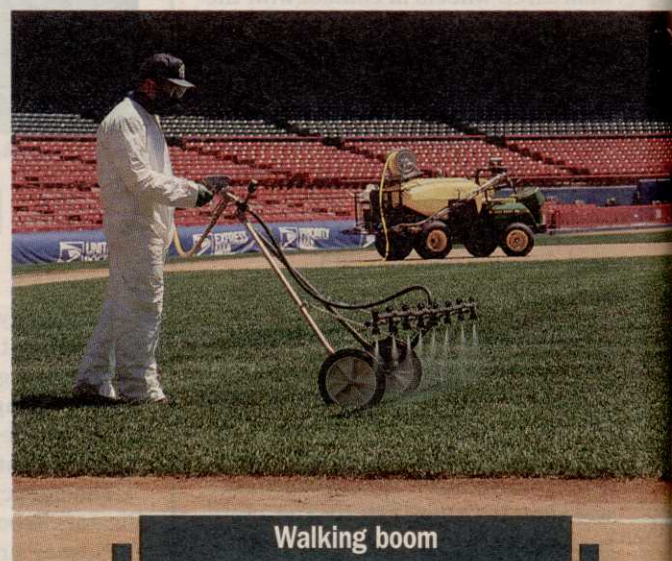
Pendulum spreader



Chemical injection system



Dump option



Walking boom

Now You Know Why 'UTILITY' Is Its MIDDLE NAME



RUTGERS' LUND RESIGNS

Daryl B. Lund, executive dean at Rutgers University's Cook College, has resigned, effective in August, to accept a position at Cornell's state College of Agriculture and Life Sciences in New York. Lund, from Wisconsin, played a large role in analyzing New Jersey's farming industry, chairing a committee that issued a long and detailed report this past winter. He was also a strong supporter of the Center for Interdisciplinary Studies in Turfgrass Science (CISTS). He was named associate director of the state's agricultural experiment station and chairman of the food science department in 1988.

Six earn environmental certifications

Donald F. Ewoldt Jr. is the first superintendent to earn certificates in two Golf Course Superintendents Association of America Environmental Management Program specializations at the same time. He completed course work for the Integrated Plant Management and the Underground Storage Tank specializations at the San Francisco Conference and Show.

Ewoldt is director of grounds/superintendent at Sand Creek Country Club, Chesterton, Ind. Members from Arizona, Florida and Ohio also completed the IPM specialization. They are J. Mark Black, assistant vice president of club operations at Bonita Bay Club, Bonita Springs, Fla.;

Ronald D. Powell, superintendent at Pinetop (Ariz.) Country Club; and Robert A. Radachi, superintendent of grounds at Stone Oak Country Club, Holland, Ohio.

Individuals who had completed one or more of the six EMP specializations by Feb. 1, 1995, received a special designation in their listing in the 1995 Who's Who in Golf Course Management membership directory.

To learn more about GCSAA's Environmental Management Program, see pages 13-14 of your 1994-95 GCSAA Professional Development Catalog, or call Technician Training Coordinator Lynn Paul at 913-832-4475.

EPA report upbeat

Continued from page 13

benefit the environment."

Among the report highlights:

- Air quality — The statewide average concentration of the criteria pollutants carbon monoxide and ozone have both decreased by 20 percent since 1982.

- Pesticides — Field worker illnesses related to pesticide exposure have dropped dramatically from 111 in 1987 to 12 in 1993.

- Hazardous waste — The volume of federal hazardous waste has decreased almost 40 percent since 1984.

- Solid waste — The Integrated Waste Management Board will attain its 1995 goal to reduce waste entering landfills by 25 percent this year.

- Water — The number of leaking USTs reported has decreased from 4,000 in 1990 to 1,000 in 1993, while the number of leaking tanks being cleaned up has increased from 2,500 in 1990 to more than 6,000 in 1994.

"Superintendents are doing a great job reducing water usage," said Peter Bowman, Merced Hills Golf Club superintendent and Calif. GCSA president.

"Manufacturers have responded to environmental concerns. You can't buy a new gas rental cart for a course after January 1 [which will reduce emissions]. Many courses have pulled out leaking USTs and are replacing them with above-ground tanks. Several courses have their own composting programs, which keeps clippings and debris out of landfills. And we've reduced pesticide usage dramatically by going to curative rather than preventive programs."

...

Pesticides were detected in 1.3 percent of 2,839 California monitoring wells, according to the state Department of Pesticide Regulation's (DPR) 1994 annual report on ground water testing for pesticides. Routine agricultural use was the reported source.

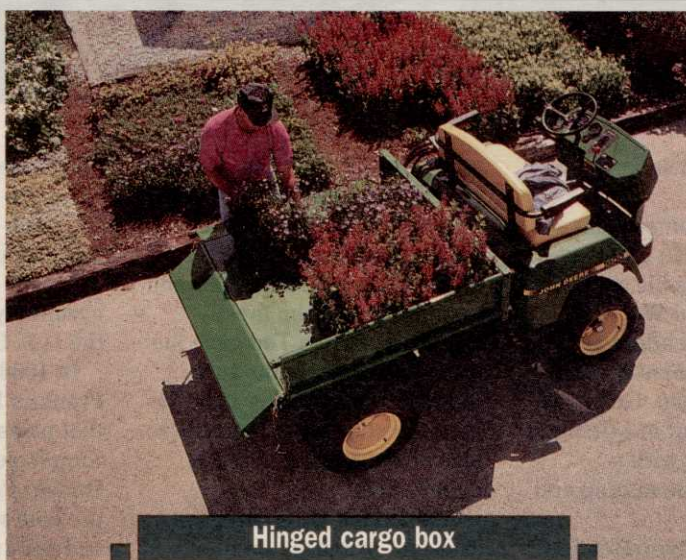
Researchers detected five herbicides and one herbicide breakdown product. They included atrazine, bromacil, diuron, prometon, simazine and deisopropyl-atrazine (the breakdown product). All were found in previous years.

DPR first attempts to verify detection by analyzing new samples from positive wells. Nearby wells are also tested. If contamination levels are unsafe, the state may take corrective action. Past actions have included revocation of permits to use pesticides, modification of use practices to prevent ground water contamination, or suspension of a chemical's registration in California.

The report summarizes 44 well-sampling surveys submitted between July 1993, through June 1994. The wells were located in 50 of the state's 58 counties. Pesticides were found in Colusa, San Joaquin, Solano, Yolo, Merced, Fresno, Glenn, Los Angeles, Riverside and Tulare counties.



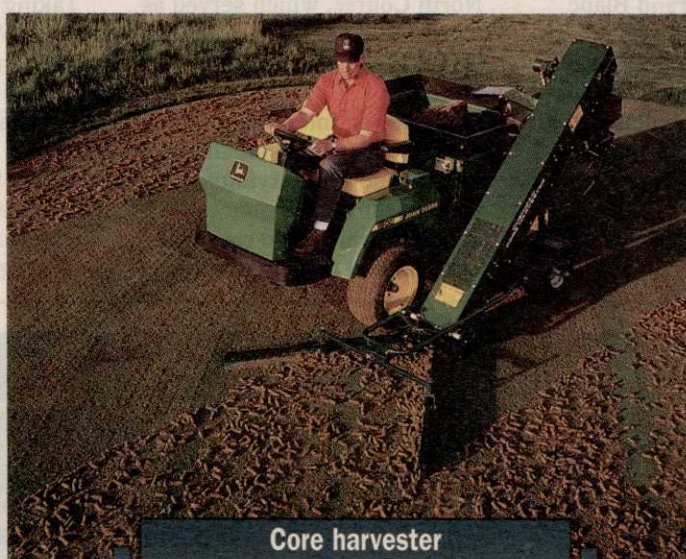
Belt top dresser



Hinged cargo box



21-foot sprayer



Core harvester

The 1800 Utility Vehicle truly lives up to its name — offering you tremendous work potential from one basic machine. Foot-controlled hydrostatic drive gives you an immediate advantage. Teamed with a gutsy liquid-cooled engine, this drive system delivers infinite speed control for more precise operation — up to 6 mph while working, 11 mph between jobs. Jobs that can range from spreading to spraying to hauling thanks to the 1800's full host of compatible attachments.

For the name and location of your nearest distributor, or free literature, call 800/503-3373. Or write John Deere, Department 956, Moline, Illinois 61265.



NOTHING RUNS LIKE A DEERE®



And the leader in the clubhouse is Iron Man Gray

Dedication of Franklin Hills superintendent is two-fold, extraordinary

By TERRY BUCHEN

FRANKLIN, Mich. — He handles a heavy work schedule as superintendent at Franklin Hills Golf Club here, serves on the Green Section Committee of the U.S. Golf Association, the board of the Michigan Turfgrass Foundation and the Green Committee for the Golf Association of Michigan (GAM), and is co-chairman of the Michigan Turfgrass Conference. Yet Tom Gray has earned the moniker "The Iron Man" among course superintendents, not for these duties, but because he has played more than 100 rounds of golf every year the past 15 years.

A member of *Golf Digest's* national ranking panel the past seven years, Gray's 138 rounds in 1994 were the most of any golfer with GAM.

By mid-June the 1.9 handicapper had played 51 rounds of golf this year. Some would say that is amazing for a person who lives in the Midwest. Gray merely shrugs and goes about his business, much like other Caro, Mich., natives, numbering about 50 people in the golf construction and turf industry.

Among his Caro compatriots are 21 people past and present who have worked for Wadsworth Golf Construction Co., course builder Paul Clute, course architect Tom Fazio



The 2nd hole at Tom Gray's Franklin Hills Golf Club.

and a half dozen superintendents.

While Gray comes from a community rich in golf tradition, he lays his accolades at the feet of Ted Woehrle, who as superintendent at Oakland Hills Country Club hired Gray in 1980. Gray was just two years out of Michigan State University with a bachelor's degree in crop and soil sciences.

Working as superintendent at the 27-hole Grand Blanc Golf Club while it was going through receivership, Gray was superintendent, mechanic and spraying technician all in one — surely setting the stage for his future Iron Man status.

"I spent nine years learning the trade from Ted and

sometimes I think that I should have stayed a couple of years longer and learned a little more," Gray said.

"He is tough, smart, fair and patient. One of the most important things Ted gave me was the history of the turf industry. His father was in the turf industry, and I was able to learn from 50-plus years of experience."

At Oakland Hills, Gray was assistant primarily on the North Course, which served as a parking lot of the 1981 U.S. Senior Open and 1985 U.S. Open.

"It was an interesting experience trying to maintain a golf course while trying to prevent the least amount of damage from 50,000 cars that were parked throughout the

tournament weeks," Gray said. "The two USGA events were a lot of fun and a lot of work, but it is a grand experience. I think everyone who is into agronomy should go through the U.S. Open."

In 1988 Gray was hired at Franklin Hills, a private club that plays fewer than 20,000 rounds per year. Designed by Donald Ross and built in 1927, the course features long par-3s and par-4s and short par-5s.

Taking the lead of his mentor, Woehrle, Gray has tutored many on his 18-hole track. He has overseen eight assistants and 10 turfgrass students. He gives high marks to current assistants Tom Lawrence, Brett Berry, Darrick Robbins and Jim Johnson, as well as "great mechanics and a



very supportive crew that has made me look pretty good over the past seven years."

The Franklin Hills membership has been very supportive, "which makes it a fun place to work," he added. "The manager, Michael Haberlein, the golf pro, Bill Baldwin, and the superintendent all work together. It's kind of incredible."

Last year, Gray's grounds crew proved its dedication elsewhere. They helped with the turf at the Pontiac Silverdome during the World Cup soccer matches. They worked eight hours at the golf course, then labored at the Silverdome until 11:30 p.m. every day.

"Dr. [John] 'Trey' Rogers was a taskmaster in trying to make the field look perfect," Gray said. "The crew crawled on their hands and knees picking up every little piece of grass that wasn't attached [to the sod]. All of the World Cup games were sold out, so there were only a few tickets for the crew. Most of our crew donated their time."

The Iron Man credited two other superintendents besides Woehrle for giving him "enough experience in turf to survive" — Ron Foote at Forest Akers Golf Club and Ron Brandon when he was at Warwick Hills in Grand Blanc.

AquaGro® DILUTE 'n SHOOT™ HOSE-END PROPORTIONER™

The No Water-In Alternative For Applying AquaGro®•L Safely, Accurately And Conveniently.

Now you can apply AquaGro®•L concentrate to problem areas at maximum strength without a spray rig and without watering it in. Simply attach Dilute 'n Shoot™ to the end of a hose and get the penetrating power of AquaGro®•L, the most widely used soil wetting agent, whenever and wherever you need it.

Safe & Accurate

The heart of the Dilute 'n Shoot is its precision tooled Venturi siphon, which accurately meters AquaGro®•L and mixes it with the proper amount of water to ensure turf safety — even during the most stressful weather. The Dilute 'n Shoot, supplied with a 5 quart reusable bottle, allows you to cover up to 20,000 sq. ft. at a rate of 8 ounces per 1000 sq. ft., without refilling.

Dilute 'n Shoot and 5 quart AquaGro®•L refills are available from your Aquatrols Turf Products Distributor. Call for a FREE product information sheet.



AQUATROLS
Making Water Work Efficiently

5 North Olney Ave., Cherry Hill, NJ USA 08003
800-257-7797 from anywhere in the U.S. and Canada
609-751-0309 • Fax: 609-751-3859

Maine Hall inducts Ruby

SOUTH PORTLAND Maine — The late Ernest E. (Pete) Ruby Jr., who logged 53 years of service at Portland Country Club in Falmouth Foreside, will be inducted into the Maine Golf Hall of Fame on Aug. 18 at Sables Oaks Golf Club here.

Ruby, who died in 1986, began at PCC as a laborer in 1921. He was superintendent from 1941 to 1969, and stayed three more seasons as consultant as son Lloyd ascended to the top post.

Longtime PCC pro Hap Malia recalls Ruby as a mechanical genius who saved the club untold thousands of dollars. "Before there was any aerator around to give greens breathing opportunity, Pete made his own by welding teeth from a rake onto a roller. He could grow grass anywhere," he said.

Hailing Ruby's career as unique in the country in 1971, then-Golf Course Superintendents Association of America President Richard Blake noted, "I've never heard of another man staying with a course that long and doing such a great job. I doubt there will be his equal in the future."



Pete Ruby

USGA seeking green research

Continued from page 13

developed for these purposes. For example, a wide array of organic and inorganic soil amendments has been introduced; new construction methods have been proposed; more golf courses use recycled or alternative water sources for irrigation; and construction costs have risen dramatically, threatening to limit the growth of the game.

The Turfgrass Research Committee has identified the goal of this new research effort: Identify the best combinations of construction, grow-in procedures, and post-construction maintenance practices that prevent long-term problems, reduce environmental impacts, and produce high-quality playing surfaces.

Preference will be given to research studies addressing issues related to hydrology and microbiology of greens built to USGA recommendations and to alternative methods. Projects incorporating disciplines such as soil physics, soil chemistry, soil microbiology, turfgrass physiology, and turfgrass pathology will be necessary to achieve the research goals.

These research studies will also give due consideration to environmental issues, and to the use of alternative water sources for golf course irrigation. Organic and inorganic soil amendments also need evaluation to determine, on the basis of sound scientific information, how they fit into construction methods.

Providing a quality putting surface is both an art and a science. A critical period in the life of a new putting green is from the time of seeding and springing to opening day. As the saying goes, time is money and, unfortunately, this time frame is often shortened and the turf growth accelerated to meet the deadline of opening day. This research will help define grow-in guidelines such as evaluating the impact of accelerated grow-in and possibly develop criteria for determining when a green is ready for play.

Proper care after the green is opened for play helps provide a quality putting surface. Potential research will investigate the effects of construction and cultural practices on the long-term performance of the green and the changes in the rootzone properties of a green over time.

All inquiries and questions about these research pre-proposals should be addressed to Dr. Michael P. Kenna, Director of USGA Green Section Research. Dr. Kenna may be contacted at P.O. Box 2227, Stillwater, OK 74076; or by telephone at 405-743-3900 or facsimile 405-743-3920.

Kimberly Erusha, PhD., is director of education and manager of technical communications at the United States Golf Association Green Section in Far Hills, N.J.

Luikens leaves Woodlands, forms comprehensive golf service

HOUSTON — Richard Luikens, former director of golf course maintenance for The Woodlands Resort and Country Club here, has formed Richard Luikens Golf Services (RLGS).

RLGS was formed to provide sound, simple agronomic advice for successful and affordable golf course maintenance; to coordinate golf course construction and renovation projects; and to assist golf product manufacturers in introducing new products into the golf course industry, accord-

ing to Luikens.

During his 20 years in golf, Luikens has been involved with both privately and corporately owned facilities, maintaining and building courses for country club members, resort guests, daily-fee players, and the most demanding golfers of all — PGA Tour players.

While employed at The Woodlands, 54 holes of golf were built, including the TPC at The Woodlands (site of the Shell Houston Open for the past 11 years) and

the Palmer and North courses.

All three have been ranked in the state's top 50.

Previously, Luikens coordinated construction of Lochinvar Golf Club, a Jack Nicklaus-designed course here.

He has also been involved in developing several golf course products.

Chipco 26019, a turfgrass fungicide manufactured by Rhone-Poulenc Ag Co., and Barricade, a turfgrass pre-

emergent herbicide produced by Sandoz Agro. Inc., were tested before their release extensively on golf turf areas under Luikens' supervision.

Prototype work on one of the initial lightweight fairway mowing tractors, the Jacobsen LF-100, also took place on turfgrass facilities under his direction.

Luikens also assisted developers of the Dura-Rake and the U.S. Golf Hole Target.

Luikens is available at 713-364-6255 or 409-539-2947.

**You need
hydrostatic drive,
reliable performance,
low cost and the
best surface finish of all.**

Sand Star Hydro II



TWIN - PHASE RAKING SYSTEM

SUPERIOR SURFACE FINISH

Meet our new Sand Star II Bunker Rake... with two-wheel hydrostatic drive that really performs... power-to-spare from its 16 hp Vanguard engine... superior raking system that delivers ultimate playability... all at a very special price. See it - it outshines the others.

ALWAYS OUT FRONT
SMITHCO
WAYNE, PENNSYLVANIA 19087

CIRCLE #112

Wetting agents can help re-establish putting greens

By DAVE COUSART

ATHENS, Ga. — In September 1986, I had the opportunity to return to Athens to assume the duties of golf course superintendent and golf professional at the University of Georgia Golf Course. It was a move from Bermudagrass greens back to bentgrass. This opportunity has been quite a challenge.

Built in 1968, the UGA Golf Course is a Robert Trent Jones design offering a great challenge to any level of player. The greens were rebuilt between 1989 and 1990. We rebuilt nine greens at a time to U.S. Golf Association specifications. One of the main reasons was to increase the percolation (perc) rates to levels necessary for producing quality bentgrass putting surfaces. On a public course averaging 50,000 rounds a year, this was an absolute necessity. However, my perc rates are still sub-par four years after rebuilding.

Working with Tifton Physical Soil Testing Laboratory, samples show a perc range of 4 to 6 inches per hour. My observations have been that, despite a low percolation, we still have isolated hot spots on all humps, crowns, and tiers throughout the course.

In spring 1990, I knew I was going to have problems with the new greens. The use of a wetting agent was suggested. My experience with these products had not been good. I've had problems with turf burn associated with wetting agent applications. Naturally, I was skeptical. I decided to experiment with Montco Product's Surfside 37 wetting agent.

I set up small plots on my bentgrass nursery in June 1990. The wetting agent was applied on a clear afternoon when temperatures exceeded 85 degrees. Treatments consisted of 8, 16, 32 and 128 ounces per 1,000 square feet, and were not watered in after application. In fact, all irrigation was withheld until the next afternoon. This was not the recommended procedure for use, but I wanted to put the product through the wringer on the nursery before taking it to the greens.

The next afternoon I saw no phytotoxicity. The 128-ounce rate had no burn despite not watering in. Still full of reservations, I was convinced enough to treat my high spots and crowns with a backpack sprayer at 16 ounces per 1,000

square feet. We applied the wetting agent and hand watered these areas immediately after application as recommended on the label. I saw improvement overnight.

After this success with the isolated dry spots, I decided to treat entire green complexes. I assumed if a wetting agent could safely improve the water content on elevated areas, it might help reduce the need to syringe daily or nightly irrigation.

All assumptions have proved correct. Though I have not replicated with different plots, the results are consistent across the 18 greens and practice areas.

My program begins in mid-March with an application of 16 ounces per 1,000 square feet on all green complexes and 32 ounces per 1,000 square feet on all humps and high spots. This initial application is done immediately after spring aerification. Next, an applica-

tion of 8 ounces per 1,000 square feet is made every three to four weeks from April through mid-September. The final September application is made when core aerification is completed. During the year, when fungicides or fertilizers are applied, a 1-ounce-per-1,000-square-foot rate is applied.

I saved more than 90 percent of my syringe labor budget as a result of these methods. The need for afternoon watering



ON THE GREEN

was basically eliminated. During summer 1993 we had to syringe less than 10 times in the afternoon. During summer 1994 we only had to syringe two afternoons.

Continued on next page

WHEN WE
INTRODUCED
OUR NEW CAR,
WE EXPECTED IT
TO INVITE
COMPARISON.

WE'RE
WAITING.

COULD BE, WE'LL BE WAITING FOR QUITE SOME TIME. After all, a golf car as luxurious, as well engineered, as the new Yamaha Ultima™ simply defies comparison.

But, then, that's the way we designed it. From the ground up, we painstakingly analyzed and reinvented every aspect of the golf car. Resulting in a car whose very heart and soul were created for no other purpose than to achieve the

ultimate in performance.

We started with the details, like a wider seat for greater comfort. Plus coil springs and an independent front suspension for a smoother, more controlled ride.

Then we wrapped these refinements in our revolutionary new Sentry™ Body Protection System. With a totally new body material, for the durability you need in the golfing



Experiment over: Loxahatchee switches to Bermuda

By PETER BLAIS

JUPITER, Fla. — After 11 years of pushing the bentgrass envelope in South Florida, The Loxahatchee Club began converting from bentgrass to Bermudagrass greens in mid-May.

"It's been an issue for at least the six years I've been here. It's just escalated recently," said Phil Shoemaker, head superintendent at what is believed to be the southernmost course with bentgrass greens in the Sun-

shine State.

Putting surfaces at the exclusive, Jack Nicklaus-designed layout were seeded with Penncross bentgrass prior to opening in 1984.

Hot, humid summer conditions caused the greens to thin to the point that they were not very playable, Shoemaker said. Even though the greens bulked back up by winter, when most of the layout's 17,000 annual rounds are played, enough members complained that the decision was fi-

See related stories,
pages 20-21

nally made to switch to Bermuda.

"With the new mowers and cultural practices, you can get Bermudagrass greens rolling real close to bent, although not quite," Shoemaker said.

The switch was a contentious matter among members, some of whom had bought property around the course because of the bentgrass greens, the superin-

tendent said. Shoemaker believes the switch to Tifdwarf greens is for the better, although it won't eliminate every turf problem at Loxahatchee.

"Now you have to worry about overseeding with ryegrass, the transition period from Bermuda to rye and the effects of a cold winter," Shoemaker said. "But Tifdwarf is the standard here and for now, it's for the best."

In addition to returfing the greens, Shoemaker plans on replacing the Tifway II fairways

and tees with a hardier Tifway 419. Quality Grassing and Services Inc. of Lithia will do the grassing work. Nicklaus will oversee the project while redesigning the 8th and 18th holes for safety and real-estate reasons.

Plans were to fumigate greens, tees and three problem fairways in mid-to-late May, Shoemaker said. The entire course will receive two treatments of Roundup. Grassing will start by mid-June and should be completed by mid-July. That will give the course four months to grow in before its scheduled Nov. 15 reopening.

"It's kind of a tight schedule, but we can meet it if we're aggressive," the superintendent said. "Our biggest concern is getting a big storm or a hurricane. Otherwise we're very comfortable with that schedule."

Admiral's Cove Golf Course in Jupiter and The Reserve Golf & Tennis Club in Port St. Lucie converted from bentgrass to Bermudagrass greens in recent years, Shoemaker said. Loxahatchee was believed to be the southernmost club in Florida with bentgrass greens. That honor now passes to The Plantation at Ponte Vedra.

"It thins out a little in the summertime," said Jeremy MacDonald, an assistant pro at The Plantation. "But we're quite a bit farther north and we have an ocean breeze here that helps cool things off. We use fans, too, to help get us through the summer."

Asked if he thought Loxahatchee's bentgrass experience was a failure, Shoemaker responded: "Not at all. The greens lasted 10 years, which isn't bad. Those who favor bentgrass probably still do and those who like Bermudagrass probably feel the same. If a good strain of bentgrass comes along that can tolerate the conditions, it would probably be worth looking at. We have some turf plots going here with Penn State and Texas A&M universities that are showing some interesting things."

Wetting agents

Continued from previous page

The use of a wetting agent has helped eliminate hard-to-wet areas. By treating the entire greens complex, it seems water movement through the soil has improved. This has decreased the need for daily irrigation and nearly eliminates the need to syringe during the day. We have saved our operation more than \$7,000 per year in labor costs during the summers of 1993 and 1994.

The bottom line in any golf operation is to provide the best facility for the least amount of money. And, in most cases, the operation must show a profit. The wetting agent we used has definitely contributed to the vast improvement of the University of Georgia Golf Course the last few years. Just ask the golfers.



environment — and in the car barn. And with our exclusive new bumpers, to withstand repeated impacts of up to 5 MPH.

When off-the-shelf was under our standards, we created our own components. Like an infinitely variable speed controller in the Ultima Electric, for the ultimate in smooth starts and acceleration. And our own Yamaha gas engine in the Ultima Gas, for the most powerful, most

efficient, yet quietest performance in the industry.

Of course, there's more. But isn't this enough to invite comparison on your home course?

Call us today for a free demonstration. 1-800-843-3354, ext.U32. At the same time, include our competitors. Because we think you'll find that the car which invites comparison truly has none.

YAMAHA USA
Nothing compares.™

New bentgrasses stir superlatives from breeders

By MARK LESLIE

Are the new bentgrasses coming to market this year almost too good to be true? Plant breeders who have discovered the germplasm, developed it, and nurtured it through the development process, believe so. Yet, they think even greater heights can be reached.

"I'm very excited," said Lofts Seed Director of Research Dr. Rich Hurley, whose new L-93 along with Crenshaw and Southshore bentgrass varieties all placed in the top 10 in the U.S. Department of Agriculture's National Turfgrass Evaluation Program (NTEP) results, released in June.

"I continue to be real optimistic about the direction things are going," said Dr. Milt Engelke of Texas A&M University. "The industry has got some really good choices now. Some of the new varieties are much stronger from a biological standpoint, and have stronger genetics. And I don't think that's going to stop. We will continue to add more and more physiological characteristics. We will start stacking them. We may find certain grasses that rise to the top for certain areas. They may be more niche-type grasses."

"We are starting to locate grasses with Multiple Physiological Characters, what I call MPCs. We want to bring together the heat tolerance, seed-production capability, high qualities, disease- and insect-resistance. We have identified the genetics for these. We are seeing this with new germplasms and genetics."

The new bentgrass cultivars, by and large, are superior in density and featuring habits more upright for a truer putting quality, said Dr. Joe Duich, who has four cultivars in the NTEP top 10 and whose Penncross, Pennlinks and Penneagle varieties have been the industry standard-bearers for 30 years.

"These newer generations of bentgrasses require different management," said Seed Research of Oregon Technical Agronomist Skip Lynch. "They are bred to be less maintenance-intensive — less water, less pesticides, less mechanical manipulation of the grass."

Once dominated by Tee-2-Green and Penn State University research, the field of bentgrass research is wider now. Seed Research's SR1020 and Providence bentgrasses "stuck a crowbar in the market and opened it up" in 1987, Lynch said. "Now 11 seed companies, plus two universities, are entering [NTEP]... We have 28 [bentgrass] entries just for greens. A few years back, less than a half dozen were available — creepers or otherwise."

Turf Merchants Inc. Vice President Steve Tubbs added: "The top 10 or 12 varieties didn't even exist five years ago."

"We've taken a cool-season grass and moved its areas of use 100 to 150 miles south of where it was 20 years ago," said Hurley. "If you could comfortably grow bents in the mid-portion of the transition zone, now you can grow them in the southern part of the transition zone and maybe a little farther south. But you still can't grow them in Florida, where the [summer] season is so long. Certainly, there are better bents for central Georgia, Alabama, Mississippi and Texas."

Engelke even points to success just north of Houston, where a golf course still reports "gorgeous" bentgrass greens four years after opening. "The bent is doing fantastically well and that is a very humid environment," Engelke said.

So what happens to the Penn series of grasses that have dominated the golf industry for years?

"If somebody could see Penncross with any of the new material, I think they would be shocked," Hurley said. "There is no reason to use Penncross for putting greens. It makes no sense at all. People say they like Penncross for its aggressiveness. But all the top eight or so are more aggressive than Penncross. Penncross is prone to spike marks, it's open and coarse, it's grainy. It doesn't have as good heat tolerance as other varieties. But yet a lot of people would dispute me and challenge me."

Added Lynch: "As the newer varieties come out and show better disease resistance, why plant something you know in advance is going to cause a headache?"

"We won't be putting Penncross on greens anymore," Engelke said flatly. "You have much better choices to work with."

Duich himself is excited by the improvements in the new grasses, while putting turfgrass maintenance in perspective. "Some of the best greens I've ever seen are Penncross. And some of the worst are Penncross. A lot depends on soil conditions and management."

While Duich's PSU A-4, A-1, G-6 and G-2

Continued on next page

Buyers are guinea pigs no longer

By MARK LESLIE

As people in the golf industry become accustomed to giant advances in turfgrasses, they are increasingly apt to take the plunge and buy them, according to experts in the seed world. That may not be as true with golf course architects as it is with superintendents.

While people are usually most reluctant to buy new bentgrasses, especially on putting greens, according to Dr. Joe Duich, characteristically conservative superintendents are reportedly acting as pioneers for newly unveiled grasses.

"Absolutely," responded Turf Merchants Inc. Vice President Steve Tubbs when asked if people are ready to take the leap.

The idea of superintendents holding back from purchasing new grasses is "changing and changing radically," agreed Skip Lynch, technical agronomist with Seed Research of Oregon. "[Reluctance] is not nearly as predominant as it was, say, three years ago. I see guys running out to buy new varieties they have never seen before, simply because they want to see something new."

"Sometimes you find yourself on the other side of the argument, asking, 'Where has it been used?' I encourage new grasses, but don't make that huge leap of faith without having at least seen the material first."


Concerning course architects, Dr. Rich Hurley of Lofts Seed said: "Many are reluctant to use newer varieties. They don't want to be a guinea pig, they say. But they're not. The parent material [for new varieties] came off golf courses."

RegalFate™

THE FATAL ATTRACTION FOR INSECTS!



RegalFate™ is a granular insecticide with the active ingredient impregnated on a 100% edible organic carrier and then baited with an attractant to lure insects. And lure it does. Mole crickets, grubs, sod webworms and a host of other pesky insects are drawn to **RegalFate™** and then make the fatal mistake of eating it.



SOD WEBWORM

RegalFate™ is many times more effective because the insect ingests it. Control by contact or vapor action is only partially as effective as the ingested toxicant. Spread the dry granular **RegalFate™** for superior results.



Regal Chemical Company
P.O. BOX 900 / ALPHARETTA, GA 30239
PHONE 404-475-4837 / 800-621-5208



Crown & Geyser - 2 HP



Standard High Volume Flow (HVF) - 1 HP



Plume - 5 HP

BEAUTIFUL SOLUTION NUMBER 6.



- Interchangeable Nozzles
- 120 Volt Underwater Lighting
- Patented, High-Efficiency Stainless Steel Propeller Diffuser System
- Industry's First and Only 3 Year Motor Warranty
- No Seal or Internal Maintenance for 3 Years Guaranteed
- 1/2 to 10 HP Stainless Steel Housing with the Most Energy Efficient Motor Available
- Underwater Cable Disconnect

BEAUTY BENEATH THE SURFACE

Aqua Master is the industry's only manufacturer of UL LISTED aerating fountain pump systems. Take a closer look at our beautiful solution to your water quality problems.



Superior Aquatic Management Systems
16024 CTH X, Kiel, WI 53042
PH. 414 693-3121 FAX 414 693-3245

National Bentgrass Putting Green Test 1st-year Results

Name	AZ1	GA1	GA2	IA1	IL1	IL2	KS1	KY1	KY2	MA1	MI1	MN1	MO1	MO2	NH1	NJ1	OK1	PA1	RI1	SC1	TX1	VA1	WA1	WA3	WI1	WI2	Mean
*A-4	7.2	4.0	2.1	6.7	5.5	7.1	6.9	7.7	7.6	6.1	6.0	7.8	7.3	7.3	6.7	6.0	6.6	6.6	6.1	5.2	7.1	6.6	6.7	6.3	7.4	7.8	6.5
*L-93	6.6	4.3	1.9	6.6	5.3	6.3	6.9	8.0	7.4	7.5	6.3	7.3	6.9	6.9	5.9	7.3	6.4	7.4	6.2	5.1	6.4	6.1	6.2	5.7	7.2	7.3	6.4
*Providence	6.2	4.2	2.4	6.5	5.9	6.5	6.9	7.4	7.5	7.3	5.8	6.9	7.6	7.5	7.1	6.2	5.9	6.8	6.0	4.3	7.1	6.0	6.4	5.8	7.3	7.2	6.3
*A-1	6.1	3.9	2.2	6.1	5.3	5.7	6.0	8.1	7.4	7.3	5.2	7.4	6.6	7.2	5.2	7.2	6.3	7.3	5.8	5.6	6.7	6.4	6.5	6.2	7.6	7.4	6.3
*Crenshaw	6.4	3.9	2.3	5.8	5.5	6.7	7.5	7.2	7.4	7.0	5.8	6.9	6.9	7.4	6.2	6.5	6.1	6.1	5.9	5.0	7.1	6.2	6.7	4.9	6.9	7.1	6.2
*Cato	7.3	4.1	2.0	6.6	5.1	5.3	6.7	8.0	6.8	7.4	5.8	7.2	7.0	7.0	6.7	5.7	6.0	6.8	6.5	5.0	6.0	6.1	6.0	6.0	7.1	7.3	6.2
*G-6	6.2	4.1	2.2	6.3	4.8	5.5	5.3	7.7	6.8	7.5	5.5	7.5	6.3	7.0	6.4	6.6	6.7	6.5	5.8	5.1	6.3	6.2	6.1	6.0	7.3	7.3	6.1
*G-2	6.2	3.9	2.1	5.4	4.9	5.7	5.4	7.8	7.1	6.5	5.8	7.8	6.9	7.2	5.9	6.8	6.1	6.7	6.1	5.1	5.9	6.1	6.5	5.9	7.2	7.5	6.1
*Southshore	6.0	4.5	1.9	6.2	4.9	6.5	6.6	7.1	6.5	6.1	5.5	7.5	7.1	7.2	6.4	5.9	5.7	6.7	6.2	5.1	6.8	5.8	6.3	5.5	7.2	6.6	6.1
SYN 92-1	6.1	3.9	2.2	5.8	5.1	6.5	7.0	7.1	7.3	6.6	5.2	7.4	7.1	7.3	5.3	5.8	5.9	6.1	5.9	4.4	6.5	6.1	6.1	6.2	7.0	6.8	6.0
SYN 92-5	5.7	3.9	1.9	5.8	5.1	7.1	5.6	7.1	6.6	6.4	5.5	6.5	6.8	7.1	5.1	6.2	5.9	6.3	5.4	4.4	6.9	6.5	6.5	6.4	7.1	7.2	6.0
SYN 92-2	5.7	4.4	2.3	5.3	4.5	7.3	6.5	6.7	7.2	6.0	5.3	7.3	6.9	7.1	5.8	6.0	5.5	5.7	5.7	4.4	6.5	6.3	5.9	5.7	6.8	6.8	5.9
*SR 1020	5.9	4.3	2.4	5.6	4.8	5.7	6.1	7.1	6.8	5.9	5.5	7.1	6.8	7.0	6.4	5.1	5.8	5.8	6.1	4.6	7.2	5.6	6.3	5.5	7.0	6.9	5.9
*Pennlinks	5.0	4.3	2.5	5.5	5.0	6.4	6.5	7.7	6.5	5.8	5.2	6.8	7.3	7.4	6.0	5.4	5.3	6.2	5.3	4.7	6.1	5.5	6.3	5.2	6.8	7.0	5.8
*Regent	5.4	4.3	1.8	5.7	4.7	6.0	6.5	7.1	6.7	6.2	5.2	7.0	6.8	7.3	6.2	5.8	5.4	5.6	5.4	4.3	7.2	5.4	6.1	5.2	7.1	6.4	5.8
BAR WS 42101	5.9	3.9	1.7	5.3	4.6	5.5	6.5	7.4	7.2	5.7	5.3	7.4	6.8	7.0	5.9	4.8	5.5	5.6	5.6	3.9	6.0	5.9	6.4	5.5	7.1	7.3	5.8
MSUEB	4.8	4.1	2.2	5.4	4.7	6.7	6.0	7.2	7.2	5.6	5.2	6.6	7.5	7.2	5.3	5.8	5.3	6.3	5.2	5.0	5.7	5.3	6.1	4.7	6.9	6.7	5.7
ISI-AP-89150	5.0	3.9	1.7	5.5	4.8	5.0	5.9	7.3	6.1	6.6	5.2	7.2	7.2	7.2	5.6	5.3	5.3	6.3	5.2	4.0	6.5	5.5	6.5	5.7	7.1	6.5	5.7
*18th Green	5.4	3.7	1.7	5.2	4.1	4.7	5.5	6.8	7.1	6.3	5.3	7.5	7.1	7.3	7.2	5.2	5.7	5.9	4.9	4.0	6.1	5.9	6.0	4.9	6.5	7.0	5.7
*Lopez	4.8	3.9	3.2	5.5	4.3	6.3	5.9	7.7	6.0	6.1	5.2	6.8	7.2	7.1	5.6	5.8	5.1	5.6	5.2	3.4	6.4	5.4	6.1	4.8	6.8	6.7	5.6
*Pro/Cup	5.0	4.1	1.7	4.8	4.5	5.1	6.6	7.3	7.2	5.7	4.8	6.7	6.6	7.1	6.0	5.8	5.3	5.5	5.6	3.6	6.5	5.5	6.1	5.3	6.8	6.6	5.6
DG-P	5.0	3.9	1.8	4.7	4.2	5.7	5.7	7.5	6.0	6.1	5.2	7.0	6.9	7.1	5.8	5.3	5.3	6.2	4.9	3.8	6.5	5.3	5.6	5.2	7.0	6.6	5.6
*Penncross	4.9	4.3	2.7	5.3	4.7	6.1	5.9	7.0	7.3	5.2	5.2	6.8	7.0	7.1	6.2	4.7	4.9	5.3	4.8	3.5	7.0	5.2	6.2	4.8	6.2	6.1	5.5
*Truline	4.8	3.8	2.2	5.2	4.3	4.0	6.4	7.3	6.9	5.5	4.3	7.0	7.4	7.1	6.3	5.9	5.1	5.4	5.6	3.4	6.1	5.4	6.0	4.8	7.1	6.6	5.5
*SYN-1-88	4.8	4.6	2.0	4.3	4.8	5.1	5.9	7.1	6.7	4.9	4.7	6.8	6.7	7.1	5.0	5.3	5.3	4.5	4.8	3.8	6.5	5.3	6.0	4.5	6.6	6.3	5.4
*Tendenz	2.5	3.9	4.4	3.4	3.3	5.3	4.3	5.8	5.1	5.0	4.2	6.5	6.3	6.8	5.9	4.2	3.7	5.1	3.8	3.1	6.1	5.7	5.1	4.4	5.9	5.8	4.8
BAR AS 492	2.4	4.8	5.2	3.6	3.1	4.1	5.6	4.6	4.6	3.8	3.5	6.3	6.0	7.0	2.7	3.6	3.6	4.5	5.0	2.5	5.2	5.1	4.5	4.2	6.8	6.5	4.6
*Seaside	3.7	4.3	3.3	3.5	3.9	3.9	4.9	6.3	5.8	3.8	4.0	6.4	6.0	7.0	3.6	3.0	4.0	3.3	4.8	2.8	6.3	3.8	5.1	3.1	5.6	5.6	4.5
LSD Value	0.7	0.7	0.7	0.9	0.6	1.8	1.4	0.5	0.6	0.9	0.8	0.8	0.7	0.6	0.4	0.6	0.4	0.7	0.9	0.8	1.2	0.5	0.6	0.4	0.5	0.5	0.2

* — Commercially available in the United States in 1995.

Blending cultivars the answer for some

By MARK LESLIE

Turfgrass blends. For some golf course superintendents, they are the answer to the equation as to the best turfgrass to buy.

Providence and SR 1020 equal Dominant. Cato and Crenshaw equal CNC.

The idea is simple. Seed your favorite grass along with another that has characteristics lacking in your favored turf. For instance, Crenshaw is susceptible to dollar spot. Cato is not. Mixing the two results in an excellent blend.

The demand certainly exists. "I get 20 calls a week for Crenshaw and Cato, and I don't even sell it," said Steve Tubbs, vice president of Turf Merchants Inc. "I know there is demand that is not being met. [Blends] are real and they are making their mark, especially under the banner of being heat-tolerant."

With a rash of new, high-quality grasses entering the marketplace this fall, more possibilities exist for blends. The most pro-

nounced appears to be Lofts' Crenshaw and L-93. Pickseed West owns Cato, making the Crenshaw-Cato mix a bit of a problem. The appearance of L-93 as a top-rated cultivar solves that problem.

Indeed, Lofts research director Dr. Rich Hurley said: "We'd actually like a three-way blend: L-93, Crenshaw and Southshore. Crenshaw-Southshore has been popular."

Dr. Milt Engelke of Texas A&M University added that superintendents can take advantage of some of the aggressive new grasses "that tend to thatch but have tremendous traffic tolerance... If the course will run only 10,000 to 20,000 rounds, they need a light Crenshaw in the blend or to do heavy verticutting. If a super understands a grass's strengths and weaknesses and manages toward them, the management doesn't have to preclude its use. PSU A1 and A4 and the PSU G2 and G6 produce heavy thatch. But you can manage for that."

The following are conditions at the sites of the bentgrass national tests, including, in order, location, soil texture, soil pH, nitrogen applied (in pounds per 1,000 square feet), mowing height (in inches) and irrigation practiced:

- AZ1 — Tucson, Ariz., sand, 7.6-8.5, 3.1-4.0, 0.1575, to prevent stress.
- CO1 — Fort Collins, Colo., sandm, 7.1-7.5, 4.1-5.0, 0.0-0.5, to prevent stress.
- GA1 — Griffin, Ga. (high soil pH), sandy clay loam, 5.6-6.0, 2.1-3.0, 0.6, to prevent stress.
- GA2 — Griffin, Ga. (low soil pH), sandy clay loam, 3.6-4.5, 2.1-3.0, 1.0, no irrigation.
- IA1 — Ames, Iowa, silty clay loam, 7.1-7.5, 3.1-4.0, 0.5, to prevent stress.
- IL1 — Urbana, Ill., silt loam and silt, N/A, 2.1-3.0, 0.0-0.5, to prevent stress.
- IL2 — Carbondale, Ill., silty clay loam, 6.1-6.5, 3.1-4.0, 0.0-0.5, to prevent stress.
- KS1 — Manhattan, Kan., sand, 7.6-8.5, 3.1-4.0, 0.1562, to prevent stress.
- KY1 — Lexington, Ky., sand, N/A, 4.1-5.0, 0.1875, to prevent stress.
- KY2 — Lexington (Griffin Gate GC), sand, N/A, 4.1-5.0, 0.1875, to prevent stress.
- MA1 — Amherst, Mass., sandy loam, 6.1-6.5, 3.1-4.0, 0.0-0.5, to prevent stress.
- MI1 — East Lansing, Mich., loamy sand, 6.6-7.0, 8.1+, 0.1875, to prevent stress.
- MN1 — St. Paul, Minn., silty clay loam, 7.5, 2.1-3.0, 0.0-0.5, to prevent stress.
- MO1 — Columbia (traffic), Mo., sand, 7.1-7.5, 5.1-6.0, 0.1562, to prevent stress.
- MO2 — Columbia, Mo., (no traffic), silt loam and silt, 6.1-6.5, 1.1-2.0, 0.1562, to prevent stress.
- NH1 — Durham, N.H., sandy loam, 5.6-6.0, 3.1-4.0, 0.0-0.5, to prevent stress.
- NJ1 — North Brunswick, N.J., sandy loam, 6.1-6.5, 4.1-5.0, 0.25, to prevent stress.
- OK1 — Stillwater, Okla., sand, 7.1-7.5, 4.1-5.0, 0.1875, to prevent stress.
- PA1 — University Park, Pa., loamy sand, 6.1-6.5, 2.1-3.0, 0.0-0.5, to prevent stress.
- RI1 — Kingston, R.I., silt loam and silt, 6.6-7.0, 4.1-5.0, 0.1875, to prevent stress.
- SC1 — Florence, S.C., sandy loam, 6.1-6.5, 5.1-6.0, 0.25, to prevent stress.
- TX1 — Dallas, Texas, loamy sand, 6.1-6.5, 7.1-8.0, 0.15-0.25, to prevent stress.
- VA1 — Blacksburg, Va., sand, 5.6-6.0, 5.1-6.0, 0.0-0.5, to prevent dormancy.
- WA1 — Pullman, Wash., silt loam and silt, 5.6-6.0, 3.1-4.0, 0.1875, to prevent stress.
- WA3 — Puyallup, Wash., (native soil), sandy loam, 5.6-6.0, 5.1-6.0, 0.0-0.5, to prevent stress.
- WA4 — Puyallup, sand, 6.1-6.5, 7.1-8.0, 0.0-0.5, to prevent stress.
- WI1 — Madison, Wis., sand, 7.6-8.5, 2.1-3.0, 0.1875, to prevent stress.
- WI2 — Madison, silt loam and silt, 6.6-7.0, 2.1-3.0, 0.1875, to prevent stress.

New bents superlative

Continued from previous page

have shown a tendency to thatch, he defends them. "The results to date show they are appreciably denser and finer textured," he said. "But they are bred that way to tolerate a lower height of cut. Better density also means better wear tolerance."

The next generations of bentgrasses should reach even higher plateaus, the breeders believe.

"I think the most important thing is putting quality," Hurley said. "People make a big deal about dollar spot. But that is the easiest disease to control. I'm interested in less spike marks, more upright growth — that sort of thing."

"With today's irrigation, and as good as superintendents are today, I'm not as interested in sheer heat tolerance as I am in disease resistance," Lynch said. "Our ultimate goal is to reduce the amount of pesticides and fungicides used."

Whatever bentgrass superintendents choose, Engelke said, "The problem we have is getting them to recognize that they have these tools and they now have to take advantage of them by changing management practices... The super has to get to know his environment, which greens are problem greens, and manage that way."

"Go with a proven winner... Easy Marker"

Coaching Great Mike Ditka says, "Easy Marker is the perfect tool for your temporary marking needs!"

easy marker®

"Meets temporary marking needs for special events, construction and utility projects, golf course and landscape work. Saves money by clearly marking work sites with instructions to avoid costly mistakes."

Mike Ditka

Also from FOX VALLEY SYSTEMS

SUPER STRIPER® \$49⁹⁵

STRIPE...

- Parking Lots!
- Warehouse Floors!
- Athletic Fields!

SUPER STRIPER® TRAFFIC POWER PAINT CARTRIDGES Perfect for either covering old faded lines or for striping new ones. Paint is fast drying, offers one coat coverage even on a variety of surfaces and comes in eight choices of colors. One case will cover about 2,400 linear feet of bright, crisp 3" lines.

12 (18 oz.) cans per case \$49⁹⁵

SUPER SUPREME® TRAFFIC POWER PAINT CARTRIDGES Our best paint is specially formulated with modified acrylic for a harder finish. Ideal for heavy traffic areas.

\$69⁹⁵

12 (18 oz.) cans per case

U.S. patent numbers 4126273, 4895304, 4940184, 4943008, 4946104, D320757, D324053

GREAT FEATURES...

NEW COMFORT HANDLE - revised plastic grip with locking option for extended use

SPRAY CAN - specially designed with the patented EASY MARKER/TRIG-A-CAP nozzle for consistent paint flow, easily inserted into the holder

Lightweight EASY MARKER HANDLE is the Ultimate Temporary Marking Tool!

Only \$8⁹⁵

© 1995 FOX VALLEY SYSTEMS, INC.
U.S. and foreign patents pending

SOME USES...

- Construction
- Utility Companies
- Landscaping
- Golf Courses



easy marker® / trig-a-cap®

POWER PAINT CARTRIDGES

Best paint on the market because it's loaded with pigment which means you get more marks from every can, about 2 1/2 miles per case! Available in paint cartridges or in chalk for less permanent marking. Can be used out of the holder for hand marking. Made exclusively for use in easy markers and for handheld applications. Call for the full selection of colors.



12 (17 oz.) cans per case \$28⁵⁰

See your local dealer for product information or call:

1-800-MARKERS
1-800-627-5377
DEALER INQUIRIES INVITED

FOX VALLEY SYSTEMS, INC.

DEPT. 4188 • 640 INDUSTRIAL DRIVE • CARY, ILLINOIS 60013
The Old Fashioned Company with Old Fashioned Values

Even empty it's loa

CONTOURED TWO-PIECE, HIGH BACK CUSHIONED SEATS WITH HIP RESTRAINTS.

OPTIONAL DIAMOND PLATE STEEL CARGO BOX WITH HEAVY GAUGE, REMOVABLE STEEL SIDE PANELS; HYDRAULIC LIFT.

OPERATOR LOCATION PROVIDES A SMOOTHER, MORE STABLE RIDE.

BIGGEST PAYLOAD IN THE INDUSTRY: 2,200 LBS (2,800 LBS TOTAL CAPACITY).

TAILGATE HINGED TOP & BOTTOM, WITH AUTO-RELEASE FOR DUMPING.

FULL REAR FENDERS HELP PROTECT AGAINST DIRT & DEBRIS BUILD-UP.

BRAKE / TAILLIGHTS.

REMOTE HYDRAULIC CONTROL.

FIFTH-WHEEL ATTACHMENT CAPABILITY.

OVERSIZED, 4-PLY ULTRA-TRAC FLOTATION TIRES, 24x13.50-12, MINIMIZE COMPACTION.

RUGGED STEEL FRAME.

TRUCK-TYPE DIFFERENTIAL AND REAR AXLE WITH HEAVY-DUTY TAPERED WHEEL BEARINGS.

BEEFY, MULTIPLE-LEAF SPRING SUSPENSION AND HEAVY-DUTY SHOCK ABSORBERS.

BIG 8.6" SELF-ADJUSTING HYDRAULIC, INTERNAL EXPANDING, DRUM-TYPE REAR BRAKES.

LIVE HYDRAULIC PTO FOR QUICK ATTACHMENT CHANGE-OUT - NO TOOLS NECESSARY.

4-SPEED TRANSMISSION WITH HIGH/LOW RANGE SELECTOR FOR 8 FORWARD SPEEDS FROM 1.7-19.5 MPH.

HEAVY-DUTY 7.25" COMMERCIAL CLUTCH.



The all-new Jacobsen SV Series – loaded with everything, ready for anything. This is the one customers like you have been asking for. A vehicle built from the ground up for toughness, and designed from the operator out for superior all-around productivity.

ded. Inside & out.



SV-3422: FEATURES A LIQUID-COOLED, 4-CYLINDER FORD GAS ENGINE - MFR. RATED AT 44 HP @ 4000 RPM GOVERNED TO 34 HP @ 3200 RPM WITH A FULL 60 FT LBS OF TORQUE.

SV-2322: FEATURES A DEPENDABLE LIQUID-COOLED, KUBOTA DIESEL ENGINE - MFR. RATED AT 26 HP @ 3600 RPM GOVERNED TO 23 HP @ 3200 RPM WITH A FULL 42.5 FT LBS OF TORQUE.

With so many features standard, the Jacobsen SV is more than a new utility truck. It's the first true *service vehicle system*. A system that accommodates most leading attachment makes and models in addition to our own high-capacity, all-hydraulic line of attachments.

The Jacobsen SV Series. A bold new look. A bold new statement of what utility equipment value is all about.

For more information, or to arrange a demonstration of an SV Series vehicle, contact your Jacobsen dealer today.

THE PROFESSIONAL'S CHOICE ON TURF.

JACOBSEN
TEXTRON

Jacobsen Division of Textron Inc.

CIRCLE #117

J-6-3

SAVVY SUPERINTENDENT



As the British Open approaches, all eyes in golf focus on the British Isles. A key "player" is Michael F. Bonallack, OBE, secretary of the Royal and Ancient Golf Club of St. Andrews since 1983 and one of Britain's all-time amateur golf champions. He received the Donald Ross Award from the ASGCA in 1991. Bonallack, 60, received the Bobby Jones Award for distinguished sportsmanship in golf in 1972. Chairman of the Golf Foundation from 1977 to 1983, he also served as chairman of the Professional Golfers' Association Board of Management from 1976 to 1982, and president of the English Golf Union in 1982.

On Aug. 23 the NEC World Series of Golf will honor him as Ambassador of Golf. Every year since 1981 the tournament has honored someone who has "fostered the ideals of the game on an international level and whose concern for others extends

R&A's Secretary Bonallack in an Open state of mind

beyond the golf course." Contribution editor Terry Buchen recently conducted the following interview with him.

Golf Course News: What are your duties as R&A secretary?

Michael Bonallack: I am responsible for the day-to-day operation of the R&A ensuring that policies laid down by the General Committee and Staff. This concerns both our role as a private members' golf club here in St. Andrews and as the governing authority for the Rules of Golf and Amateur Status and the organizers of various championships including the Open.

GCN: What is the procedure for selecting the course rotation for The Open Championship?

MB: There is no set course rotation for the Open Championship. There are, in fact, nine courses which we use from time to time, although we do try to bring the Championship back to St. Andrews more often than we do to other venues.

GCN: Who visits the head greenkeeper prior to The Open to make observations and recommendations? Are there specific specifications as to mowing heights, fairway widths, etc. for him to follow?

MB: We employ a consultant agronomist who visits all nine courses on the Championship rotation and who has regular meetings with the head greenkeeper at

each course. In the year prior to the Open, the chairman of the Championship Committee and I make visits to the championship venue and discuss with them the width of fairways and the height of rough. However, generally speaking, on seaside links courses the width of fairways is governed by the bunkering and it is not normally necessary to grow much rough since this is put there by nature.

We do not specifically lay down mowing heights for the fairways or greens. But, as a general rule, we suggest greens run at approximately 9 1/2 on the Stimp meter which is quite fast enough for links courses, especially if the wind is blowing.

GCN: I found it fascinating that courses on The Open rotation have automatic irrigation systems. Why is that?

MB: Irrigation systems were put in on the Open courses, not to make the course green, but just to make sure that during periods of drought there is sufficient water there to keep the course alive. Indeed, not all the Championship courses have full irrigation systems. In fact, Muirfield has no water on the fairways. If they need sprinklers, they have to be connected around the greens.

GCN: What are your philosophies for course set-up for The Open?

MB: Because of the natural features of links courses, the policy of setting up a course for the Open Championship is to have firm, fast fairways. Pins are sited in positions which mean only a drive in the right place will give the player a chance of getting near the hole with his second shot.

GCN: Are courses on The Open rotation changed very much, architecturally or agronomically, the next time that each individual course hosts the championship? If so, how might they change?

MB: The courses have changed very little as far as architectural layout is concerned, although the last two years we found it necessary to have all the greens at Royal Birkdale relaid because of problems with the soil and drainage. We took this opportunity to have the contours of the greens reshaped. **GCN:** Is there anything different in store for the 124th Open at St. Andrews this year?

MB: The course will be exactly the same for the '95 Open Championship as it was for the one in 1990. It would almost need an Act of Parliament to make any changes.

GCN: During a typical Open, what are the major concerns of players and how are they handled?

MB: The main issues are the condition of the golf course, the way in which rulings are given, practice facilities, accommodation and transportation. All are handled by our offices. Committee members accompany each group of players to ensure decisions are given promptly.

GCN: How much time do you personally spend on the Rules of Golf administration? How long do the rules meetings, held every four years, usually last with the USGA?

MB: I do not become personally involved with any of the Rules of Golf meetings. We have a separate secretary who is responsible for the Rules of Golf Committee as well as the Amateur Status Committee. The meetings with the USGA are ongoing. As soon as one four-year cycle is finished, the joint committees start



Michael Bonallack

considering changes for the next cycle.

Generally there is one meeting per year between the joint committees. The final meeting, which lasts two or three days, is held approximately nine months before the new rule book comes into effect.

GCN: What is the hardest part about operating The Open?

MB: One of the biggest problems is adapting the tented village to fit the different venues. All of them vary in the amount of space available. Accommodations are also becoming an increasing headache because of the large numbers of players and overseas visitors that want to come to The Open.

GCN: What is the most fun about operating The Open?

MB: We always regard operating our championships as something which gives pleasure to us and our staff. One of the best things is the final champagne party for the winner. That is the first time everybody can relax, knowing the Open has hopefully been a great success.

GCN: What is the hardest part of your job?

MB: I am fortunate to have a very capable staff which makes my job seem very easy.

GCN: What is the greatest satisfaction you receive as secretary of the R&A?

MB: One is for all the championships to go well. It is also satisfying to know the financial success of The Open enables us to give grants to develop golf in many parts of the world and provide coaching for hundreds of young players.

GCN: What is the funniest thing you can remember happening during The Open?

MB: When we played at St. Andrews in 1984, the BBC carried out a very detailed survey of the course in early March to determine how many camera positions they needed and where they would be. They were therefore not very pleased when I sent out a press release saying the Championship Committee had decided to revert to the traditional course for The Open, which meant it would be played backwards, as it was before the turn of the century. I went on to describe the course going from the 1st tee to the 17th green, the 18th tee to the 16th green, and so on. The BBC producer was on the phone within minutes of receiving the press release and called me every name he could lay his hands on for a good two or three minutes before I pointed out to him that the date of the press release was April 1. We are still friends.

GCN: Do you visit with the players after The Open and listen to their recommendations? What course of action do you take?

MB: We are always pleased to receive suggestions from players as to possible improvements and we certainly take note of them. If they are sensible we will do our best to implement them. For instance, there used to be no facilities for the children of players and we now have a creche [children's nursery]. The practice facilities have improved in accordance with their wishes, and we consulted a number of players on a playoff format before deciding on four or five holes as opposed to either sudden death or an additional day. There are many others.



Give a little guy a chance.

What they give up in size, they make up for in maneuverability. The 120 model (above) goes 10" deep while the walk-behind Pedestrian model goes a mere 6. Still deeper than most competitors and remember both have the unique Verti-Drain® pitchforking action.

Great for tight areas with smaller tractors and even with thinner tines you have the option of pulling cores. Or use thin solid tines and aerate more often without fear of surface disruption. Do yourself a big favor — give these little guys a closer look.



Rubber as top dressing

Continued from page 1

improved some infiltration rates and some aeration. But it didn't protect the turf surface. Top dressing did, though, at layers that could be from 1/4 inch up to 3/4 inch of rubber."

The idea is that the rubber itself absorbs the shock from traffic and the soil beneath it doesn't become compacted. Also, the rubber particles are much softer edged and don't have the abrasive action of sand, Rogers said in introducing the research results at a Lofts Seed Co. field day here in June.

"We're very impressed and encouraged by this. We're very confident [about using it] on athletic fields but cautious about golf courses," he added, suggesting that for now it be applied at the end of cart paths and exits off greens. "We have tested it on high-traffic pathways and have been very pleased. It doesn't do a great job of regenerating turfgrass. It keeps turfgrass from wearing out. So you have to get the grass into good shape before you put the rubber down.

"It's not a cure-all. You still have to do everything else you normally do. But it's got some real potential. It protects the heartbeat of the course."

From studies performed by graduate student Tim Vinini, MSU researchers have settled on a recommendation that on traffic areas, if the turfgrass is mowed above 5/8 inch, use 1/2 to 3/4 inch of rubber. That amounts to 1,200 to 1,500 pounds of crumb rubber per 1,000 square feet. The cost is 14 to 20 cents per pound, the smaller size costing the higher rate.

"The smaller size works quicker, because it naturally works its way down to the bottom of the turf-soil interface. But once the larger size works its way down, we don't see any difference," Rogers said.

...

Regarding possible toxicity from the rubber, Rogers said: "We haven't looked at all the compounds that come off the rubber. But as far as zinc, iron, manganese and copper are concerned, we've seen some increase in zinc and manganese but not in iron and copper. Even when we tilled rubber six inches into the soil, the soil levels were well below drinking standards, even after four years."

He said he was surprised to find the rubber does not cause heat problems. "In April, when the grass is low, it warms up the soil a little quicker. Later, when the turfgrass canopy is higher, it covers up the crumb rubber."

Asked about aerating and core-cultivating the rubber into the soil, Rogers said: "I think if you had an area that you couldn't grow grass in, and you wanted to seed it, you should core-cultivate it before seeding it anyway. I would do that, but still concentrate in having the majority of the rubber at the top. Don't put the rubber down until you are almost ready to put traffic on it."

Rogers dispelled any concern that too much rubber would work its way into the soil profile over a period of time.

"We have not seen the rubber migrate down into the soil profile," he said. "Its particle density is around 1.1 — much less than the soil density, which is around 2.6."

Finally, and most important for golfers, he said, the rubber doesn't affect hitting a golf ball.

MSU is receiving a use patent on crumb rubber. The university has granted licensing rights to a company which is calling the product Rebound Top Dressing. It can be reached at telephone 800-795-TIRE.

GOLF COURSE NEWS

Wood-fiber mats may answer range problems

By MARK LESLIE

WILMINGTON, Ohio — Wood-fiber mats may be a sure-fire medium for superintendents interested in growing sod, according to Dr. John "Trey" Rogers of Michigan State University.

Speaking at a Lofts Seed Co. field day here in June, Rogers said MSU research on four- by 50-foot Ecomat proved viable for seeding.

"You can lay this mat out, seed it and mulch it, and grow it on your property," he said. "The results are very promising so far. As long as you have the irrigation and fertility, you don't have to have a soil base for any of these wood fibers. You can do it right on a parking lot and transfer it.

"Two people can pick up a sheet of this mat, even after it is watered," he added, and "you can sod an area very quickly."

In research done to determine the minimal amount of light needed to grow grass, MSU researchers have "discovered that plant growth regulators [PGRs] did a phenomenal job under absolute lowest light conditions," Rogers added.

Done over the last 2-1/2 years in a dome with the same type of cover and floor as the Pontiac Silverdome, the research showed that PGRs proved to be a key for the best growth results.

"We've not only seen good color retention and quality, but some recovery and wear tolerance from using PGRs," Rogers said. "The growth regulator is absolutely instrumental in providing higher quality turf under these lower light conditions. PGRs slow the plant's cell elongation, which is the natural thing for a plant to do under reduced light conditions."



If Silence Is Golden, Our DS Gas Cars Are Way Underpriced.

Noise was never meant to be part of the game of golf. But if your operation depends on gas powered cars, engine noise from an active fleet can make your otherwise peaceful course sound more like a go-cart track. That is, unless you have Tranquility.®

With Club Car's revolutionary Tranquility powertrain, our DS Gasoline is every bit as smooth as an electric car, and almost as quiet. But don't think that such quiet performance comes at the expense of power. Its 9-rated horsepower, overhead valve, 4-cycle engine makes the DS Gasoline powerful, clean running, and fuel efficient.

To hear the full story on our DS Gasoline, call 1-800-643-1010 for the Authorized Club Car Representative nearest you. If you're looking for an affordable way to give your members less noise, this is your golden opportunity.

Golf's Driving Force. **Club Car**®

Club Car, Inc. • P.O. Box 204658 • Augusta, Georgia 30917-4658 USA • Telephone: 706-863-3000 • Facsimile: 706-863-5808

Rygg leaves Squaw Creek for Estancia

SCOTTSDALE, Ariz. — **Carl Rygg** has been named director of golf course operations at The Estancia Club, a 375-member equity club under construction here, northeast of downtown. Rygg comes to the Tom Fazio-designed Estancia project from the Resort at Squaw Creek, where he directed all agronomic and arboretic programs.

JUPITER, Fla. — **Chip Fowkes**, late of Emerald Dunes in West Palm Beach, has joined Frenchmans Creek Country

Club here as head superintendent. A superintendent at PGA National, Fowkes was head superintendent at Emerald Dunes for nearly six years.

A former assistant, **Steve Bernard**, replaced him at Emerald Dunes.

HELEN, Ga. — **Rob Shields** has accepted the position of golf course superintendent at Innsbruck Golf Club here. He had been the head superintendent at Riverside Park Golf Club in Dublin.



WHERE THEY'RE GOING

INDEPENDENCE, Kan. — **David Gann** is the new golf course superintendent here at Independence Country Club.

WOODSTOCK, Vt. — **Timo-**

thy Stanwood has been appointed golf course superintendent at the Woodstock Inn & Resort here. A University of Massachusetts graduate, Stanwood comes to Woodstock from the Gleneagles Golf Course at the Equinox in nearby Manchester. He also trained at the Equinox's sister course, Gleneagles in Scotland.

FAYETTEVILLE, Ga. — **Billy Huskins** has accepted the head superintendent's position at



Timothy Stanwood

River's Edge Golf Club here. He was formerly the golf course superintendent at North Fulton Golf Course.

COFFEYVILLE, Kan. — **Randy Sweet** has accepted the position of head superintendent here at Hillcrest Country Club.

ANDALUSIA, Ala. — **John Fake** has left Andalusia Country Club here after accepting a position at the Innisbrook Resort in Tarpon Springs, Fla.

AUGUSTA, Ga. — **Joe Durden** has been named golf course superintendent at West Lake Country Club here. Durden had been an assistant superintendent at Augusta National Golf Club.

LAKIN, Kan. — **Lonnie Melvin** has been named the head golf course superintendent at Lakin Country Club here.

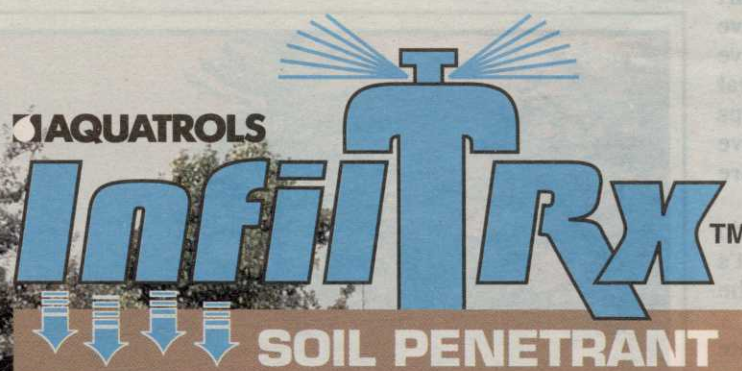
Kansas State University has placed three graduates in assistant golf course superintendent positions — all in state: **Matt Miller** is the new assistant at Willowbend in Wichita; **Brian Ruder** has joined the crew at Tallgrass Country Club, also in Wichita; and **Kevin Wallace** is the new assistant at Winfield Country Club.

In Georgia, the assistant superintendent market is hopping: **James Thomason** has accepted the assistant's position at Stouffer's Pine Isle Resort in Lake Lanier. Thomason had been with Ansley Golf Club... Replacing Thomason at Ansley GC is **Luther Warrick**, formerly an assistant at Lake Arrowhead in Waleska... **Scott Hale** is the new assistant the Country Club of Roswell under Cory Hopke. Hale had been with the Champions Club of Atlanta... **Will Gross**, formerly of Berkeley Hills Country Club, has accepted the assistant superintendent's position at Monroe Golf and Country Club.

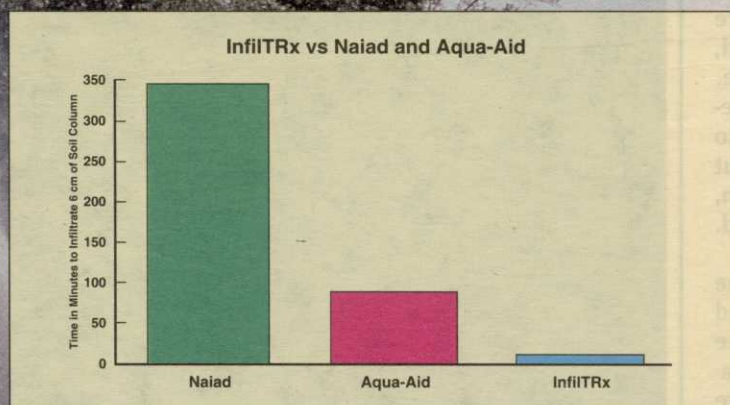
GREEN BAY, Wis. — **Marc Davison** has joined the new Dick Nugent-designed Green Bay Country Club here as head golf course superintendent. Davison had been superintendent at the 36-hole Blackwolf Run resort in Kohler for seven years.

MALVERN, Pa. — **Kirby Putt**, head superintendent at Arizona Country Club in Phoenix, is taking over the reins at Chester Valley Golf Course, an 18-hole private course that is the site of the Bell Atlantic Senior Event. A former director of Cactus and Pine GCSA, Putt was at Arizona CC for seven years and before that was assistant superintendent for two years at Tucson (Ariz.) Country Club.

Compared to



Other injection wetting agents barely scratch the surface!



A totally new wetting agent chemistry specifically developed to out perform all wetting agents applied through irrigation systems.

Call 1-800-257-7797

for information on Aquatrols' unique chemistries that provide solutions for your soil-water management problems.

AQUATROLS

5 North Olney Avenue
Cherry Hill, NJ 08003-1622 USA
1-609-751-0309 • FAX: 1-609-751-3859

BRIEFS



FREUND JOINS FAIRWAY

TEMECULA, Calif. — Fairway Construction has appointed Ron Freund manager of its new Irrigation Division. Freund, who has worked in the irrigation industry for more than 16 years, will be based at the company's headquarters here. "The creation of a new Fairway Irrigation Division will help us provide a broader range of professional services for the golf course industry," said Gosch. He was previously affiliated with High Tech Golf as an irrigation sales representative for Southern California, and worked with Hunter Industries.



Ron Freund

WATER OF ALL SORTS AT TURTLE CREEK

O'FALLON, Mo. — The Falls At Turtle Creek, an 18-hole daily-fee golf course here, opened for play May 27. Missouri National Golf Links, a St. Louis-based partnership headed by co-general partners Robert Saur and Ed Schultz, is the developer. The 197-acre complex includes an 18-hole course, driving range with separate teaching center, miniature golf course, batting cages, and 5,500-square-foot clubhouse. The Falls At Turtle Creek features three waterfalls. Fairways are planted with Bermudagrass. Greens are bentgrass. The majority of fairways are tree-lined. Water hazards come into play on eight holes.

DEVICTOR LANGHAM ADDS MUSARRA

ROSWELL, Ga. — DeVictor Langham, land planners and golf course architects, has added Sal Musarra to its staff in its office here. Musarra has 13 years experience in land development, including four years of course design and development. He will focus on marketing efforts for new course and renovation projects, as well as land planning for golf communities. The firm recently began design work for Rarity Bay, a semi-private facility on Lake Tellico in Eastern Tennessee. Preliminary design has also begun for Rancho San Gerardo, a 27-hole layout in Aguascalientes, Mexico.

HARBOTTLE BREAKS GROUND — TWICE

Ground has broken on two new John Harbottle designs, the Mountain Course at Genoa Lakes North in Genoa, Nevada will stretch to 7,500 yards over high-desert savanna at the foot of the Sierra Mountains. The New Course at Golf Mountain in Bremerton, Wash., is a traditional design playing over 6,900 yards through tall firs.

Hurdzan Cooks up a treat outside Columbus

By MARK LESLIE

ASHVILLE, Ohio — From cornfield and atrazine to golf course and ecology. That's the story of Cooks Creek here — a golf course that has transformed a flood plain into a wetland haven for waterfowl and other wildlife.

"I think it's probably a good prototype of what modern golf architecture is going to be in the years to come," said Dr. Michael Hurdzan, who designed the course along with PGA Tour pro John Cook. "It doesn't look contrived. It looks natural. It's believable, even though we did an enormous amount of earthwork. It enhances the environment."

For Hurdzan's consultant on Cooks Creek, PGA Tour pro John Cook, it is a family affair. His grandfather, Bert, and father, Jim, once farmed the land. Jim decided to build a golf course on it. John's sister and former LPGA Tour pro Cathy is interested as well, but the new mother will not be working there. GolfCorp, the public golf arm of



The 5th hole at Michael Hurdzan's new design — Cooks Creek — in Ashville, Ohio.

ClubCorp, joined the project as majority owner, infusing finances and managing the facility, whose second nine opened at the end of June.

"Our expertise is in operations and

marketing. Jim and John will be involved to an extent, promotionally," said GolfCorp Senior Vice President of Marketing C.J. McDaniel, adding that

Continued on next page



The 7th hole at the Barry Serafin-designed Players Club at Foxfire.

Q & A

Serafin becomes marketable in competitive Ohio region



Ask the folks in Columbus, Ohio, about The Players Club's new golf course — Foxfire — and you'll hear it is a major, challenging addition to that golf-rich region. Discover who designed it and you'll discover a relatively new name — in terms of golf architecture — that is, Barry Serafin. A former pupil of Jack Kidwell and Dr. Michael Hurdzan, with major university work in landscape architecture and an agronomy degree in his pocket, Serafin is carving out a niche for his work in the Ohio Territory. Managing editor Mark Leslie caught up with him in Ohio for this interview.

Golf Course News: How did you first get involved in golf course design?

Barry Serafin: I like designing things. I transferred down to Ohio State because of landscape architecture. I was in that for a few years. I loved the design aspect of it. I loved working with the ground. But it wasn't a field I felt I would be happy in.

When I went into agronomy, it was with the idea of getting into golf course design. I then worked in construction

on a golf course for about a year with Quality Golf. Then I started with Mike, who had sat down with me and given me direction [while in college].

GCN: The canvas in landscape architecture wasn't big enough?

Serafin: That's about it. I felt it would be repetitive year after year. That's what I love about golf course design. Every year it's different. It's a new piece of property, new people and new challenges.

GCN: You were involved in the first

Continued on page 30

Philippines rich with possibilities

By MARK LESLIE

MANILA, The Philippines — A stabilized government, combined with a hefty infusion of Hong Kong and other foreign money, is translating here into a golf development boom.

"I see this as a second-wave development boom," said Mark Hollinger, vice president and partner with J. Michael Poellot course architects. "Typically, the first level of development [in a country] targets tourists and foreigners. Then, as golf develops and matures — and as people realize the value in it and in creating value for real-estate — it starts being marketed to 'locals.'"

Hollinger referred to a Poellot project called Mount Malarayat, a housing development with 27 holes of golf in Lipa City, south of Manila. "It is probably the only [non-resort] project in the Philippines right now. It's one of the early ones in the second wave — the first of a trend," he said.

Most of the projects combine foreign and Filipino money.

"Historically," said architect Brad Benz, "it has been a Japanese initiative that got things going [in a golf boom]. In this instance, it's perhaps a little different in that some perceptive Filipinos are saying, 'Why can't we be a part of this?'"

Hollinger agreed that "most all the projects going on have a local partner.

"A lot of foreign money has come into The Philippines — especially with the uncertainty of Hong Kong," he added. "There was an initial bailout a few years back from Singapore and Bangkok. Now a lot of the Hong Kong players are hedging their bets and want to stay as close to Hong Kong as they can. The Philippines, being stable

Continued on page 29

Pearson leaves Golden Bear, enters the fray of golf course design

By MARK LESLIE

JUNO BEACH, Fla. — Testing the waters and finding them temperate, golf course architect Tom Pearson has left Nicklaus Design Co. and formed Pearson Golf Design, headquartered here.

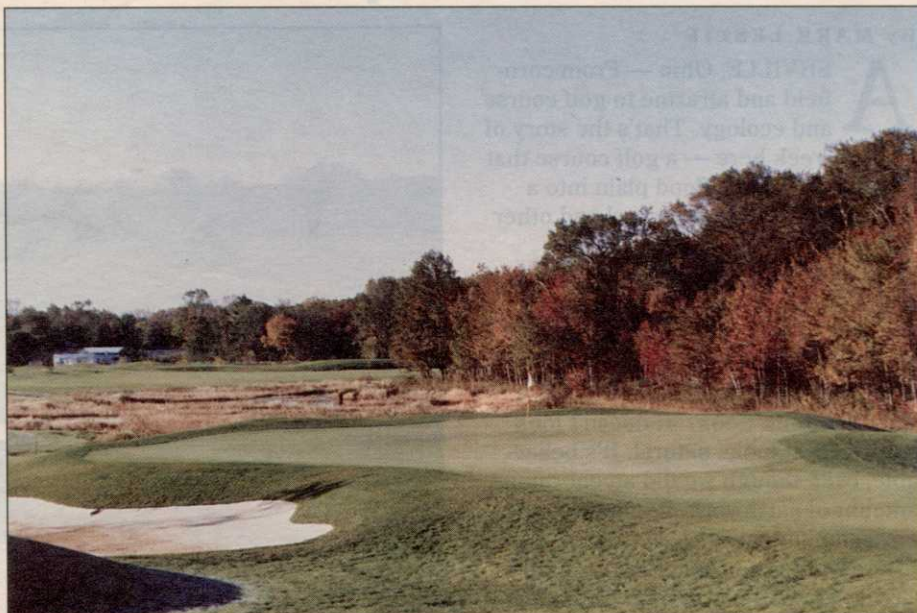


Tom Pearson

Opening his own firm, Pearson follows in the steps of former Nicklaus cohorts Jay Morrish, Bob Cupp, Scott Miller, Rick Jacobsen and Rick Robbins. "I've been at Nicklaus Design a long time," Pearson said. "I always felt that I was at the top just by working with Jack. The only thing I could personally see that would be a step up would be to go on my own. This is that step."

Pearson spent 15 years working with Nicklaus and also worked with Robert von Hagge and Bruce Devlin, assisting on more than 70 courses at varying stages of design and construction. "I was a pencil-pusher for Jay [Morrish] and Bob [Cupp] when I started out," he said.

Nicklaus has been very supportive of his move, Pearson said. He added that he is finishing up work on some Golden Bear projects as well as starting his first Pearson



The view from the left of the approach on the par-5 3rd hole at the Tom Pearson-designed Shore Oaks.

signature tracks — The Tradition at Ibis Golf & Country Club in Palm Beach County and Aston Oaks in Cincinnati, Ohio.

"I like to see what the land is going to yield to me," Pearson said of his design philosophy. "It breaks my heart when we have to make slope cuts and things like that. I've been on a lot of old golf courses and they have blind shots and things like

that... In some ways I wonder if all this modernization and availability of equipment may have interfered with some of the mystique of golf design."

His decisions on earth-moving, he said, are based, first, on safety; and second, on playability of the hole.

"The environment is a big concern," he added. "All my jobs have been confronted

with environmental concerns and we've always been able to accommodate the desires of environmental agencies and our clients, and make it all come together and work..."

"There are some uncertainties about what we have to do to preserve the environment and sometimes you wonder if we are going to the extreme in certain situations. But we don't know any different, so it's the sure way of preserving things now. Maybe down the road we will find out we didn't have to do some of the things we've done, or that it would have been better if we had enhanced it rather than left it alone."

The biggest challenge facing golf development today, Pearson said, is putting together an adequate land package to support a course.

"We need to have so many acres to do a golf course. A developer has to put together enough land to make the numbers work. If there is wetland or something else, he has to obtain more land... There are just so many variables involved."

"We've always had to work with the land. Years ago it was the topography, soil conditions and things like that. Now it seems to be more the environment. And so it has always been a challenge to work with the land in one form or another."

Cooks Creek points way to future

Continued from previous page

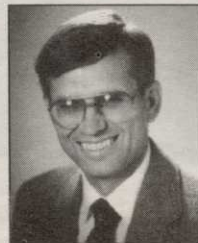
Jim plans to build some housing the property.

For them all, especially course builder Niebur Golf, it was a major undertaking confronted by one massive problem — flooding. The Scioto River runs along the 355-acre property and merges with Little Walnut Creek on-site. That confluence over the years has often submerged the property under three to four feet of flood water.

"We explained it was a lousy site,

virtually flat except for one huge ridge that runs down the middle," Hurdzan said. "But Jim said, 'By God, we'll do it anyway.'"

With the help of environmental groups and the Ohio departments of Natural Resources (DNR) and Fish and Wildlife, they have done just that. Some 63 acres of wetlands were created, and the soil dredged up was used to raise the fairways six to seven feet to get out of the flood plain and not alter any of the flood capacity of the valley. Some



Michael Hurdzan

800,000 cubic yards of dirt were moved.

"We had to build big detention areas," Hurdzan said. "Those areas became wetlands and, ultimately, the habitat."

Audubon Society of New York

President Ron Dodson counted some 40 varieties of birds on the property when he visited to sign Cooks Creek into the group's Cooperative Sanctuary Program.

"We're promoting the bluebirds," said superintendent Galen

Scharenberg. "We've installed houses for American kestrels [small hawks], bluebirds, martins, barn owls, woodducks, bats... We have a blue heron rookery, and will start putting floating logs and tying them off in the lakes for them to perch on."

"It's not actually the bird houses that do the most good," Scharenberg added. "It's the natural areas, like the tall grasses. Whenever we clear areas for air circulation we pile the branches back up like wigwams. People don't realize that pile of sticks in the forest has 10 times the amount of animals than the birdhouses."

Ohio DNR personnel visit every several months to discuss what Cooks Creek is doing and how they can help Scharenberg and his crew.

"Initially, environmentalists saw our intentions were to do it right," Hurdzan said. "Once they saw that and we could show we weren't going to alter the flow of the river, that indeed we were going to stabilize the land to erosion, and increase the wildlife value of the site, they were thrilled."

The story line, Hurdzan said, is that "wetlands have always been unusable ground. We have taken modern earth-moving equipment and put the flood plain into recreational use without changing the intention of what a flood plain is all about — to allow for flood waters. The flood plain today is probably a better storage area than before."

Cooks Creek? It's a narrow, three- to six-foot-wide creek that runs down through the Upland nine which looks down on the Bottoms nine set in the wetlands. "We made it," Hurdzan said, explaining that water from near the river is pumped to an upland pond that flows down through the creek and the wetlands.

"So the water is circulating. It allows for greater biodiversity on the site," Hurdzan said.

With its excellent texture, low mowing heights and high tiller density, 18th Green Bent Grass is ideal for courses that demand lightning fast greens.

Contact:
ZAJAC PERFORMANCE SEEDS INC.
33 Sicomac Road, North Haledon, NJ 07508 201-423-1660 Fax: 201-423-6018

RESTROOM FACILITIES CORPORATION

GOLF MID COURSE RESTROOMS

ANSWER THE NEED!

- Designed for 6-8 minute starting times
- Connects to irrigation or potable water
- Waterless version available
- Standing seam steel roof, spike mat floor
- Rugged proven finishes (Tile interior walls, Wood-grained fiber/cement exterior)
- Shipped fully constructed, plumbed, ready for site installation on concrete slab
- 3 week ship date

(800) 447-6570 ext. 200
Call For Catalog

Phillips comment: EPA making nice?

Continued from page 8

has a checkered environmental record, now is the time to cleanse your bill of health. In other words, it's time to use someone else's political ambition to achieve your own goals.

A quick glance at the *Golf Course News* masthead (turn back to page 8) indicates the move has been made. Publisher Charles von Brecht has arrived in Maine and can now be reached at GCN's Yarmouth, Maine, address.

As it happened, Charlie and his family didn't require a great deal of adjustment. Their first two days in Maine set records, as temperatures climbed into the high 90s. Just like St. Petersburg, huh Charlie?

What's the old saying about the sleeping bear? No, that's the wounded bear. They're quite dangerous, apparently... I believe one is often urged to let sleeping bears lie — no, wait: that applies to groggy dogs... Of course, there are sleeping giants, too, which may better describe the Chelsea, Mich.-based publishing house making its mark in the golf industry.

Of course, Sleeping Bear Press is hardly gigantic, but it was responsible for giving us *The Spirit of St. Andrews*, the lost manuscript of Dr. Alister Mackenzie, published this year and reviewed by Terry Buchen in the March '95 edition *Golf Course News*. We can also thank the publishing house for Tom Doak's controversial but honest book, *The Confidential Guide to Golf Courses*.

There, on the horizon, are two new Sleeping Bear offerings. Due out this fall are books from architect Dr. Michael Hurdzan, a member of GCN's Editorial Advisory Board, and photographer Mike Klemme.

For more information, call 313-475-4411.

Far be it for me to cry wolf, but no one seems to care very much that golf is watching the slow ebb of a playing population that once inspired awe and envy among those who organize competing pastimes.

The National Golf Foundation (NGF) is reporting that U.S. play declined 7 percent in 1994 to 465 million rounds — the lowest total for this traditional growth indicator in six years. The study was conducted by Chicago-based Market Facts, Inc., the same firm to conduct the NGF's surveys since 1985 (copies of the report, "Golf Participation in the U.S.," can be had by calling the NGF at 407-744-6006).

What are we to make of this? Course openings continue at record pace... A 24-hour golf programming channel has hit the airwaves... Equipment manufacturers continue to go public in attempts to expand — they wouldn't want to reinvest in a dying market, would they?... Are these signs of an industry in trouble?

I'd be interested to hear your thoughts on the matter. Write me at *Golf Course News*, P.O. Box 997, 38 Lafayette St., Yarmouth, Maine, 04096; or e-mail me at:

hphillip@gcn.biddeford.com.

Palmer, Nicklaus, Jones, Casper, others busy in Philippines

Continued from page 27

now under [President Fidel] Ramos, is a good place to put your money."

While Mount Malarayat begins a new future of non-resort development providing golf for Filipinos, a number of other projects dot this Pacific paradise. Robert Trent Jones Sr., Arnold Palmer, Jack Nicklaus, Billy Casper, Benz, Nelson-Wright-Haworth, Andy Dye, Poellot... The list of golf course architects bustling about The Philippines goes on and on.

- Arnold Palmer Design opened two courses recently — The Legacy Golf Course at The Orchard G&CC in Dasmariñas, Cavite, and Banyan Tree Evercrest G&CC in Nasugbu, Batangas — and expects in late summer to begin construction on an 18-hole track, the Ayala-Cebu Golf Estates, in Cebu. It is being developed by Ayala Land Co. of The Philippines. The Legacy, whose grand opening in January was attended by Palmer and President Ramos, is a private members' course, while Banyan Tree is a combination resort and members' facility.

- Nicklaus is involved with Fil-Estate Golf and Development Inc. of Manila in three projects — one private, one resort and residential, and the third undecided. Antipolo, a private residential and resort development, will feature an 18-hole Nicklaus design that is under construction and should be completed next summer, with an opening in fall 1996.

- Looc Cove, an 18-hole private Nicklaus

Signature course in Batangas, Island of Luzan, will begin construction by November. Fil-Estate is undecided about housing or resort components.

In Kagayan de Oro, Mindano, construction should begin in November on another Nicklaus Signature track.

- Benz, who has worked in Asia-Pacific for two decades and is headquartered in Los Gatos, California, U.S.A., reports interest in three resort projects. The three include one 18-hole, one 27-hole and one 36-hole facility.

The time frame? "Two are imminent," he said.

Benz points to one, in particular, as a potential "destination of choice," sitting right on the ocean and boasting beautiful beach frontage.

"The scenic beauty in some of these projects is absolutely superlative," he said. "Much of the land is untouched. That's why we'd like to be part of it, to develop the idea of eco-tourism, preserving to the greatest extent what you possibly can. That has been my bent since Day One [of his career]."

- Santa Lucia, developer of The Orchard G&CC which hosted the 1995 Johnnie Walker Classic, plans to build Las Colinas on the outskirts of Manila. A 72-hole facility, it will boast 18-hole designs by Greg Norman, Nick Faldo, Isao Aoki and Andy Dye.

- Japan Air Resorts is still seeking financing for the 18-hole Billy Casper/Greg Nash-designed Billy Casper Ocean

Course on Camotes Island. Playing along the ocean, it is the first of four courses eventually planned for the resort.

- John Harvey of Robert Trent Jones Sr. reported: "We have some incredible leads." Included are a resort projects in Cebu City and Manila — both loaded with amenities.

- Nelson-Wright-Haworth (NWH) reportedly is drawing plans for a new 27 holes in Laguna, and a well-placed source says a Japanese firm is planning 36 holes or more on the former Clark Air Force Base property, where NWH recently completed the Mimosa Resort course.

A number of influential Filipino families have been able to get things done in spite of political instability in the past. Today, they are even more able to push projects ahead. Take, for instance, the Turalbas, owners of Turalba and Associates and its subsidiary, Active Realty and Development Corp. A large developer which has built residential developments is undertaking its first golf project with Mount Malarayat. Built partially on a pineapple plantation, it will include an integrated sports facility including an equestrian center and sports lodge along with golf.

The residences will be a mixed market, dominated by second homes. A two-year build-out of the golf course is projected, with as many of the 27 holes as possible opening by the end of 1996.

Poellot has a couple of other projects, including one in Cebu, they hope will get off the ground this year.

The Asia-Pacific connection for suppliers to the golf course industry.

Golf Course News Asia-Pacific is the only golf course industry publication to offer circulation to the entire Asia-Pacific region.

REACH

Over 6,000 decision makers at golf facilities throughout the Asia-Pacific region, including Australia & New Zealand.

TARGET

Course Managers, Directors, Owners, Developers, Architects & Superintendents.

SCHEDULE

September issue: closes August 18
November issue: closes October 20

Contact Golf Course News Asia-Pacific

In Asia, contact Tom Gorman
CCI Asia-Pacific Ltd.
Unit 101, 1/F, Pacific Plaza
410 Des Voeux Road West
Hong Kong
Phone: (852) 2858-0789
Fax: (852) 2857-6309

GOLF COURSE NEWS
THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

In the U.S., contact
Charles von Brecht, Publisher
Golf Course News Asia-Pacific
PO Box 997, 38 Lafayette St.
Yarmouth, ME 04096
Tel: (207) 846-0600
Fax: (207) 846-0657

Q&A: Serafin

Continued from page 27

preparations for design of the course for the handicapped in Akron, Ohio. Is the public-access law going to impact the design of courses in the future?

Serafin: Definitely. Obviously, there is major concern about it. It's something as designers we have to be aware of, and incorporate it into our designs.

GCN: Will it hamper the designs?

Serafin: I don't think so. Obviously, there is a part of the population who are handicapped and who want to play golf. We need to accommodate them. It is the same thing as with women's tees and the progress we've made in that the past few years. They want to play golf and we need to accommodate them.

GCN: Going off on your own was a huge step. Have you discovered that perhaps life was easier working for someone else?

Serafin: The first few years it was harder. I worked with Mike Hurdzan and Jack Kidwell for 4-1/2 years. In 1991 I started my own design firm. It has worked out well. I have been steadily busy throughout Central Ohio, and am looking to expand from there. As in any profession, it's a matter of establishing your name in the market.

GCN: It's something like a young actor looking for his first big break.

Serafin: Yes. I was very fortunate that I had the new nine at the Players Club — Foxfire. It has literally led to almost all my other jobs. It's been a domino effect.

GCN: Are more skills required now to be an architect then years ago?

Serafin: Yes. Everything progresses. Designers need to be more knowledgeable in a lot of different aspects — not just design. Turfgrass is more a science now.

So you need to have a basic agronomy background. You need to be aware of the environmental and disability issues and all the others. It's all part of change, part of advancing. You need to change with the times.

GCN: Like the grasses.

Serafin: Exactly. They come out with new varieties every year. It's something you need to be aware of.

GCN: Do most architects stay on top of the NTEP [National Turfgrass Evaluation Program] tests?

Serafin: I'm sure they all get copies of them. Whether they study them, I don't know. I look at them, and I work one-on-one with the sales reps.

They deal with them all the time. And for the rest of us, it's very hard to stay on top of that and on top of all the irrigation changes coming out, all the environmental issues. I talk to two or three reps, and then make a decision.

GCN: Is there a particular challenge you'd like to be faced with — a dream of a mountain site, or an ocean site, for instance?

Serafin: I think anybody would love to be given that ultimate piece of property like the Kiawah [Ocean] course. I'm sure that was a dream for Pete Dye, too. To have a piece of ground like that with such natural amenities, and to be able to go out and truly design what you want...

GCN: You work basically in Ohio. Several of the top 100 golf courses are in your vicinity. Is

there an unspoken competition among architects here to design the best course?

Serafin: The Columbus market is actually saturated with private courses right now. Robert Trent Jones Jr. has built a couple [Wedgewood and Jefferson golf and country clubs] in the last few years. Jack Nicklaus II has done the Medallion Club. But there is a market for public golf courses.

The developers are not there to compete with Muirfield, Scioto, or Double Eagle. There is that potential. There is an in-

ternal challenge, not only to prove it to the owner but to yourself as well.

GCN: What are the toughest challenges that developers face today to get a project off the ground?

Serafin: Most the projects I have done have not had any environmental problems to speak of. Before the project even starts, we talk with the Department of Natural Resources and EPA [Environmental Protection Agency] and ask them what they need from us. Then we incorporate it. We try to avoid anything up front.

GCN: Who do you consider the great architects past and present?

Serafin: [Alister] Mackenzie and Donald Ross have done some great courses that have stood the test of time. Presently, I really like Pete Dye's and Tom Fazio's work.

They have had the opportunities, the bigger budgets, the great pieces of ground — those ideal situations. I think there are a lot of architects who don't have that name who could do some great work, also, if given the

Continued on next page

Keep On



Willard Byrd, Geoffrey Cornish and Don Herfort were elected Fellows of the American Society of Golf Course Architects at the society's recent annual meeting in St. Andrews, Scotland.

ASGCA Fellows are regular members who have been in good standing for 10 years or more, have reached the age of 70 and have been approved by the ASGCA board of governors.

Byrd founded his firm in 1956 and has since developed

Byrd, Cornish, Herfort elected ASGCA Fellows

more than 100 golf courses throughout the Southern United States.

His designs include Atlanta Country Club in Atlanta; Heather Glen in Little River, S.C.; Country Club of North Carolina in Pinehurst, N.C.; Wexford Plantation in Hilton Head Island, S.C.; and Longboat Key Club in Longboat Key, Fla.

Cornish has designed more golf courses in New England

(240) than anyone in history and is co-author with Ron Whitten of the definitive history of golf course architecture, *The Architects of Golf*.

A past ASGCA president, he is also one of only three ASGCA members to receive the society's annual Donald Ross Award for contributions to the profession of golf course architecture.

Among Cornish's designs

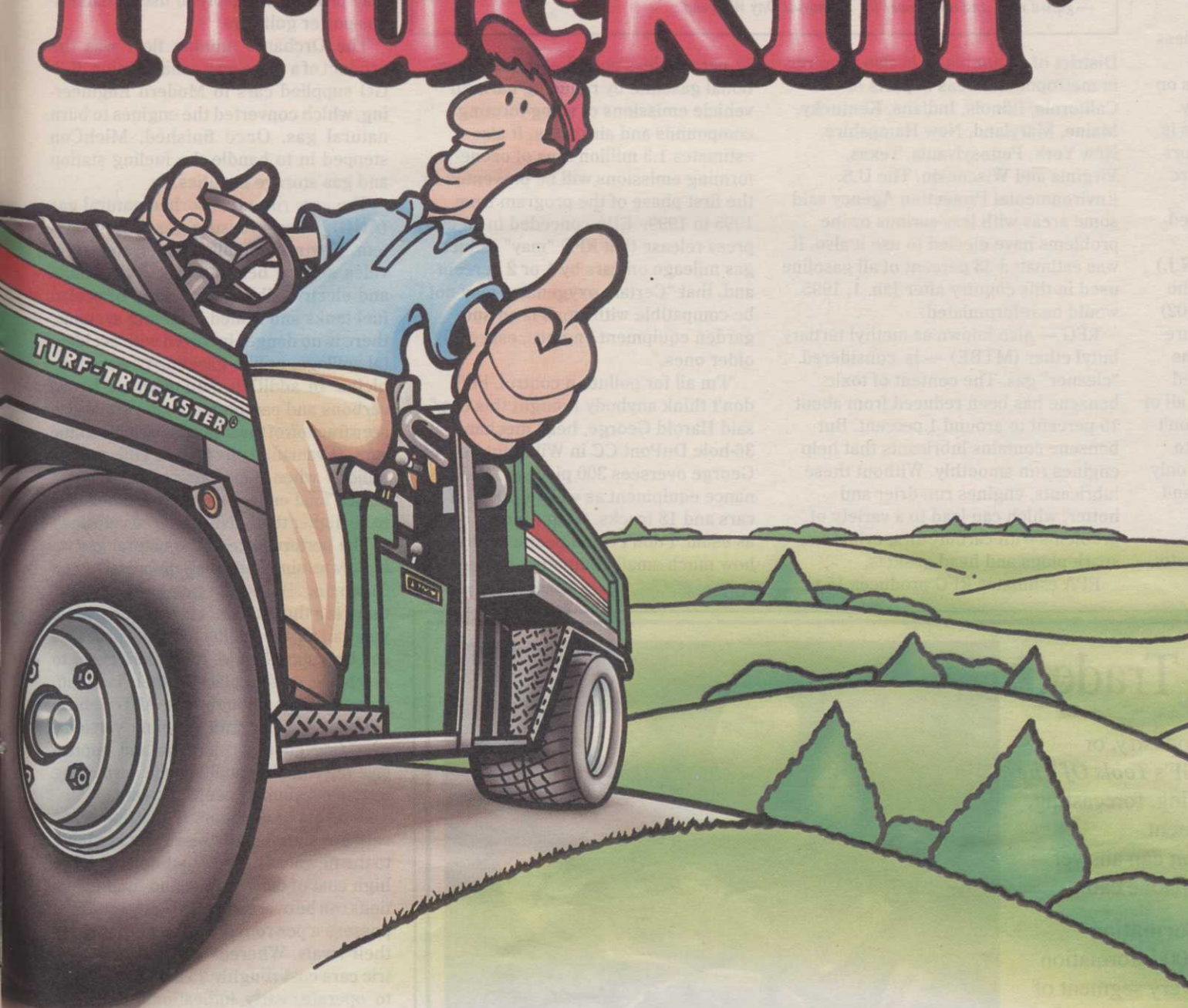
are the International Golf Club, Bolton, Mass.; Summerlea Golf & Country Club, Montreal; Center Valley Club, Center Valley, Pa.; The New Ashburn Golf Course, Halifax, Nova Scotia; and The Quechee Club, Quechee, Vt.

Herfort, active as an architect since the mid-1960s, has designed 45 golf courses while remodeling or expanding an additional 100. To his credit are Northwoods Golf Course,

Rhineland, Wis.; Indian Hills Country Club, St. Paul, Minn.; Pebble Creek Golf Course, Becker, Minn.; Phalen Golf Course, St. Paul, Minn.; and Oak Glen Country Club, Stillwater, Minn.

Byrd, Cornish and Herfort join Floyd Farley, David W. Gordon, James G. Harrison, Robert Trent Jones, Jack Kidwell, W. Bruce Matthews, William H. Neff, E. Lawrence Packard, Ted Robinson, Arthur Jack Snyder, Philip A. Wogan and Albert Zikorus as Fellows of the Society.

Truckin'



ANSI certified ROPS and seat belts available on all models.

After 30 years of industry leadership, the Cushman Turf-Truckster® is still coming on strong. And now you can keep truckin' with your choice of four basic Turf-Truckster models: the 3-wheel Turf-Truckster, the 4-wheel Turf-Truckster with power steering, the 3-wheel Jr. Turf-Truckster or the 4-wheel Jr. Turf-Truckster. With four models and various engine options there's a Turf-Truckster for every turf maintenance project, every budget. To make sure your work vehicle keeps on working year after year, keep on truckin' with the one and only Cushman Turf-Truckster. Call 1-800-228-4444 for the name of the dealer nearest you.



CUSHMAN

Driven to be the best.

CIRCLE #124

Q&A: Serafin

Continued from previous page

opportunity. But, like myself, we will be given that opportunity one of these days.

GCN: What is your philosophy of design?

Serafin: I am more of the natural, or minimal, type... The majority of my work is in public golf. These clients can't move a million yards of dirt, because once I leave, it's a going business, and how soon are they going to get a return on their investment? Much sooner if we move 200,000 or 300,000 yards of dirt as opposed to a million. That's my responsibility to the owner, also. If money's not an issue, that's fine. But I sit down with the owners at the outset of a project and find out their intent and priorities.

GCN: Should architects be more concerned with the speed-of-play issue?

Serafin: Definitely. You need to look at it on a project-by-project basis. How many people play there a year? If there aren't many, then you don't have to worry about speed of play. But if you're building a public golf course and you need to push through as many people as fast as possible, the architect needs to be aware of that. The greens, the bunker placement and other hazards all come into play.

GCN: What advice would you give to an aspiring golf course architect?

Serafin: There are so many already. There are three former employees of Mike Hurdzan who are in business in the Columbus area. As he said, 'Today's employees, tomorrow's competition.' That's true. There is so much growth in golf development that there are a lot of guys breaking off and taking advantage of that.

But, as for advice, they need a thorough understanding of turfgrass and construction. A background in landscape architecture will certainly help. I'd say: Just have a love for the business.

I absolutely love what I do. I get up every morning and can't wait to get out on the projects and to see what progress has been made ... and try to learn something new every day. Once you think you know everything, that's when you start regressing.

FUTURE SHOCK

Supers, mechanics none too pleased with mandated RFG

By J. BARRY MOTHES

Officially, the acronym RFG stands for reformulated gasoline. But some golf course mechanics and greens crews around the country might have their own spicy interpretation.

As part of the 1985 federal Clean Air Act, RFG became mandatory starting Jan. 1, 1995, in all or part of 18 states with the worst ozone and air pollution problems. RFG supposedly pollutes less because it has lower levels of volatile compounds like benzene and contains an oxygenate like ethanol.

But complaints and anecdotal evidence against the new, technically "cleaner" gas have been piling up.

Some golf course mechanics are finding RFG yields lower mileage, less engine power and punch, more frequent tune-ups and nagging repairs on everything from greens and fairway mowers to weed-whackers. The gas is also less stable and many distributors recommend a storage life of no more than 30 days.

"The big surprise to me was mixed-gas items," said Eric Ingenbrandt, mechanic at the 18-hole Trenton (N.J.) Country Club (CC). "I have five Echo weed eaters (models SRM 2501, 2502) and on two of them had to do carburetor rebuilds because the diaphragms are wearing out. I've already cleaned carbon out of the mufflers once on all of them and changed spark plugs. I don't know how much can be attributed to this new gas ... but prior to this I'd only done one carburetor in five years, and that was four years ago."

RFG is being used statewide in Connecticut, Delaware, Massachusetts, New Jersey, Rhode Island and the



LOOK OUT BELOW!

The newly completed back nine at the Jim Fazio-designed Country Club of the Poconos (CCP) is so rugged, they've installed guard rails on cart paths at strategic locations — probably when the golfer encounters some of CCP's 100-foot vertical drops. "We're also going to install a cellular phone on the back nine for emergencies due to the remoteness," explained CCP General Manager Albert Bertha. The front nine at CCP has accommodated play for two years, but delays in securing state wetland permits postponed completion until this spring. The course held its grand opening — guard rails and all — over the Memorial Day Weekend.

District of Columbia. It is also required in metropolitan areas in parts of California, Illinois, Indiana, Kentucky, Maine, Maryland, New Hampshire, New York, Pennsylvania, Texas, Virginia and Wisconsin. The U.S. Environmental Protection Agency said some areas with less-serious ozone problems have elected to use it also. It was estimated 33 percent of all gasoline used in this country after Jan. 1, 1995 would be reformulated.

RFG — also known as methyl tertiary butyl ether (MTBE) — is considered "cleaner" gas. The content of toxic benzene has been reduced from about 15 percent to around 1 percent. But benzene contains lubricants that help engines run smoothly. Without these lubricants, engines run drier and hotter, which can lead to a variety of problems with carburetors, cylinders, spark plugs and head gaskets.

EPA estimates RFG produces 15 to

17 percent less pollution than conventional gasoline by reducing harmful vehicle emissions of smog-forming compounds and air toxins. It also estimates 1.3 million tons of ozone-forming emissions will be prevented in the first phase of the program from 1995 to 1999. EPA conceded in an early press release that RFG "may" reduce gas mileage on cars by 1 or 2 percent and, that "Certain oxygenates may not be compatible with small lawn and garden equipment engines, especially older ones."

"I'm all for pollution control, but I don't think anybody thought this out," said Harold George, head mechanic at 36-hole DuPont CC in Wilmington, Del. George oversees 300 pieces of maintenance equipment as well as 100 golf cars and 18 trucks. "It got forced on us, as usual. I don't think people realize how much small equipment can be

Continued on page 34

Cost may exceed practicality with natural gas cars

By MATTHEW PHILLIPS

WASHINGTON TOWNSHIP, Mich. — First, they were electric-powered. Then came gasoline in 1971. And now, natural gas. Will the quest for a better-performing, more economical and environmentally friendly golf car ever end?

Recently, *Golf Course News* sampled the latest breakthrough in golfing transportation here at The Orchards, a year-old Robert Trent Jones Jr. designed course 30 miles north of Detroit. Built 3,500 feet above a Michigan Consolidated Natural Gas (MichCon) natural gas storage facility, The Orchards is a fitting venue for the world's first fleet of natural gas golf cars.

However, the sheer expense of exploiting this alternative fuel source — conversions run about \$1,500 per car, and fueling stations can be upwards of \$50,000 — may prohibit widespread use of natural-gas-powered golf cars.

The Orchards' unique fleet was the product of a three-way collaboration. E-Z-GO supplied cars to Modern Engineering, which converted the engines to burn natural gas. Once finished, MichCon stepped in to handle the fueling station and gas storage facilities.

The cars run on absorbed natural gas (ANG), a low-pressure gas fueling system. Environmentally, this system provides several benefits over its gasoline and electric siblings. Because of sealed fuel tanks and sealed refueling systems, there is no danger involved with accidental spillage, unlike gasoline-powered vehicles. In addition, non-methane hydrocarbons and carbon monoxide emissions are a fraction of those produced by gasoline cars. (Evaluating electric car emissions is difficult when you consider the electric plant's total emissions. They are believed to be higher than ANG-powered vehicles.)

The performance of the natural gas vehicle was simultaneously impressive and frustrating. Before the car goes anywhere, there is a three-to four-second delay while you wait for the engine to "spool up." This can be a source of ire for golfers eager to reach the resting place of their last duff. Once moving, though, the ANG vehicle performs on par with gasoline versions, providing good acceleration and impressive hill-climbing ability while surpassing terrain capabilities of electric cars.

In terms of economics, ANG-powered cars are significantly disadvantaged due to the newness of their technology. If the high cost of conversions and fueling stations can be overcome, ANG-powered cars possess a per-round cost advantage over their rivals. Whereas gasoline and electric cars cost roughly 25 cents per round to operate, early indications peg ANG cars at about 10 to 15 cents per round. Over the life of the car, which should be longer than gasoline or electric versions, the savings realized could be substantial.

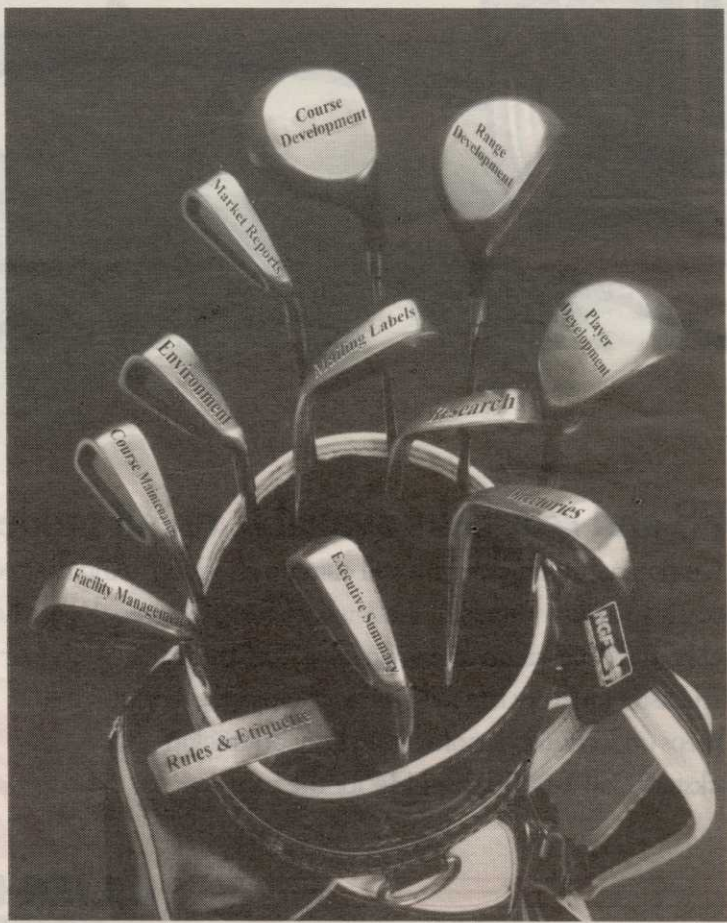
As always with new technology, there are kinks to work out and eventual room for improvement and efficiencies. Absorbed natural gas-powered golf cars are no different. That having been said, early indications show ANG cars to be an environmentally sensitive, strong performing and a potentially economical golf transportation alternative — attractive qualities to golf course managers everywhere, even if they like to walk.

Tools Of The Trade...

If you're involved in the golf industry, or planning to be, you'll need NGF's *Tools Of The Trade* for your business planning, forecasting, marketing or project development. The **National Golf Foundation** can answer your needs with just a simple phone call.

The **NGF Comprehensive Information Catalog** contains more than 200 information resources covering virtually every segment of the golf industry ... **Market Reports... Directories... Golf Course Development... Facility Operations and Maintenance... Rules and Etiquette... Player Development... Executive Summaries and much more.**

To request your **FREE NGF INFORMATION CATALOG**, Call toll-free: **1-800-733-6006** You may order publications by phone or fax using VISA, Mastercard or American Express.



New Yamahauler specs unveiled

The Yamaha Golf Car Group has announced updated specifications and a modified front cowl on its Yamahauler lightweight utility vehicle. The engine has gone from 285 c.c. to 300 c.c., while the horsepower has been increased from 8.6 to 9.5. Also, the Yamahauler's maximum speed is now 14 mph. It used to be 12.

The front body of the Yamahauler now emulates the widely acclaimed G-14 Ultima, which features the Sentry Body Protection System and includes a 5 mph impact front bumper.

For more information on this and other Yamaha products, write Yamaha Golf Car Group, 1000 Georgia Hwy. 34 E, Newnan, Ga., 30265; or call 404-254-4153.

CIRCLE #303

Path-Rangers keep cars on the path

The Micron Path-Ranger is permanently attached to the golf car, concealed under the floor boards. Its patented sensor detects the texture of the surface over which the car travels and emits a warning signal when the car leaves the paved car path.

Upon hearing the signal, the operator has a predetermined number of seconds to return to the path. If he does not return, the car engine will stop running and remain stopped until unlocked by golf course personnel.

Uncooperative golfers will be embarrassed and will soon learn to observe the "stay-on-the-path" rule. Micron has made available a quick demonstration unit that is clamped easily on one of your golf cars so that you may try out the product to see for yourself how it will benefit you. For more information, contact the manufacturer at 617-762-5045.

CIRCLE #304

Club Car offers regenerative braking

Having introduced its 1995 DS Electric with the revolutionary PowerDrive System 48, Club Car has added an optional Regenerative Braking System to the already "intelligent" golf car. When incorporated with its exclusive onboard computer and solid-state speed controller, the DS Electric with regenerative braking is smarter, faster, safer and more powerful. On a downhill grade, the motor becomes a generator that gently brakes the car and actually recharges the batteries. But to prevent overcharging the batteries, the onboard computer automatically tells the PowerDrive system to "dump" the excess regenerative energy through the exclusive Energy Displacement Module.

For more information, contact Club Car at 706-863-3000.

CIRCLE #311

The Edge protects connections

The Edge golf car resistor, manufactured by IPC Power Resistors International, may eliminate many of the troublesome problems associated with conventional golf car resistors. According to IPC Vice President Dave Allen, the edge virtually eliminates overheating and the resulting downtime.

A continuous stainless-steel ribbon wound on its edge replaces the old nickel elements. This new design

greatly expands the surface area which in turn means reduced element temperature. The same edge-wound coil is used for all steps eliminating coil-to-coil interconnections and their possible failures. Connection terminals are welded to prevent loosening and other failures.

For more information, contact Cart Parts or IPC Power Resistors International factory direct at 606-282-2900.

CIRCLE #302

E-Z-GO announces new TXT model

E-Z-GO Textron has announced production of the TXT Golf Car, making it the only manufacturer to offer both composite body and metal body golf cars. The new car was unveiled at the E-Z-GO 1995 national sales meeting.

The E-Z-GO TXT body, made of a Thermoplastic elastomer (TPE) called DuraShield, is produced by Textron Automotive Co., among the largest injection molders of plastics in North America.

The DuraShield material features molded-in color, a special color adhesion promoter, an au-

tomotive exterior paint and a clear coat protective finish. E-Z-GO is the only manufacturer to use this four-stage process that provides unmatched depth of finish, gloss and scratch protection.

The TXT is the third major new product introduction by E-Z-GO in the last 18 months. The Medalist golf car was introduced in January 1994 followed by the introduction of the DriveControl System for electric cars in January 1995. For more information, contact E-Z-GO at 706-798-4311.

CIRCLE #301

Think of it as a combination bunker rake and steamroller.



Tour Smooth® is the affordable way to rake and smooth sand into perfect playing condition!

The trouble with ordinary bunker rakes is that they leave little ridges in the sand. The trouble with the new breed of "smoothing" rakes is that they're too expensive. Tour Smooth® by Standard Golf solves both problems. It smoothes sand, and it's affordable, too! ♦ Tour Smooth rakes are based on our long-lasting, hard-working Duo-Rake, but feature shorter teeth and a curved 15", high-impact, molded plastic head. As the teeth rake the sand into place, the curved head follows behind, automatically leveling all those little ridges into a "steamroller smooth"

playing surface. Add a sturdy 4-1/2 ft. fiberglass or aluminum handle, and you'll have an affordable tool that will last for years — and even float! ♦ Why get trapped with an inferior — or more expensive — rake? Contact your nearby Standard Golf distributor and ask about Tour Smooth. All things considered, it's the smoothest bunker rake in the business.

**STANDARD
GOLF** ProLine

Standard Golf Company
P.O. Box 68
Cedar Falls, Iowa 50613
U.S.A.
319-266-2638
FAX 319-266-9627

CIRCLE #126

SG-180

Leslie comment

Continued from page 8

Ocean Course Purchase Agreements or otherwise, directly or indirectly, with any other person, entity or qualified organization participating in the auction, TOC agrees to grant ASNY \$150,000 to enable ASNY to complete the [environmental] study..."

The agreement, which included another \$100,000 to ASNY at the end of its study, was signed by ASNY President Ron Dodson and TOC Vice President Daniel M. McCormack on Sept. 9, 1993.

Of course, that promise of \$250,000 bit the dust with the other commitments. But ASNY personnel don't wish to work with people who have shunned, and some would say "used" them. (The first bid had to include an environmental group and VIT courted ASNY to join in the process.)

Ah, commitment. They say lack of it is a reason for the high divorce rate nowadays. Who would have thought inhabitants of Golf Nation would witness it in their own family?

Meanwhile, some may have been shocked at the seeming complicity of the government in this matter. The Resolution Trust Corp., which was such a stickler for involving environmental organizations in the original auction of the Ocean Course, apparently went into an environmental fog during the second sale. The RTC essentially trashed the original sale — to the partnership of the New York Audubon and VIT — because neither would agree to a unilateral RTC provision allowing other environmental organizations to get involved, if they disagreed with how the Ocean Course was being managed.

But in the second auction, the RTC's agreement contains absolutely no language regarding environmental management of

the course.

Spokesman Mike Fulwider simply stated that, under the Coastal Barrier Improvement Act, the RTC was obligated to market the property to environmental groups only the first 90 days (two years ago). Although several groups besides the New York Audubon had stated an interest, RTC took the position that it had fulfilled its commitment, Fulwider said. "Therefore, we were free to market it to the general public... Our primary concern is meeting our statutory responsibilities and recovering as much as for the taxpayers as we can in the sale of that property."

People in the golf industry, especially in recent years, have promoted awareness that they are the true environmentalists — the ones enhancing wildlife habitat hands-on.

One entity alone can now threaten all that goodwill.

Who cares if the RTC gets another black eye in this bankruptcy mess which was arguably caused by the government itself? The golf community should not have to pressure one of its own to stand on the environmental high ground. But, one person falls off that high ground and so do compatriots from Honolulu to Halifax.

...

Like maintaining golf courses, designing them can be a stress on a family. It involves long days and sometimes long seasons for superintendents, long days and extensive travel for architects. Designer Barry Serafin, this month's Q&A subject (see page 27), puts his career and family in this perspective:

"Right now, all my projects are in central Ohio [where he lives]. I have a 6-, a 3- and a 1-year-old and I like to be home as much as possible. You have to keep your priorities straight. It's so easy to get so involved it takes over your life. Once that happens, it gets in

front of your God, in front of your family and things like that. Once your priorities get out of whack, so does your life."

...

Referring to his association's request for proposals on the construction of putting greens (see story page 13), U.S. Golf Association Director of Research Dr. Mike Kenna says builders, architects and soil labs ought to back this. It should not be left solely in the hands of the USGA Green Section and superintendents, he argues.

"Who's involved in new golf course construction?" he asked. "In the world, research is done by the architects, not the maintenance men. In effect, [the industry] is doing the same as asking the plant manager (caretaker) to design a good furnace, etc. The USGA gets dragged into this because of our [green-spec] guidelines."

Kenna added: "There's very little research into the most important factor: Ensuring you have a good property to work with and that it's built well."

...

There's no accounting for taste differences in turfgrasses, says Turf Merchants Inc. Vice President Steve Tubbs. "In Las Vegas, a desert, they are managing a New Jersey perennial ryegrass year-round. That's what they want. In Palm Springs, a desert, it's the opposite. They love Bermudagrass and want perennial ryes just to overseed and then to die out. And those two spots are only 200 miles apart."

...

Texas A&M University's Dr. Milt Engelke, a noted plant breeder, commenting on breeding turfgrasses: "It sounds like wedding preparations. You hear phrases like 'The prospects are excellent,' 'There's a lot of potential' and 'Now we have to go through generations of breeding in characteristics.'"

RFG troubles

Continued from page 32

affected and how much small equipment there is out there used by contractors and landscapers. All this stuff, especially on a golf course, is specialized high-dollar equipment.

"I think there's going to be a lot more fallout as the summer goes on here. If there are any problems with this in the long run, it could damage our fleet and you could be talking about a lot of money."

With golf course work crews everywhere facing the brunt of the summer heat, mechanics also note engines using the new RFG seem to have problems starting and running when temperatures hit the mid-80s and higher. On top of all this, prices for the new gas have been creeping up steadily the past six months.

"You're paying a little more at the pump and you're paying for nothing," said David Pellerin, head mechanic for six years at Portland (Maine) CC. Pellerin said he recently discovered a melted head gasket for the first time on a National triplex bank mower and has had to make constant adjustments to mowers and grounds carts.

"I believe the gas is here to stay, so we're going to have to make the best of it. We'll probably start by going to a higher octane."

Tinkey comment

Continued from page 9

defining the objectives, creating a structure, selecting leadership, obtaining funding and tracking results.

In South Carolina the course owners worked together to determine the economic impact of golf operations on the economy of the state. They desired useful comparative financial information to run their courses, objective data on the cost benefit of the state's tourism expenditures on golf marketing and facts to support the importance of the golf industry to state employment and taxes. Primary data is collected confidentially from golf course operators throughout the state.

The initial program was a cooperative project with the South Carolina Parks, Recreation and Tourism Department (PRT), the South Carolina Chapter of the NGCOA and the University of South Carolina. The study, to be repeated this year and every one or two years thereafter, will continue to receive research funding through a marketing partnership program with the PRT Department. The data on golf course operations accumulated for the most recent study was extensive, including average revenues and expenditures by various categories, age of course, capital expenditures, and percentage of in-state and out-of-state rounds.

Many owners, private and public sector leaders as well as the general public are unaware of the significant role that golf plays with tourism, business development, contribution to the tax base and providing numerous well paid jobs. In South Carolina, the direct impact of more than 300 golf course operations — not counting the impact from related businesses, such as real estate sales, lodging, travel, food and other off-course purchases — to the state was \$644 million. With these related expenditures added in, the economic impact of golf has been widely reported as \$1.5 billion.

Each tax dollar spent on golf advertising produces \$74 in spending by golfers. The South Carolina PRT 1994 marketing and advertising budget, which is funded primarily from admissions tax paid on golf greens fees, drew an 18 percent increase over 1993.

The economic impact from golf course operations has added more than 14,000 full-time jobs for the state, with a payroll for those employees of more than \$227 million. Golf generates \$5.7 million in direct taxes and over \$16.7 million in combined tax revenue.

"Attracting more golfers means more jobs, more income and more tax revenue for the state," acknowledges South Carolina's Gov. David Beasley.

CARTS The Best Flags,
Signs, Flagsticks,
Tee Markers,
Practice Green
Markers,
And
Accessories
Ever Made.

Call today for a catalog and more information.

FORE-PAR

DISTINCTIVE GOLF COURSE ACCESSORIES

16761 Burke Lane, Huntington Beach, CA 92647
Phone 714 842-8494 / 800 843-0809



Strength... Design... Beauty...

On Site Timber Bridge & Wall Construction

- Experienced With Environmental Areas
- Treated (CCA) Southern Yellow Pine
- Projects Throughout The U.S.
- Low Profile & Arched Bridges
- Retaining Walls
- Curb System & Picket Rails
- Custom Design & Build Service
- Piling Support & Free Span Bridges
- Designed To Specific Load Requirements

YORK
BRIDGE CONCEPTS
The Professional Bridge Company

Southern USA 800-226-4178	Northern USA 800-383-0555	Western USA 800-474-4990
------------------------------	------------------------------	-----------------------------

BRIEFS



COBBLESTONE BUYS HILLS AT LAKEWAY

AUSTIN, Texas — Cobblestone Golf Group has acquired the Hills at Lakeway from The Hillwood Co., a real estate development firm operated by Ross Perot Jr. The complex includes three golf courses, The Academy of Golf and The World of Tennis. The Hills at Lakeway represents Cobblestone's largest single acquisition. Del Mar, Calif.-based Cobblestone operates 19 courses throughout the country.

MARTTY INVADERS ATLANTA

ATLANTA — Martty Golf Management has signed a management consulting agreement to oversee construction, marketing and grand opening phases of The Heritage Club for developer Maurice Whyte. Construction has begun and plans are for the Mike Young-designed, 18-hole course to open in November, said President Thomas Martty.



Thomas Martty

LA EXTENDS GOLFCORP LEASE

DIAMOND BAR, Calif. — Los Angeles County has agreed to a 15-year extension of GolfCorp's management agreement at Diamond Bar Golf Course. The Club Corporation International subsidiary has operated the county-owned, 18-hole, daily-fee facility since 1987. More than \$1.4 million in course improvements are underway, including a renovated driving range and new irrigation system.

AGCC SIGNS ON IN SACRAMENTO

SACRAMENTO, Calif. — American Golf Country Clubs (a division of American Golf Corp.) has received a long-term operating lease for Oaks Golf & Country Club in Nicolaus, located approximately 20 minutes from Sacramento. The private, 18-hole layout is tentatively scheduled to open early next year.

NAG NAMES RIPPY PRESIDENT

LOMBARD, Ill. — Michael Rippey has been named president of North American Golf, the full-service course development and management company based here. Rippey takes over the position previously held by George Rourke, who will remain as principal stockholder and director. NAG manages seven courses, primarily in the Midwest.



Mike Rippey

GOLF COURSE NEWS

MARKETING IDEA OF THE MONTH

The incentive is profits in the incentive business

By PETER BLAIS

Rewarding productive employees with travel vacations has been one of the most successful methods for corporations to keep their best workers.

Warmer locales such as Florida, Southern California, Hawaii and the Caribbean have been the traditional destinations to which companies have sent their best sales people, department heads who come in under budget or supervisors with strong safety records.

Increasingly, golf courses, particularly in Northern areas, are beginning to see corporate incentive travel as a way to fill rounds at their facilities and are tapping into the lucrative \$5.2 billion market (Society of Incentive Travel Executives figure).

"Corporate incentive packages make up 15 to 20 percent of our rounds," said Shanty Creek (Mich.) Director of Marketing Barry Godwin.

The incentive travel business at the Bellaire, Mich., complex has been growing steadily in recent years, Godwin said. Attracted by the nationally ranked Legend Course as well as the Northern Michigan resort's other three layouts, corporations are increas-



Shanty Creek Golf Course has successfully catered to the corporate incentive travel market.

ingly looking at the area's golf packages as a way to reward their best employees.

Incentive groups average about 50 people with average stays of two nights/three days, Godwin reported.

Incentive packages are typically discounted an average of 15 to 20 percent below the normal rate.

Some can be scheduled into slower times of the year, although most

Continued on page 38

Official says clubs take insufficient time selecting course superintendent

By PETER BLAIS

SAN FRANCISCO — The superintendent is in charge of the primary asset at many clubs. And yet, few clubs take sufficient care in selecting the most important individual on the payroll, according to Reed Mackenzie, past president of Hazeltine National Golf Club in Chaska, Minn.

"The most important thing a club can do is analyze its own situation and decide what it wants from its superintendent," said Mackenzie, who has been part of the Hazeltine search committee for two superintendents, Chris Hague and his successor, Patty Knaggs.

No books or pamphlets were available to instruct the Hazeltine greens committee how to begin the search process when its superintendent abruptly quit back in 1982 just prior to the U.S. Senior Open.

The club was fortunate to land Hague,

Mackenzie said. The committee refined its technique and was better prepared when it hired Knaggs three years ago, he added.

While there is no standard operating procedure for hiring a course manager, Mackenzie recounted Hazeltine's guidelines during the International Conference and Show.

- Appoint a chairman of the search committee. The green chairman is often the person selected. The most important thing, however, is that it be someone with sufficient time to devote to the search.

- Establish a selection committee of three to six people. Members should be familiar with golf, club facilities, budgetary process and superintendent responsibilities. A woman and a financial expert should be part of the committee. Members should have eight to 10 weeks to devote to the search.

- Develop a detailed job description. This allows the committee to focus on its



Patty Knaggs

needs and applicants to know what will be expected. The GCSAA, association chapters, U.S. Golf Association and other clubs can help formulate a job description.

- In addition to lines of authority, salary and budget size, other items on the job description might include club expectations regarding the superintendent's participation in professional associations, educating interns, dealing with local government boards and enrolling in classes.

- Establish a compensation package that

Continued on page 37

Nation's first public course marks centennial

NEW YORK CITY — Van Cortlandt Golf Course in the Bronx, the first public course to be built in the United States, will commemorate its 100th birthday with a week-long celebration beginning July 3.

American Golf Corp. (AGC) has operated the course for the city since 1992. "American Golf is proud to play a part in the recent history of this stately public course, which has served as both an invaluable recreational asset to the city of New York and a pioneering force in public golf course development for an unprecedented 100 years," said AGC President of Golf

Operations Kevin Roberts.

Van Cortlandt was originally designed as a nine-hole layout by T. McLure Peters at a cost of \$625 and opened in July 1895. Four years later, Thomas Bendelow remodeled the course and added the second nine holes. Bendelow later became general manager at Cortlandt and instituted the first-ever system of reserving tee times during peak periods.

The clubhouse, built in 1902, is still used. In fact the locker room, complete with wooden lockers, was featured in a scene from the movie "Wall Street" starring Michael Douglas.

Jones elected pres. of Nat'l Club Assn.

WASHINGTON — Hugh Jones was elected president of the National Club Association during the organization's recent annual meeting in Charleston, S.C.

Jones was partner-in-charge of the audit department in the Orlando office of KPMG Peat Marwick until retiring in 1991. He is a consultant to agribusinesses and not-for-profit organizations and a member and past president of the Country Club of Orlando.

A National Club Association member since 1990, Jones had previously served as treasurer. He succeeds James Maser, vice chairman of the board of ClubCorp International, as the association's president.

Continued on page 36

Courses added by management companies in the past 3 months

American Golf Corp.	310-315-4200	
EastLake CC	Chula Vista	CA
Wood Ranch GC	Simi Valley	CA
Creekside GC	Salem	OR
General Washington GC	Audubon	PA
Berry Creek CC	Georgetown	TX
Honey Bee GC	Virginia Beach	VA
American Golf Country Clubs	310-315-4200	
Oaks G&CC	Nicolaus	CA
The GC of Tierra Oaks	Redding	CA
Idlewild CC	Flossmoor	IL
Cobblestone Golf Group	619-794-2602	
Hills of Lakeway	Austin	TX

CourseCo Inc.	707-763-0335	
Mather GC	Sacramento	CA
GolfCorp	214-888-7766	
Haile Plantation	Gainesville	FL
Greenlinks Inc.	615-661-9100	
CC of Franklin	Franklin	TN
LinksCorp	708-441-1010	
Holly Forest CC	Cashiers	NC
Martty Golf Management	334-928-7820	
The Heritage Club	Atlanta	GA
Matrix Development Group	908-521-2900	
Forsgate CC	Jamesburg	NJ
Ashbourne CC	Cheltenham	PA
Commonwealth National GC	Horsham	PA
St. Andrews Corp	913-749-5885	
Red Fox Run GC	Marquette	MI
Eagle Bend GC	Bigfork	MT

Brassie to move headquarters to western Florida

ST. LOUIS — Brassie Golf Corp. will relocate its headquarters from here to Tampa, Fla., now that its merger with Club Operations and Property Management is complete.

With the official closing in June, Brassie now owns and manages 48 courses in 15 states as well as five courses in Mexico, making it the country's third-largest management firm and second-largest among U.S. publicly held management companies, according to Brassie.

Brassie also reported its pre-merger financial results for the first quarter of 1995. The company reported revenues of \$2.45 million, up 112 percent from the \$1.16 million for the same period a year earlier. Management noted the increases primarily reflected the April 1994 acquisition of three additional courses.

The firm reported a net loss of \$168,330 (1 cent per share) compared to a net income of \$19,319 (0 cents per share based on 10.6 million shares) a year earlier.

In addition to the recent opening of The Gauntlet at Curtis Park in Stafford County, Va., Brassie also expects to complete negotiations within 90 days on a long-term lease and related financing to develop an 18-hole, Hale Irwin-designed course in Virginia Beach, Va.

**The most complex,
special equipment
you'll need to invest in
with our
closed system.**

If you want to use a fungicide in a closed system, here's what you do. Get out your hose, fill your tank, throw in a new BAYLETON® turf and ornamental fungicide water soluble packet and you're ready to go.

You don't need to invest in a special metering and measuring device with lots of gizmos, whizbangs and doodads. Which means you don't have to learn how to operate it, or fix it, or find a place to put it.

Better yet, you don't have to invest in a year's worth of fungicide that comes with those special devices.

Like all closed systems, you reduce worker

exposure and container disposal hassles. Best of all, you get the premium protection of the industry's leading fungicide. BAYLETON.

If you'd like more information, call us toll-free at 1-800-842-8020. Or if you'd like, write to us at Miles Inc., Specialty Products, Box 4913, Kansas City, MO 64120.



Pick up the new water soluble packets of BAYLETON. Then use all that money you didn't

spend on a measuring and metering device for something more useful.

MILES

Always read and follow label directions. © 1995 Miles Inc. 95S10A0024

CIRCLE #129

Frank Stover

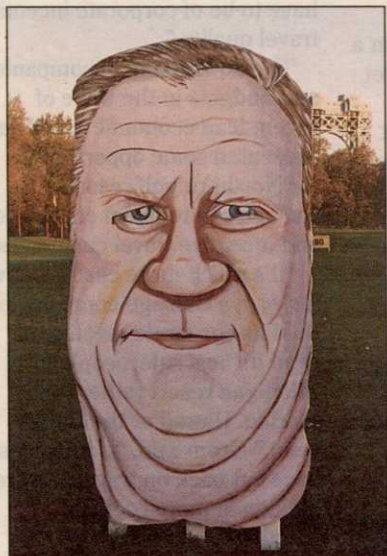


NCA elections

Continued from page 35

Elected to serve in other officer positions were Victor Mauck, interim vice president; Charles Forbes, treasurer; and J. Bryan Williams, secretary.

Frank Stover was elected to the board of directors, expanding that body to 11 members. Stover, a certified club manager, is general manager of the Chicago Club, located in the nation's third-largest city. A past president of the Cornell Society of Hotelmen, he is also a member of the Club Managers Association of America and Chaine de Rotisseur.



N.Y. Yankees owner George Steinbrenner was among four celebrities whose caricature was used as a target during a recent New York City fundraiser.

Celebrities target of NYC charity effort

RANDALLS ISLAND, N.Y. — Four New York City personalities became the target of flying golf balls this spring when Randalls Island Golf and Family Entertainment Center unveiled 8-foot targets bearing the caricatures of David Letterman, Madonna, George Steinbrenner and Donald Trump.

The caricatures were part of a day-long fundraiser May 7 in which the public was invited to "Aim for the Stars" with a portion of fees benefiting local junior golf programs.

"The caricatures represent four of the city's most beloved and controversial residents, and we thought it would be a big hit to give local residents the chance to get out some good-humored aggression while raising funds for a worthy cause," said General Manager Rob Halabov.

American Golf Corp. operates the Randalls Island facility.

Storage tanks

Continued from page 1

co-chairman of a task force charged with monitoring petroleum clean-up efforts for the Association of State and Territorial Solid Waste Management Officials.

With claims on the rise, all 46 states with government-controlled UST funds must be concerned with the possibility of claims outstripping revenues, Rounds added.

"The long-term projections can be pretty scary," he said.

Should golf course operators be concerned if the state funds they believed would insure them against spill problems are in financial trouble?

"Definitely," said Sammy Ng, branch chief in the U.S. Environmental Protection Agency's UST Division. "First, tank owners must be in compliance with federal financial requirements. If they can't get the needed \$1 million coverage through the state, then they must get private insurance. And that could be much more expensive.

"Second, if a state fund becomes insolvent that doesn't release the course owner from financial liability for clean-up or third-party compensation. The golf course would still be liable, even if the state fund folded."

A 1988 federal law required all tanks be closed, replaced or upgraded to meet leak-prevention guidelines within 10 years. Private insurers said they were willing to insure structurally sound tanks or those that would eventually meet the new federal standards. But insurers shied away from existing problems.

"Insurance companies don't insure burning buildings," Rounds noted.

With many privately un-insurable older tanks already leaking fuel into the ground, a mechanism to finance clean-up and compensation to third parties was needed. State funds were established to fill the void.

Those state programs have typically been financed by a few-cents-per-gallon surcharge on fuel sales and/or an annual per-tank charge to tank owners. While some programs were adequately financed, others soon realized that the cost of claims was outstripping revenues, leav-

ing those funds in a financial bind.

To avoid financial problems, EPA has encouraged states to require their funds to have larger cash reserves, higher deductibles and the authority to raise levies if revenues begin to fall behind claims, Ng said.

Pennsylvania has managed to avoid the financial pitfalls experienced elsewhere. In fact, the state's mandatory program is running a healthy surplus, according to George Chapman, claims manager with the state UST Identification Fund. The key to Pennsylvania's success is that it closely scrutinizes all claims and performed detailed actuarial studies regarding projected funding and costs before implementation, Chapman said.

"We control remediation costs by requiring that tank owners make serious efforts to have their tanks in compliance with state and federal laws," Chapman said.

To help control the number of claims it accepts and how much is paid, EPA encourages states to adopt risk-based corrective action processes. This method calls for a ranking so that those spills posing the greatest threat are cleaned first. Additionally, only the areas needing cleaning within the spill area are actually cleaned, thereby avoiding unnecessary costs.

Still several state programs are in trouble and could disappear in the near future unless their financial picture brightens. Additionally, many of the healthy

funds will likely be phased out as existing problems are taken care of. That means private insurance will be used more frequently in the future to cover tank owners, Ng said.

"That would be a good trend," Ng said. "Why should a state provide coverage if affordable, private insurance is available."

But tank owners frequently complain private insurance is too expensive. Not so, said David Brixen, an environmental scientist with the Delaware Division of Air and Water Management's UST Branch.

Delaware began enforcing financial responsibility requirements in December 1993 but soon suspended any enforcement actions when it realized many tank owners were failing to comply. The department established a special advisory committee to determine whether private insurance was indeed available and affordable, or if a state fund should be established.

The committee decided that private insurance was both easy to find and fairly inexpensive, making a state-operated program unnecessary.

"The average cost for a three-tank site [which includes most courses] is \$500 to \$600 a year. That's less than the 2 to 3 cents-per-gallon surcharge often used to finance state funds," Brixen said.

Beginning July 1, all Delaware tank owners/operators not in compliance will be subject to penalties ranging up to \$2,500 per day, Brixen said.

YOUR BATTERIES ARE DYING FOR THESE!

NO OTHER BATTERY CHARGER CAN MAINTAIN FULL CHARGE ON YOUR GROUNDS EQUIPMENT BATTERIES LIKE DELTRAN CHARGERS AND TENDERS® CAN.



Just two of six Deltran models available

Only Deltran's technologically-advanced SuperSmart® Battery Tenders® and Chargers can keep your grounds equipment batteries **constantly charged** and ready to roll, no matter how long they sit. Even if it's over an entire winter.

Here are battery Chargers and Tenders® so advanced their unique micro-chip circuitry not only fully charges your batteries, it **maintains them at full charge indefinitely!** No overheating or overcharging. No gassing or bubbling over. No cycling up and down.

No normal battery charger or trickle

charger can do all this. Fact is, they can actually overcharge and destroy a battery if left unattended.

Deltran Chargers and Tenders® even monitor the battery, **adjusting themselves to the ambient temperature.**

And they **need no fuses.** The micro-chip circuitry won't activate the output until the clips are correctly connected to a battery!

There are six models available, from a big 20-amp Charger for your heavy gear, down to a 1.25 amp Tender®.

Call or write today for all the details.

Deltran

Deltran Corporation, Dept. GCN, 801 U.S. Highway 92 East, DeLand, FL 32724.
Phone: (904) 736-7900 / Fax (904) 736-0379

Selecting a super

Continued from page 35

includes salary, insurance, club privileges, vehicle and/or housing allowance.

- Identify candidates. If the job is advertised nationally, expect many applicants. Hazeltine advertised nationally in 1982 and received 250 resumes. Just searching locally, however, doesn't attract enough quality applicants. Mackenzie recommended concentrating on the state GCSAA chapter, regional USGA agronomist and state golf association for names of "qualified" applicants.

- Tell potential candidates what is expected in terms of application materials — resumes, salary expectations, educational background, etc. Have candidates write a 500-word essay on why their experience matches the club's needs.

- Whittle down the entire pool of applicants to 10-15 candidates. Check references and conduct phone interviews with these individuals. A conference call with all members of the selection committee present works well at this stage. Following the phone interview, have each committee member rate the candidates on a scale of 1 to 10.

- Narrow this group down to three to five finalists. If possible, have a selection com-

mittee member visit each finalist's club for a tour and inspection. Invite each finalist for a personal interview at the club's expense. Prior to the interview, allow each finalist to visit with club staff to get a feel for the operation and prepare for the interview.

- Finalists should meet with one to three selection committee members at a time rather than the full committee all at once. Candidates should speak 80 percent of the time and the interviewers no more than 20 percent. During the interview, selection committee members should avoid first impressions and what-if questions; compare the candidates to the job description rather than to each other; use open-ended rather than yes/no questions; and provide the candidate a chance to ask questions.

- Once the committee reaches a consensus, make an offer to the top candidate. Don't tell the other candidates until the first choice officially accepts the position since no one wants to know they were actually the second or third choice.

"The most important thing is not to drop everything once a superintendent is hired," Mackenzie said. "The job description should become part of the performance review so that the superintendent knows what he needs to improve on and what he is doing well."

Golf Links to manage Tenn. layout

MANCHESTER, Tenn. — Willowbrook Golf Club, a new 18-hole public golf course here, has chosen Golf Links Inc. of Hermitage as its management company. Golf Links President Jerry Lemons, who also designed Willowbrook's 7,021-yard layout, said his company will provide daily operation management of the entire project, golf shop operations, food service and course management.

The course is scheduled to open in the fall. It features bentgrass greens, Bermuda-grass fairways and roughs, and zoysiagrass approaches and collars. Tall fescue outlines the out-of-play areas that will be used to enhance wildlife.

Lemons said green fees will be comparable to state parks golf courses, which are around \$26 to \$30 with cart for 18 holes.

Incentive travel

Continued from page 35

corporations prefer to come during the heart of the golf season, Godwin said.

Cape Cod (Mass.) courses are starting to see the benefits of tapping the incentive travel market, according to Tom Martin, director of Cape Cod Golf Holiday, a holiday travel firm.

"Corporations are surprised to discover we have 31 public courses in a 70-mile stretch of land," Martin said. "Say a corporation wanted to reward

four executives for successfully completing a major project. We could put them in a centrally located hotel and get them on four different top-quality golf courses. I expect that part of the Cape's business to really grow."

Golf can also be a major component in attracting corporate meetings. "You can only keep executives in a board room for so long," said Taren Grom, an editor with *Corporate and Incentive Travel Magazine*. "Golf is a great amenity and will attract corporate meeting planners. But the course, rooms,

food and other amenities all have to be of corporate incentive travel quality."

The downsizing of companies and budgets in the wake of recent lean economic times has presented some opportunities for Northern golf resorts that can cater to regional conference and incentive travel customers.

"It's much more cost effective for, say, a Chicago company to hold its corporate meeting or send its best salespeople to a Michigan resort rather than Florida, Hawaii or the Caribbean," Grom said. "Companies have cut back on travel and are looking at more regional meetings and incentive packages. Northern golf resorts are in a good position to go after them."

Sugarloaf Golf Club in Kingfield, Maine, is becoming increasingly involved in the regional market and targets Maine companies.

"Some stay at the hotel, but most of our incentive players come up for the day," said Sugarloaf Conference Sales Manager Scott Wentzel. "The company will typically spend \$75 on green fees and a cart plus another \$50 or more in the clubhouse. We get a lot of foursomes and occasionally groups of 15, 20 or more."

Travel agencies specializing in corporate and golf travel typically book incentive and meeting arrangements for their clients. Moritz Travel of St. Louis, for instance, reportedly books \$200 million of incentive travel annually.

"One way to get involved in the incentive travel market is to contact some of the larger incentive and golf travel agencies," said William Hogan, managing director of Wide World of Golf, a golf travel firm based in Carmel, Calif. "Put together a packet of information and send it out."

Grom had several additional suggestions:

- Go to the local convention and visitors bureau and get a feel for the type of companies that have expressed interest in that area.
- Contact the two best-known corporate travel associations — Meeting Planners International (214-712-7700) and the Society of Incentive Travel Executives (212-575-0910) — for information or to purchase mailing lists.
- Send press releases and consider advertising in corporate travel publications.
- Put together a public relations and marketing package stressing golf packages.

"With tight budgets, corporate travel planners are looking for extras when deciding between destinations," Grom said. "Consider something like a free cocktail party or golf tournament for anyone booking at least 50 rooms. The cost is minimal and it might mean the difference in being selected."

RegalCrown™

"The Plant Growth Stimulator"

Develop a turfgrass root system that grows deeper and is more dense for your golf course with RegalCrown®. Healthy growing turfgrass requires a root mass that can endure the stress of hot summer weather and winter desiccation with the added pressure of turf traffic.

RegalCrown® provides excellent root development to minimize turfgrass stress and pressure. The result is healthy, fine quality turfgrass.



"For the lion's share of quality turfgrass"



BRIEFS



JACOBI TO REP ISK IN SOUTHEAST

MENTOR, Ohio — Jim Jacobi has joined ISK Biosciences Corp., the manufacturer of agricultural and specialty chemical products, as Southeast Turf & Ornamental specialist. Jacobi is a recent graduate of Auburn University. Jacobi will be responsible for the commercial development and sales support of ISK's turf and ornamental products and experimental compounds in the Southeast. He reports to Dr. M. Howard Thomas, North America commercial development manager.

CYANAMID SENDS SUPER TO SCOTLAND

WAYNE, N.J. — Tony Gustaitis, CGCS at Whitemarsh Valley Country Club in Lafayette Hill, Pa., will visit the birthplace of golf this summer courtesy of American Cyanamid Co., makers of Pendulum pre-emergent herbicide, Image herbicide, Amdro fire ant bait and Pendimethalin. Gustaitis won the expense-paid trip for two to Scotland at the GCSAA Conference & Show in February. "I never thought people really won drawings like this," exclaimed the seven-year Whitemarsh employee, who credits his wife with urging him to enter.

KOERNER TO LEAD SI'S FIBERMESH

CHICKAMAUGA, Ga. — Synthetic Industries, Inc., the second-largest manufacturer of technical polypropylene fabrics and fibers in the world, announces the formation of the Construction/Civil Engineering Products Group under the leadership of C. Ted Koerner. This new group will be composed of SI's Fibermesh Division and Geosynthetic Products Division (formerly Construction Products Division).



Ted Koerner

HARGROVE JOINS PURSELL

SYLACAUGA, Ala. — Pursell Industries, Inc., has announced the employment of Garry Hargrove, PhD. Hargrove, formerly director of product development at Grace-Sierra in Milpitas, Calif., will assist in fulfilling Pursell's goal to lead the market worldwide in controlled-release fertilizer and related technologies development.



Garry Hargrove

EPA looking to streamline label review process

By PETER BLAIS

WASHINGTON, D.C. — The Environmental Protection Agency plans to accelerate or eliminate its review of many changes to pesticide labeling and formulas, according to EPA spokesman John Kasper.

The streamlined procedures could affect as many as 750 of the 5,000 pesticide registration amendments made each year, Kasper said. Most of the amendments concern labeling (such as changing to an alternative brand name) or altering product composition (such as the addition of dyes and fragrances).

"If EPA can establish procedures and guidelines that everyone understands so that products aren't submitted that don't qualify for the quicker procedures, then it could really speed up the process. That would be great," Ciba Product Manager Jose Milan said.

The proposed policy cuts EPA's review process in half, from 90 days to 45 days, for certain minor pesticide registration amendments.

At the same time, the notice expands the range of pesticide registration amendments that can be accomplished by simply notifying the agency without approval.

It also increases those amendments about which the agency need not be notified.

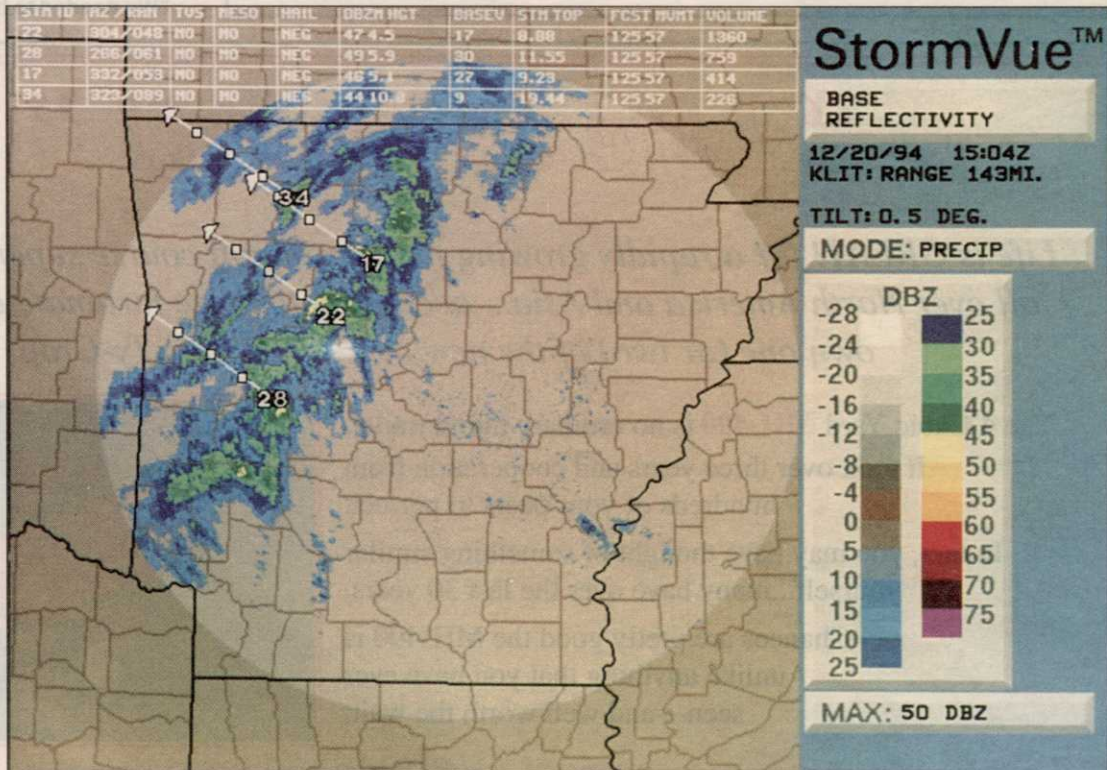
Companies using the notification process need to sign a certification statement pledging the amendments are in compliance with EPA regulations, including public health protection.

"[This] action demonstrates that our process for handling changes in pesticides registration can truly be cleaner for our environment, cheaper for the taxpayer and industry, and smarter for America's future," EPA Deputy Director Fred Hansen said.

Continued on page 40

NEW PRODUCT OF THE MONTH

Accu-Weather, Inc. has announced the availability of its proprietary StormVue Nexrad Doppler radar product, which is designed to predict where thunderstorms will go and indicate future storm locations (boxes along the storm track show future storm positions at 15-minute intervals). StormVue can be overlaid onto any of the 20 color graphic Nexrad Doppler radar products from any of the 88 Nexrad sites available from Accu-Weather. For more information, call Accu-Weather at 814-237-0309. For more new products, see page 42.



Study should lead to Bermudagrass certification in Fla.

By PETER BLAIS

GAINESVILLE, Fla. — Developing a certification program for vegetative Bermudagrass to ensure that Florida golf courses receive only top-quality turf from suppliers is the eventual goal of a two-year, \$66,000 study funded by two of the state's major golf industry associations.

The study, which begins this summer at University of Florida laboratories in Gainesville and Fort Lauderdale, will attempt to distinguish the desired strains of Tifway and Tifdwarf (the two most common grasses found on Florida courses) in terms of chromosome count, morphological (physical) attributes and DNA analysis.

The Florida Golf Course Superintendents Association and Florida Turfgrass Association (FTA) are splitting the cost of the project. The two associations will share the findings with the 10 or so major Bermudagrass suppliers, who will hopefully use the information to eradicate off-type strains from their fields.

The undesirable grasses often have different densities, color and wear tolerance than the desired strains of Tifway and Tifdwarf. When mixed with pure strains, the unwanted characteristics of off-type grasses can result in inconsistent ball roll, higher maintenance costs and



disappointed golfers.

"That can have major ramifications for the superintendent, employees and golfers," said Kevin Downing, research chairman for the Florida GCSA and head superintendent at Willoughby Golf Club in Stuart. David Barnes of Greg Norman Turf Co. represents the FTA.

"Six months into the program, we'll call the major growers together and give them an idea of what direction the research seems to be taking. We want to make sure they have time to react to the program rather than just dumping the results in their laps two years from now.

"It's frustrating for them to grow a crop and not get what they or the superintendents expected. The extra scrutiny will probably drive up Bermudagrass prices somewhat. But it's in their [suppliers'] and our [superintendents'] best interests

Continued on page 46

Burlingham, Pickseed West penalized for alleged mislabeling

FOREST GROVE, Ore. — Civil penalties amounting to \$110,000 have been imposed against two Oregon grass seed dealers following allegations of product mislabeling, according to reports in the Portland-based Oregonian newspaper.

E.F. Burlingham & Sons of Forest Grove paid a \$100,000 penalty, and Pickseed West Inc. of Talent paid a \$10,000 penalty stemming from an investigation by the Oregon Department of Agriculture.

Both firms have signed court documents stating they will not violate unlawful trade practice laws in the future. Neither company admitted wrongdoing.

As part of the settlement, E.F. Burlingham & Sons had its state license to sell seeds suspended for 30 days starting May 20.

State inspectors alleged the Burlingham firm on several occasions from 1992 to 1994 labeled its own varieties of tall fescue seeds as Kentucky 31, a nonproprietary seed which has greater popularity in some markets.

Continued on page 40

Surflan's popularity spurs plant expansion

INDIANAPOLIS — DowElanco has announced a production plant expansion to meet increased demand for oryzalin, the active ingredient in Surflan pre-emergent herbicide. Oryzalin's world wide sales have increased 15 percent over the last year and customer demand continues to strengthen, according to John Peterson, product manager for Surflan.

"Industry professionals are seeking versatile products that are highly efficacious and versatile enough to be used on a variety of sites," said Peterson, who attributed Surflan's growing appeal to the need to reduce

weeds as part of integrated pest management programs. "They need to strike a balance between satisfying their customers and keeping operating expenses in mind. That means implementing a pest management program that advocates a judicious use of weed-control products."

Surflan has been used in the turf and ornamental industry for more than 15 years. It's designed to prevent growth of more than 50 grassy and broadleaf weeds on a variety of turfgrasses and ornamentals. For more information, contact DowElanco at 800-352-6776.

New offices for growing York Bridge

CLEVELAND, Ohio — Due to increased business and growth, York Bridge Concepts has expanded by opening a new and larger office strategically located here.

The new office handles all sales and marketing efforts intended to service the golf course industry throughout the northern half of the U.S., including Michigan, Ohio, Illinois and Wisconsin, all of which ranked in the top five states for golf course construction, according to NGF's latest report.

York Bridge Concepts originally opened the regional office in February 1994, in order to better meet the needs of clients, but quickly outgrew its environs. "We needed to hire a salesperson and a

receptionist to handle the number of calls that were coming into the office," said Joseph York, vice president of York. "By adding more space and more phone lines, we are able to offer the level of service our customers expect."

York works in the office and directs activities in the Northeast region. Mark Neal is the sales manager for the Northwest area.

Revenues for the company, which is headquartered in Tampa, Fla., reached \$2.8 million in 1994. "We are on pace to double that figure for this year," said York.

Currently, three full-time employees staff the new office. For more information, call 800-383-0555.

"Life Is Great!"

*Life is GREAT! for a rapidly growing number of golf course superintendents all over North America and Asia... according to those fortunate enough to own one (or two) of the new **MH-400's** from Ty-Crop.*

The 4 Cubic Yard **MH-400** is no ordinary dump trailer.

It took over three years and cooperation from hundreds of your peers to perfect.

In fact, you may have thought of something similar yourself...many have over the last 30 years.

Chances are pretty good the MH-400 is unlike anything that you have ever seen—and well worth the wait.



The **MH-400** sits level at 34 inches or can be raised to any height up to 65 inches high—with one simple control lever.

This great feature allows operators to load top dressers, fertilizer spreaders, utility vehicles, etc., in only seconds...no wasted travel and unnecessary wear on your equipment, no labour—no sweat.



The **MH-400** boasts a growing list of outstanding options. The optional equipment easily attaches (without any tools!) in just a few moments on the universal mounting bracket located at the rear of every new machine.

The Twin Spinner is perfect for spreading top dressing mixes, sand, lime, gypsum and composted products from 15 to 40 feet wide.

You can even sand your roads and parking areas in the winter.



The 3-Way Cross Conveyor attaches to the right or left side and can be attached straight out the back to operate at a 7' extension to the **MH-400**. The Cross Conveyor will allow you to complete a variety of in house construction or renovation jobs.

It's the only answer for back-filling drainage ditches, building tees and greens, filling/maintaining traps and bunkers.

It's also great for building flower beds and completing a variety of landscaping jobs, etc.

For more information on the **MH-400**, your nearest dealer, or a free demonstration, please call:

TY-CROP TURF EQUIPMENT INC. 1-800-845-7249

Main Office: 48945 Yale Rd. E., Chilliwack, B.C. V2P 6H4

Phone: 604-794-7078

Fax: 604-794-3446

EPA planning review of label procedures

Continued from page 39

"These changes will allow us to focus our efforts on high-priority risks to public health, while making it easier for industry to make minor changes in pesticide registrations."

In the case of label changes, registrants will still be required to provide EPA with a copy of the product label including the latest alterations. EPA will review amended label changes and assist registrants to ensure that pesticide registration amendments under the new process comply with the agency's health and safety guidelines.

This is the first step in fulfilling the self-certification measure in President Bill Clinton's report on reinventing environmental regulations issued March 16, according to Kasper. It is expected to lead to similar streamlining efforts in other EPA programs.

Ciba Manager of Public Affairs Steve Powell said EPA staff and scientists have also shown a greater willingness to work with chemical manufacturers to make certain they are doing the proper tests and following the correct procedures to get more complicated, new products registered.

"A field study can take 18 months to finish. And if it's not done right you have to do it all over again," Powell said.

"We've worked closely with EPA the past few years to make sure our science is solid before we begin our research. It's working. Not so long ago, it wasn't unusual to take five to seven years to get a new product approved. We recently received approval for an agricultural herbicide in just 14 months."

Seed violations

Continued from page 39

The state alleged that Pickseed used another company's proprietary names on Pickseed varieties submitted in response to a bid from a Midwestern buyer in 1993.

Dennis Isaacson, a state commodity inspections manager, said a \$5,000 civil penalty also has been imposed against E. Julian Lafayette Jr., a seed grower in Dallas, for mislabeling a seed variety. Isaacson said there was no evidence that Lafayette's conduct was intentional.

West Coast buys out Warren's Calif. branch

WINCHESTER, Calif. — With its acquisition of the Warren's Turf operation here, West Coast Turf has added another arrow to its increasingly replete quiver.

The Warren purchase, finalized May 1, is 1995's first significant move for Palm Desert-based West Coast Turf, which bought out Foster Turf Products and opened its Las Vegas office in 1994.

The 200 acres here — just one of many Warren's locations — feature three types of hybrid Bermudagrass, as well as St. Augustine, and tall fescue turfgrasses. The newest West Coast Turf office serves Southern California's Inland Empire.

"The Winchester location has both warm- and cool-season grasses, and securing that inventory will enable us to broaden our product line," explained John Foster, president of West Coast Turf.

EPA OKAYS FUSILADE FOR NON-CROP AREAS

WILMINGTON, Del. — Fusilade II, a turf and ornamental herbicide available from Zeneca Professional Products, has received federal registration for use in non-crop areas, non-bearing ornamentals and certain turf grasses.

Fusilade II is a selective post-emergence herbicide for control of a wide variety of annual and perennial grass weeds.

Registered for non-food agricultural uses, Fusilade II controls grasses in ornamental non-grassy plants, trees, shrubs and ground covers grown in commercial greenhouses and nurseries. It may also be used to suppress and eventually control some problem grasses in commercial turf areas, as well as turf areas of golf courses.

ITPF awards \$20,000 in research grants

ROLLING MEADOWS, Ill. — Research grants totaling \$20,000 have been awarded to four university research bodies by the International Turf Producers Foundation based here.

These projects were selected by the Foundation's Research Committee from among 12 studies submitted by 21 researchers at 10 institutions, requesting a total of \$121,500 for the 1994-95 fiscal year. Projects receiving support this year are:

"Limiting Chemical Input in Turf Production Through Treatment Thresholds for White Grubs," Dr. Robert Crocker, Texas A & M University.

"Biological Control of Annual Bluegrass," Dr. Paul Goodwin, University of Guelph.

"Resistance of Kentucky Bluegrass Cultivars to Necrotic Ring Spot," Dr. Tom Hsiang, University of Guelph.

"Advancement of Genetic Resistance in Bluegrass and Creeping Bentgrass to Patch Dis-

eases," Dr. Henry Wilkinson, University of Illinois.

Funding for the International Turf Producers Foundation Research Grants comes from an annual contribution by Turfgrass Producers International as well as individual contributions made to the foundation general fund.

Each fall, more than 300 individual turfgrass researchers are invited to submit research proposals for funding consideration.

For more information, contact TPI at 800-405-8873.

SEAFORD'S TO REP POWER KING IN SOUTH, MIDWEST

BEAVER DAM, Wis. — Power King Products Co. has appointed Seaford's Distributing Co. as the newest Southern and Midwest manufacturers representative for the Power King brand. Seaford's is now responsible for all Power King sales efforts in Western Kentucky, Western Tennessee and Southern Illinois. Seaford's can be reached at 502-527-3894.

Dealing with the shrinking dollar

Continued from page 1

ager for the company. Was it a weak dollar or the Mighty Mit's disappointing penetration into the highly competitive utility vehicle market? "I don't have a comment on that," said Hertel.

At Ransomes America Corp., production of its lightweight utility vehicle, the Sprinter, has fallen under increased in-house scrutiny. Aside from its steering apparatus and the rear cargo box, the Sprinter is manufactured by Korean conglomerate Hyundai.

"If the [U.S.] currency continues to go to hell in a hand basket, we've got to do something or our customer will go elsewhere," said Peter Whurr, director of product management and training at Ransomes America Corp. "Obviously, the world currency situation is worrying us... America is a very price-sensitive market, probably more so than other parts of the world. To compete in this market, you have to offer a good product at a good price. And if the currency situation squeezes you there, it's just not feasible.

"We have inventory, parts and supplies of the [Sprinter] product and we intend to fully back the product up. But we are monitoring the situation."

Whurr explained that Ransomes' Edgewater, Fla., facility manufactures products similar to the Sprinter: the UTV, UTV Max and other, larger industrial vehicles. "If things continue along the same lines, we may have to assume manufacture of the Sprinter in Edgewater," he said.

Ironically, the golf industry rumor mill has been rife with talk of Kubota pulling a portion of its product line off the U.S. market because of the weak dollar.

lar. Yet the discontinuation of one Kubota line, gang reels, appears unrelated to currency issues.

"We're pulling out of the seven-gang and five-gang reel market," explained Paul Williams, tractor and implement product manager at Kubota. "That's basically due to the loss of our manufacturer, Roseman, out of Chicago, which has closed its doors. That has presented our no. 1 dilemma.

"In light of that, it's been extremely difficult. We've elected to step out of that market at this point in time. We have every intention of supporting those units

in the field. We can't let those customers down."

In fact, Williams added that Kubota has been pleased with the performance of its tractor and F-series products. The M-series — a 42-horsepower tractor with low-emission engines — begins production this month and should hit the market in September, he said.

Whurr, for one, said he wasn't surprised to hear of Kubota's here-to-stay attitude.

"We're probably one of the biggest users of Kubota engines outside Kubota. So if there were any changes in store, I would imagine we would have heard about it," he said.

WATER & TURF RESTORATION OF FLORIDA CO.

- Greens & Tees
- Fairways
- Athletic Fields



TEE TO GREEN

- Reduces Accumulated Organic Matter on — Greens — Fairways — Tees
- Eliminates Black Algae Growth.
- Restores Aerification to Soil.
- Enhances Root Growth.
- Reduces Soluble Salts.
- Restores water quality and clarity to supply lakes and ponds.
- 100% Environmentally Safe.

USING BIOREMEDIATION

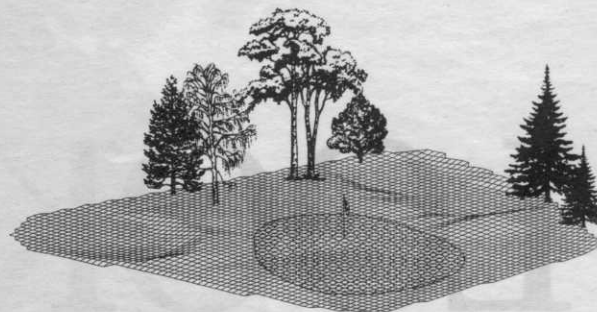
1-800-705-7450

P. O. Box 238423 Allandale, Florida 32123

CIRCLE #134

Natural Disasters Happen

(and we mean in addition to your score!)



Preserve your Golf Course

- * With accurate mapping of topographic features of greens and surrounding areas

New Courses

- * As built drawings of tees, fairways & greens
- * Accurate square footages

Laser Measurements

- * Standard tee to green
- * Sprinkler heads
- * Ponds, traps, streams

CALL FOR QUOTATIONS & DETAILS
1-800-362-0646

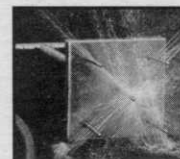
CIRCLE #133

Hot Spots?

Stop wasting labor
handwatering!
Wet Hot Spots FAST
with the

**WETTING
FORK**

(U.S. Patent #5,398,445)



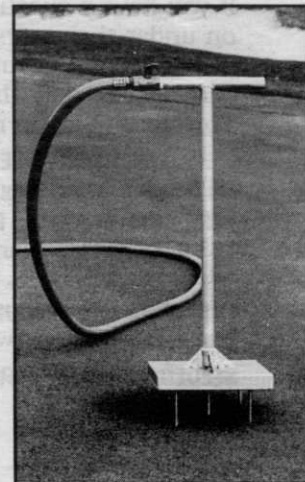
The Wetting Fork...

- Wets hydrophobic spots in 10 seconds or less
- Is made of lightweight but durable aluminum
- Has new improved stainless steel tines that can be used to inject fertilizers, fungicides and insecticides or wetting agents
- Helps control Fairy Ring
- Saves handwatering cost by wetting hydrophobic dry spots quickly and efficiently
- Reduces wetting agent use

Available Through
Professional Turf Distributors

Ask for a free demonstration!

For your nearest Distributor, call:
THE THINKING SUPERINTENDENT CO. 1-800-200-3810



CIRCLE #135

King Safety Connectors foil corrosion

King Silicone-Filled Safety Connectors are designed to prevent corrosion and corrosion-related failures in many environments, such as chemical, washdown, hazardous, turf & ornamental, or anywhere moisture is present.

The custom silicone sealant prevents corrosion and oxidation of wire ends by completely surrounding and coating the wires upon insertion into the connector. The sealant never hardens and provides a permanent waterproof connection. This feature provides corrosion protection,

but also ensures safety against corrosion-related flashover, not available from ordinary wire connectors. King Connectors exceed NEMA's requirements as a corrosion-proofing barrier, increase safety in hazardous locations where explosion-proof equipment is required, can be used in many direct-bury applications without the need of a junction box, and carry a limited lifetime warranty against corrosion-related failures. For more information, call 314-423-5300.

CIRCLE #306

Otterbine offers Fractional Series

The Fractional Series by Otterbine incorporates many features from Otterbine's other aeration systems, but at a fraction of the cost. This new line of high-quality water features, designed for small ponds at golf courses, includes all three of the interchangeable spray patterns: Starburst, Phoenix and Rocket.

The Phoenix and Rocket patterns can be varied in

height and diameter by simply adjusting the diffuser ring. You determine your spray pattern and change it whenever you like. These 1/2-hp units are manufactured entirely of stainless steel and thermal plastics.

For more information, contact Otterbine Barebo, Inc., 3840 Main Road E., Emmaus, PA 18049; or call 1-800-AER8TER.

CIRCLE #307

UHS, Roberts unveil new Perennial Rye

Passport Perennial Ryegrass (Exp.#: PST-2FF) is the latest generation cultivar out of the cool-season turfgrass research programs in Oregon.

United Horticultural Supply, in conjunction with Roberts Seed Co., has an exclusive agreement to market it nationally. Out of 123 entries, Passport tied for third place in overall turfgrass quality in 28 locations in the National Turfgrass Evaluation Program.

Passport did very well on spring greenup. This means it is winter hardy and starts aggressively when weather warms up. It was at the top of the chart in dark green appearance and scored well on appearance, cutting ease and disease resistance.

For more information, contact Roberts at 1-800-258-4657.

CIRCLE #308

Regal offers new granule, SysTec

SysTec 1998 WDG, a water dispersible granule fungicide for use on all turfgrasses and ornamental plants, has been introduced by Regal Chemical Co.

SysTec 1998 WDG is a broad-spectrum, highly systemic fungicide which is very effective for the prevention and control of turf diseases such as Fusarium Blight, Dollar Spot, Copper Spot, Large Brown Patch, Stripe Smut and many others.

The product is packaged in 5-pound bags, four bags per case.

For more information, contact Regal Chemical Co., P.O. Box 900, Alpharetta, GA 30239; or call 1-800-621-5208.

CIRCLE #309

Garon gives floors indestructible finish

Treflite, a premium epoxy floor resurfacer from Garon Products, Inc., provides an almost indestructible finish to old and new floors. Easy to apply, Treflite is non-shrink and quick-set. Floors are opened to foot traffic in four hours, normal traffic in just 12 hours. It bonds to virtually any surface: concrete, wood, steel, aluminum, glass and ceramics. It is resistant to thermal and physical shock, abrasion, acids, alkalis and solvents.

Treflite's epoxy binder creates an impervious floor for use anywhere a highly chemical-resistant surface is required. Totally non-skid, it virtually eliminates slipping, even when wet. No special tools or skills are required for application. One 5-gallon pail covers 40 square feet at 1/8-inch.

For more information and a free catalog, contact Garon Products at 800-631-5380.

CIRCLE #310

LOOK! Up In The Air! It's...It's A Pennington Turf Specialist



Well...our Turf Specialists can't actually fly, but they can be pretty amazing when it comes to turfgrass. If you have a question or a problem, just give us a call. Pennington's turf specialists may not have capes on under their suits but they are well-trained and knowledgeable. They can advise you about the latest developments in turfgrass, which grasses will best meet your turf requirements, water conditions, and climate. Not only that, they'll make sure that you get what you want when you want it. If it's Specialty Turfgrass that you need, then it's Pennington Seed you need to call.

PERENNIAL RYEGRASSES - Pennington 240, Shining Star, Stallion Select, Morning Star, Sunrise 246

PERENNIAL RYEGRASS BLENDS & MIXTURES - Sunrise Primo, CBS II, Triple Play, Sunrise plus Poa Trivialis, Professional's Select, Fairway Classic, Sports Club Mix

TURF TYPE TALL FESCUES - Duster, Tradition, Virtue, Finelawn Petite, Finelawn 88, Enviro Blend, Triad Blend

SEEDED TURF TYPE BERMUDAS - Cheyenne, Yuma



Call 1-800-285-SEED

for a Pennington Seed Specialty Turfgrass Distributor near you

CIRCLE #136

Golf Course Marketplace

To reserve space in this section, call Diana Costello-Lee at 207-846-0600

EMPLOYMENT OPPORTUNITIES

WANTED

Construction superintendents, shapers and foremen. Golf construction personnel needed at all levels. Must be willing to travel. Fax resume and info to: (904)646-1873.

SHAPE YOUR FUTURE

JOIN PAUL CLUTE & ASSOCIATES- Nationally recognized as a leader in premium golf course construction, at one of many project sites across the country. Currently seeking experienced superintendents, shapers, supervisors and irrigation specialists. Mail resume & cover letter to: Paul Clute & Associates, Personnel Dept., PO Box 454 Hartland, MI 48353.

JOB SEEKERS

For a fresh source of green industry job openings; subscribe for 3 months (6 issues)-just \$22.50. EMPLOYERS-List your job openings quickly and inexpensively. Call for details: 1-800-884-3435. Ferrell's JOBS IN HORTICULTURE, 154 E. Chapel Ave., Carlisle PA 17013-3435. MC/Visa.

EXPERIENCED SHAPERS NEEDED
Immediate openings. Send resume to Par 4 Shaping Inc. 6159 Spicer, MN 56288. Or call (612)796-6255 for more information. Ask for Cindy.

SALESMAN WANTED
Sell to golf courses. Inexpensive, widely used pipe locator. Commission basis, 30%. Bloch & Co. PO Box 18058, Cleveland OH 44118. (216)371-0979.

AGENTS WANTED
Driving Range Mats sales distributors and direct to ranges. Mark Norton. Legacy Plastics, 2366 Woodhill Road, Cleveland OH 44106. (216)421-8856.

GOLF COURSE CONSTRUCTION

Shapers needed at once. Must be willing to travel. Fax resume and date available to: (616)547-7009.

GET THE LATEST DEVELOPMENT

Subscribe to the *Golf Course News Development Letter* which tracks golf course projects under consideration across the nation! Just \$195 for a yearly subscription. Call Editor Peter Blais at 207-846-0600 for more information.

REAL ESTATE

TEXAS GOLF COURSES

Nine and eighteen holes-statewide. Some with extra land, development lots. Descriptive list available. Texas Golf Properties, 1603 Lightsey, Austin TX 78704. (512)442-1812.

FOR SALE

ARCH STYLE STEEL BUILDINGS

Build it yourself and save money! For cart & equipment storage. Factory direct. Save money on buildings in stock. 30 x 40; 40 x 50; 42 x 76; 51 x 90. Easy to erect. Archway Steel Buildings. 1-800-344-2724.

PIPE LOCATOR

INEXPENSIVE! Locates and traces underground drains, water pipelines of clay, PVC, ABS, steel and cement. Finds sprinklers, valves and clogs. Used by over 1000 golf courses! Bloch & Co. PO Box 18058, Cleveland, OH 44118. (216)371-0979.

GOLF CAR RENTAL CONTRACTS

Avoid Golf Car Abuse- Get it in writing! 2 Part Golf Car Rental Contracts. Imprinted or plain. Immediate Delivery. Minimize risk for pennies. For brochure: 1-800-223-5877.

AQUAMASTER

Fountains & Aerators decompose organic solids and prevent algae blooms. Available in ten spray patterns, 3 year warranty, only UL listed system.



Superior Aquatic Management Systems

16024 CTH X, Kiel, WI 53042
PH. 414 693-3121 FAX 414 693-3245

BUSINESS SERVICES

ATTENTION:

Golf Course owners, developers & architects: Now you have the best available people at affordable prices. We will supply you people for all aspects of golf construction anywhere in the world! Call or fax your project's needs to: Greensway Golf: 714-524-1185 ext 27 or 45 fax: 714-524-7255.

LASER MEASURING

Laser measuring and sprinkler yardage markers. We do it all! Laser measure & installation of custom metal yardage markers for all types of sprinkler heads. Fairway Yardage Designs: 800-368-2448.

GOLF COURSE ACCESSORIES

QUALITY!

- Laser Measuring • Scorecards
- Sprinkler Tagging • Yardage Books
- Redwood & Bronze Tee Signs

FORE BETTER GOLF, Inc.

1-800-468-8672

Fax: 708-893-0455

SOLID BRONZE SIGNAGE

- Yardage Markers
- Tee Signs
- 100, 150, 200
- Commemorative
- Laser Measuring
- Sprinkler Tagging
- Yardage Books

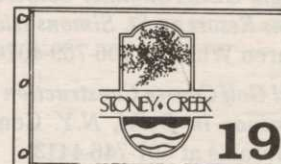
FROM TEE TO GREEN, INC.

(800) 932-5223

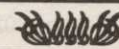
Fax: (219) 637-6874

~SAVE ON FLAGS~

Buy direct and save as much as 40% on personalized flags



No art charges. Get a free 19 for your lounge with 2 sets or more. Poles and other accessories available. Toll free 1-800-476-7005



Mid Tenn Turf, Inc.

Services -
• Row Plant Sprigging • Broadcast Sprigging
• Sod Installation • Hydro Seeding • Laser Grading
• Complete Athletic Field Construction & Renovation

Sod Varieties -
Available in 16" x 24" Slab or 42" x 120" Big Roll
• Blended Fescue • Vamont Bermuda
• 419 Bermuda • Quickstand Bermuda
• Tifway II Bermuda • Myer Zoysia
Sprigs available in all Bermudas and Zoysias

Manchester (615) 728-0583

Nashville (615) 254-4728

Fax (615) 728-0168 Toll Free 1-800-782-4083

4698 New Bushy Branch Rd.
Manchester, Tennessee 37355

Golf tax case

Continued from page 1

have their days in Collier County Circuit Court, and lawyers for Quail Creek are hoping to gain relief through state statute.

"What I'm trying to do now is fight the battle in the Florida Legislature, trying to put golf courses in a different tax category," said Larry Farrese, the Naples-based attorney representing Quail Creek, who noted that Illinois and New York already have such laws on the books. "The difference of opinion on these appraisals is substantial. At Quail Creek, we had a difference of \$3.4 million."

The case stems from assessments conducted by the Collier County Property Appraisers Office in 1993, when the county valued Quail Creek at \$10.4 million. The club retained Harrisburg, Pa.-based Golf Property

Analysts and received a second opinion of \$7 million — a serious discrepancy, especially for a member-owned club.

Abe Skinner, lead appraiser for the Collier County Property Appraisers Office, declined comment on the Quail Creek matter, citing the pending lawsuits brought by the other 11 clubs.

According to Farrese, there are three basic ways to assess golf course property:

- The Cost Method, whereby one estimates what it might cost to build the facility — course, housing, clubhouse — then depreciate to what it might cost today.

- The Market Method, whereby one takes note of recent golf course sales in the same market, then makes adjustments to reflect the particular attributes of the course in question.

- The Income Method, whereby one simply determines the income generated by the property.

"The county just used the cost approach, and that's why it came in with such a high number," Farrese opined. "When a developer builds a course, he puts a lot of money into amenities so he can attract real-estate buyers. Lots on the course are worth more than those that aren't. When he sells the lots, he transfers the golf club to its members."

"That's what happened at Quail Creek. The developer gets his \$10 million back. But the members don't get the value of all the lots."

Farrese said his client feels the county should have used a combination of the three methods to determine fair market value. He added that, in its assessment, Golf Property Analysts used all three approaches but emphasized the income method because that's the way management companies appraise golf course properties.

According to Farrese, the Florida Department of Revenue suggests use of the cost approach for two very practical reasons: 1) It's the easiest method and the state has more than 1,100 courses to appraise; and 2) Assessments tend to run higher, which means more tax revenues.

"We have major philosophical differences as to how the county appraises these properties," Farrese said. "Having used the cost approach, the county didn't depreciate the courses at all. We feel very strongly they do depreciate — you have to replace greens, tees, etc."

"The county should have used all three approaches and placed some weight to all three, instead of putting all the weight on one approach, which we believe is the worst approach given a choice."

While the remaining 11 courses weigh their chances in court, Farrese and Quail Creek

have taken their case to the politicians in Tallahassee.

Illinois' Green Belt legislation is the model statute for Farrese and Quail Creek. In Illinois, golf courses have been placed in a lower tax category because they're considered green space. For developers, it's more a disincentive to build strip malls than an incentive to build golf courses.

In New York, legislation was spurred by municipal assessors valuing courses as if they were being sold for another use, the most expensive possible use. The golf course in question argued successfully that it should be assessed as a golf course only, not a future use.

In Maine, legislation allows golf courses to sign an agreement barring any future development on the site. By preserving the open space in perpetuity, golf courses are granted sizable tax abatements.

CALENDAR

July

20-21 — *Field Diagnosis of Insects and Diseases on Trees and Shrubs in Long Island, N.Y.* Contact New York State Arborists Ass'n at 518-783-1322.

21-22 — *Sports Turf Ass'n Annual Field Day in Hamilton, Ontario, Canada.* Contact 519-763-9431.

25 — *Midwest Regional Turf Foundation Regional Turf Field Day in West Lafayette.* Contact 317-494-8039.

26 — *University of Georgia Turfgrass Field Day in Griffin, Ga.* Contact 404-228-7300.

26-28 — *Turf Producers International Summer Convention in Omaha.* Contact Doug Fender at 800-405-TURF.

30-Aug. 1 — *International Lawn, Garden and Power Equipment Expo in Louisville, Ky.* Contact 800-558-8767.

August

2-3 — *Minnesota Turf and Grounds Foundation Expo '95 in Mendota Heights, Minn.* Contact Scott Turtinen at 612-473-0557.

3-5 — *Turf Diagnostic Course in Ithaca, N.Y.* Contact Joann Gruttadaurio at 607-255-1792.

6-8 — *Georgia GCSA Summer Conference at Sea Palms Resort on St. Simons Island.* Contact Karen White at 706-769-4076.

8 — *Annual Golf Course Construction and Design Seminar in Delhi, N.Y.* Contact Dominic Morales at 607-746-4413.

16 — *Ohio Turfgrass Foundation Field Day in Columbus, Ohio.* Contact Julie Guenther at 614-261-6750.

17 — *Michigan Turfgrass Field Day in East Lansing.* Contact Kay at 517-321-1660.

23 — *Turf Talk '95 in Chandler, Ariz.* Contact Garden West at 602-233-2966.

September

7-8 — *Southwest Horticultural Trade Show in Phoenix, Ariz.* Call 602-966-1610.

19-21 — *Virginia Tech Turf and Landscape Field Days in Blacksburg, Va.* Contact David Chalmers at 703-231-9738.

November

9-10 — *Golf Course Expo in Orlando, Fla.* Contact Golf Course News Conference Group at 207-846-0600.

* For more information contact the GC-SAA Education Office at 913-832-4430.

Siena College study

Continued from page 3

defining what species are present and their level of diversity. This will be performed from 1995-97. "A golf course habitat could potentially attract a different species than if the land were not managed," Woolbright said. "One of our goals, then, is to increase native species of plants and wildlife."

• Long-term monitoring of populations and processes, like stream flow and chemistry, to determine the effects of management practices. "We need to look specifically at water chemistry changes during times of application. We will work very closely with Schuyler Meadows to time our studies with their management practices," Woolbright explained.

• Experimental manipulation, beginning in 1998. "Once we know everything that is there, where it is and how it reacts to management practices, we could recommend alternatives and methods we think would have a beneficial effect," Woolbright said. "And we would measure the effects of changes in those practices."

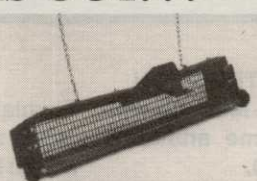
Continued on next page

Golf Course Marketplace

To reserve space in this section, call Diana Costello-Lee at 207-846-0600

GET THE ROCKS OUT...

and the pine cones, and other debris. The Sand Trap Renovator comes in 2 hand sizes: 12" wide (#511) and 24" wide (#512) and one machine size 4' wide for use with the TORO 5000, JOHN DEERE 1200, and Smithco units (#555). Insert hardware cloth for smaller particles.



Ask Your Golf Course Distributor for
INNOVATIVE MAINTENANCE PRODUCTS

From

Master of the Links

P.O. Box 283, Lockport, IL 60441-0283
(815) 723-4444 • Fax (815) 723-4485



CIRCLE #150

Featuring:



Drain Pipe
Nyoplast Drains
NDS Drains
Geotextiles
Lake & Pond
Liners
Silt & Safety
Fences

Eagle Interface for
Greens Construction

Serving the Golf Construction Industry Worldwide



CIRCLE #152



Nationwide delivery • Install in less than two hours

Golf Course Bridges!
1-800-328-2047



Route 5, Box 178, Alexandria, MN 56308 • (612) 852-7500

CIRCLE #154

Thousands in use.
Built to last.
Sponsor Member



B-DA-CL

Quality with a Twist

A twist of our easy off lid gives you quick access to Pinhigh's quality reel sharpening compound.

pinhigh
reel sharpening compound

Call 1 (800) 422-4748



CIRCLE #156

LIST RENTAL

**GOLF COURSE
NEWS**

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

...offers you the opportunity to reach the
decision makers at thousands of
golf facilities with an exclusive mailing list.

Call Diana Costello-Lee for details

207-846-0600

EXCEL

BRIDGE
MANUFACTURING CO.

Golf Course Bridges are our specialty! We fabricate easy-to-install, pre-engineered spans and deliver them anywhere in the USA. Call today for a free consultation.

Carlton Oaks Country Club, Santee, CA 10' wide x 60' long, 10,000 lb. capacity

Our classic design, with a look that stands the test of time.

800/548-0054 (Outside CA)

12001 SHOEMAKER AVENUE, SANTE FE SPRINGS, CA 90670
310/944-0701 • FAX 310/944-4025

CIRCLE #151

HARCO DUCTILE IRON FITTINGS FOR GOLF COURSE IRRIGATION SYSTEMS

Sizes 2" through 12", all configurations including "knock-on" repair couplings. High Strength, high corrosion resistance.

The Harrington Corporation
P.O. Box 10335
Lynchburg, Va 24506
804-845-7094 Fax 845-8562



CIRCLE #153

POND & LAKE LINERS

◆ Buy Direct from fabricator 20, 30, 40 mil PVC, Hypalon, HDPE, & VLDPE.

◆ Custom fabricated panels of up to 25,000 S.F. available.

◆ Material Only, Material & Supervision, or Complete Installation service.

1-800-524-8672

Colorado Lining Company, 1062 Singing Hills Road,
Parker, CO 80134. 303-841-2022 Fax 303-841-5780

CIRCLE #155

Formost Construction Co.

Serving the nation for over 30 years.

IRRIGATION SPECIALISTS

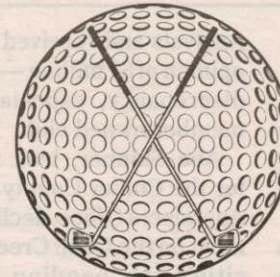
"Doing One Thing Well"

P.O. BOX 559
TEMECULA, CALIFORNIA 92593

(909) 698-7270

FAX (909) 698-6170

STATE LIC. #267960



CIRCLE #157

ENGRAVED YARDAGE LABELS

• Bright Colors • Fasteners included

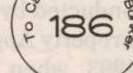
• Orders quickly shipped UPS **Free Samples!**

NEW ITEM... "THE SOLUTION"

For Areas Without Sprinklers.
Put Your Message Plus Yardage
Anywhere: Hazard Points,
Tees, Practice Ranges.

YARD EDGE GOLF
1-800-284-9273

P.O. Box 13159
Wichita, KS 67213



CIRCLE #158

GOLF COURSE NEWS

Golf Course Marketplace

To reserve space in this section, call Diana Costello-Lee at 207-846-0600

Score a
HOLE IN ONE
with a
Classified Display Ad
like this one in
GOLF COURSE MARKETPLACE
For details, call Diana Costello-Lee today at
(207) 846-0600

ACCU-GAGE™

NEW!
LIFETIME WARRANTY
ON BARS WITH
DURA-COAT™



ACCU-GAGE is a precision tool for making highly accurate height-of-cut measurements on greens mowers or other precision mowers.

AVAILABLE IN 15", 18", and 24" bars.

Our LIGHTWEIGHT and RIGID aluminum bars are now treated with DURA-COAT. DURA-COAT wears better than tool steel and enables us to offer this unique LIFETIME WARRANTY.

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

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

CIRCLE #161

Keep Your Divot Seed Mixture Where It Is Used ...



... in Divot Seed & Soil tee buckets next to the tee markers. Available in Cedar or Redwood slats and with companion Trash'M debris buckets.



Ask Your Golf Course Distributor for
INNOVATIVE MAINTENANCE PRODUCTS

From

Master of the Links

P.O. Box 283, Lockport, IL 60441-0283
(815) 723-4444 • Fax (815) 723-4485



CIRCLE #163

Flymo

Hovering Trimmers

3 NEW MODELS
GCT12, GCT15, and GCT21

Starting at **\$369.95**

Powerful engine, multidirectional cutting, lightweight, fast and easy to use, assembled in the USA

1-800-345-1960
FAX 305-973-8032

PRECISION
SMALL ENGINE CO., INC.
POMPAHO BEACH, FL

CIRCLE #165



PAVELEC BROTHERS
GOLF COURSE CONSTRUCTION CO., INC.

✓ New Construction

✓ Renovation

✓ Field Drainage Systems

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

98 Evergreen Ave.
Nutley, NJ 07110

CIRCLE #167

P. O. Box 806
201 40th St. NE



FORT PAYNE, AL
35967

"CROSSING THE NATION WITH
BRIDGES YOU CAN DEPEND ON"

ENGINEERED AND FABRICATED TO
FIT YOUR GOLF COURSE NEEDS,
FROM THE CONNECTOR (PICTURED)
TO THE ORIENTAL "EDO" SERIES.
PEDESTRIAN, GOLF CART AND
VEHICULAR BRIDGES. SINGLE
SPANS TO 200 FEET AVAILABLE.

CALL TODAY FOR FREE BROCHURES
1-800-749-7515



LANCASTER COUNTRY CLUB, LANCASTER, PA

CIRCLE #160

Featuring
CERTIFIED

MEYER Z-52 ZOYSIA

- EL TORO ZOYSIA
- TALL FESCUE
- TIFWAY II
- TIFTON 419
- TIFDWARF
- MIDLAWN

1-800-666-0007

QUAIL VALLEY FARM

P.O. BOX 5508
LITTLE ROCK, AR 72215

"Of course
we're playing on
Quail Valley!"



CIRCLE #162

LAMINATED WOOD SHELTERS & BRIDGES



PEDESTRIAN & VEHICULAR

Order Direct From The Leading Manufacturer in U.S.

- Complete Prefabricated Packages
- Ready for Fast Erection
- Direct Distribution Throughout the U.S.
- Custom Design & Engineering



CALL 800-777-8648

P.O. Box A • Morrisville, NC 27560
Tel. 919/467-6155 • FAX 919/469-2536

CIRCLE #164

TRIMS

The Worlds Most Popular
Grounds Management Software

NEW TRIMS VERSION 3.1 INCLUDES:

- ✓ Budgets & Expenses Tracking
- ✓ Equipment Maint. & Work Orders
- ✓ Inventory, PO's & Fuel Reporting
- ✓ Chemical & Fertilizer Records
- ✓ Personnel & Labor Activity Records

OPTIONAL FEATURES:

- ✓ TRIMS DrawView for site plans
- ✓ Tree Inventory
- ✓ Extended Memory Support
- ✓ Electronic Pesticide Ref / T&O
- ✓ Custom Report Writer
- ✓ Multi-User and Site Licenses

TRIMS Software International

3110 N. 19th Avenue - Suite 190
Phoenix, AZ 85015

(800) 608-7467 - (602) 277-0067

Call for your FREE DEMO diskette & indicate 5 1/4" or 3 1/2"



CIRCLE #166

Slow Play is Not Caused by Slow Golfers - It's a Management Decision.

A poorly marked course slows play. Isn't it time you made the management decision that increases revenue and golfer satisfaction?



The Kirby Marker System

800-925-4729 • 619-931-2624

CIRCLE #168

ADVERTISERS' INDEX

Cir.#	Advertiser	page
121	18th Green Bent Grass	28
133	Anderson Instruments	41
115	Aquamaster	20
111	Aquatrols	16
120	Aquatrols	26
119	Club Car	25
155	Colorado Lining Co.	44
154	Continental Bridge	44
124	Cushman, Ransomes America Corp.	30-31
130	Deltran Corporation	37
109	E-Z-GO	12
152	Eagle Golf & Landscape Products	44
164	Enwood Structures	45
151	Excel Bridge Mfg.	44
137	Flowtronex/PSI	46
127	Fore Par	34
157	Formost Construction Co.	44
116	Fox Valley Systems	21
—	Golf Course Expo	47
153	Harrington/Harco Corporation	44
139	Jacobsen	48
117	Jacobsen	22-23
156	Jesco Products/Pinhigh	44
110	John Deere	14-15
168	Kirby Markers	45
107	Kubota	9
105	Lofts, Inc.	6
150	Master of the Links	44
163	Master of the Links	45
129	Miles Inc.	36
—	National Golf Foundation	32
167	Pavelec Bros. Construction	45
136	Pennington Seed	42
165	Precision Small Engine	45
161	Precision Tool Prod. Co.	45
162	Quail Valley Farms	45
145	Rain Bird	10-11
106	Regal Chemical	7
114	Regal Chemical	20
131	Regal Chemical	38
122	Restroom Facilities	28
108	Rohm & Haas	10-11
112	Smithco	17
126	Standard Golf	33
160	Steadfast Bridge Co.	45
101	Tee-2-Green	2
103	The Thinking Superintendent/GolfLink	3
134	The Thinking Superintendent/GolfLink	41
104	Toro Comm'l. Prod. Div.	4-5
166	Trims International Software	45
132	Ty-Crop	40
118	Verti-Drain/Emrex	24
135	Water & Turf Restoration	41
113	Yamaha	18-19
158	Yard Edge	44
128	York Bridge Concepts	34

*Appears in regional editions.

Siena College study

Continued from previous page

Schuyler Meadows seems a perfect property for this type of study. It contains marshland, a creek, a pond, forest, forest edge and grassland. "It's a natural," Salinetti agreed. "We share the same woods and streams with Siena, and New York Audubon is nearby as well."

The Audubon's role will be communication, public relations, funding, dissemination of research results and, to some extent, providing interns to help with the study. Salinetti, whose club was one of the first members of the Audubon Cooperative Sanctuary Program for Golf Courses, credited his members for supporting the proposition. "I think private clubs need to realize that you have a very strong obligation to your community and you need to be working toward fostering a good-neighbor relationship," he said. "We're trying to act responsibly. If we are doing something that is negatively impacting our environment, we will work to find a better solution."

"It's an exciting cooperative agreement," Woolbright said. "Historically, environmentalists and golf course people have not had as cooperative a relationship as they might. But, if you look at what's happening in this country and around the world, the remaining pristine natural areas ... are dwindling fast. If you look at most regions — particularly the Eastern Seaboard — golf courses are becoming more and more an important large fraction of the remaining semi-natural habitat available."

"So we need to start paying attention to these refuges ... rather than trying to rely on undisturbed natural areas as sanctuaries. I don't think the [dwindling] process is going to slow. But the golf courses are still going to be there. So how can we manage them so they can serve an improved function for maintenance of habitat and species?"

Public-access Poolsbrook a testament to industry growth

By HAL PHILLIPS

KIRKVILLE, N.Y. — "Wow! That's a lot of golf courses." That was Ruth Taylor's reaction when informed that the course her family owns and operates had been recognized as the nation's 15,000th golf facility. And considering the phenomenal growth of public-access golf in the 1990s, it's fitting that America's 15,000th course be a family-run, daily-fee operation catering to the average player.

"We did it ourselves, with our son and son-in-law," explained Taylor, one of five family members who played a role in the development and operation of Poolsbrook Golf Course, a nine-hole track which opened here, 20 miles east of Syracuse, on April 1.

"My husband, Warren, had been talking about doing this for about 25 years. Last year, he developed some cancer. [The doctors] got it out, so we decided to go for it. We had the land. It's been in my husband's family for three generations.

"My husband designed the course. We dug it up, dug the trenches, put the irrigation system in. And we mow it ourselves. We have a small clubhouse with a snack bar. My daughter [Karen Furbeck] and I take care of everything inside, while the boys do everything outside."

At the urging of *Golf Course News*, the Jupiter, Fla.-based National Golf Founda-



tion (NGF) determined Poolsbrook GC was No. 15,000 after painstakingly poring over its records this spring.

When the first quarter of 1995 came to a close, the NGF determined there were 14,972 operating in the United States. Spring is a busy time for golf course open-

ings and Poolsbrook's early April opening was perfectly timed.

However, the emergence of Poolsbrook is but one piece of a larger trend in the U.S. golf course industry. While nearly 2,000 courses have opened since 1990 — a record pace — a full 80 percent are daily-fee, municipal or resort. Over the same period, the number of private golf courses has actually declined by more than 7 percent.

Private clubs will never disappear, but developers have realized the demographics of the U.S. golfing population have changed. As Baby Boomers get older, the long-term profit potential at public-access golf courses will become even more pronounced.

The Taylors — as developers and operators of Poolsbrook — have seen it for themselves.

"We have a lot of senior citizens who play it, and they love it because they can walk it," Taylor explained. "We want to have tournaments to get people to bring their wives, stuff like that. We really want this place to be one where the average golfer and family can come out and play.

"We just built a huge patio and barbeque pit so we can have big picnics. We have four leagues that play here every week. And we have 15 members. You have to start somewhere... Next year I want to start a junior league, for little kids. No teenagers. Just smaller kids. We need to get them started."

Green fees at Poolsbrook, which boasts views of the Erie Canal, are \$6 for nine holes on weekdays, \$7 on weekends. Business has been good, said Taylor. But this is clearly a labor of love for the Taylors.

Warren and son James Furbeck both work at a local bus service until 3 p.m. each day, then head to the course where they assume their maintenance duties. Warren handles the greens, James cuts the fairways, and son-in-law Chris Meloling mows the tees and rough.

The club was nearly named Deer Run because of the wild deer on the property.

"But we went with Poolsbrook because that's the name of the road," Ruth said. "It has worked out well because we've had a couple of people show up and tell us they wouldn't have found us if the street hadn't been Poolsbrook."

It could also affect how superintendents interact with members.

"A few years ago, I remember Stuart Leventhal [superintendent at Interlachen Country Club] commenting to me that his members were concerned that the greens had deteriorated and weren't putting as well as they used to," Downing stated in his study proposal.

"Obviously they had mutated to an unmanageable level and, no matter what he did, he could not maintain the level of maintenance of past years. Just think how much easier his job would have been if he could utilize DNA results to prove to the membership that there was a variety of grasses on the surfaces and it was now time to think about replanting."

Penn State University's Dr. David Huff, a molecular biologist and former turfgrass breeder, will interpret the data from the DNA fingerprinting on a quarterly basis to help steer the program in the proper direction.

The bulk of the money is ticketed for research on putting surfaces, although a portion will also go toward studying fairway Bermudagrass, Downing said.

Certified Bermuda?

Continued from page 39

to have quality grass."

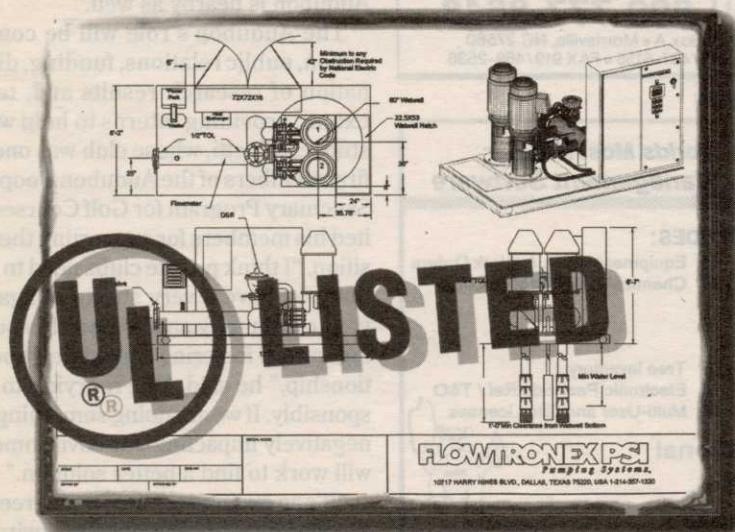
No one knows how off-types infest courses. Some likely originate from contaminated sprig stock when the course was planted, according to the University of Florida researchers who will lead the study, i.e. Charlie Guy, Al Dudeck, Nigel Harrison and Philip Busey. Some off-types may be spontaneous mutations. Undoubtedly, the mutations and common Bermudagrass are redistributed onto greens by golfers' shoes, golf car tires and mower parts.

How might the research affect how superintendents and suppliers do business? Say a superintendent on a new course helped select a grass before it was planted. He would get a report on the chromosome, morphological and DNA characteristics of the grass before it was put in the ground. Then he could hold back a portion of the cost until the turf was retested after planting to make sure that what he got is what he ordered.

Another First

FROM FLOWTRONEX PSI

COMPLETE STATION UL LISTED



Once again, FLOWTRONEX PSI offers a level of quality assurance unmatched in the industry. Underwriters Laboratories (UL), the most widely recognized independent testing service in the country, evaluated our Silent Storm pumping systems and found them to meet UL Standards for Safety. That's why the UL Mark of Safety is on every Silent Storm pump station, covering the **ENTIRE** pump station, from controls to conduit and skid to discharge manifold. It's just another example of how FLOWTRONEX PSI leads the way for the turfgrass industry.

FLOWTRONEX PSI
Pumping Systems

FLOWTRONEX PSI Ltd 1-800-786-7782

10717 Harry Hines Blvd. Dallas, Texas, U.S.A. 75220

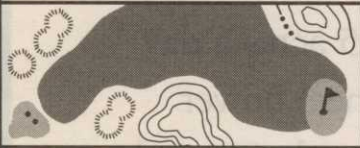
phone 214-357-1320 fax 214-357-5861

© 1995 FLOWTRONEX PSI Ltd

UT 007A, 4-95



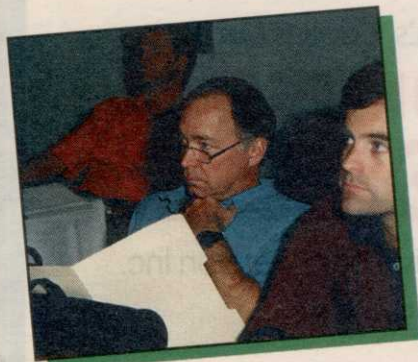
GOLF COURSE



EXPO

ORANGE COUNTY CONVENTION CENTER
ORLANDO, FLORIDA
NOVEMBER 9-10, 1995

A NATIONAL EXHIBITION AND CONFERENCE FOR OWNERS,
SUPERINTENDENTS, MANAGERS, AND DEVELOPERS OF
PUBLIC-ACCESS GOLF FACILITIES



"Great Start"

R.J. Kooyer, President
Bankhead Forest Golf Course, Double Springs, AL



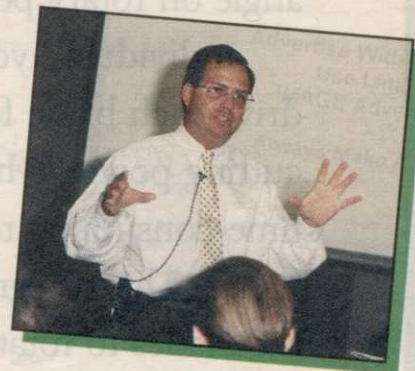
"Well run event as always."

David Claeysens, Director of Golf
Rockford, Illinois Park District

Golf Course Expo Means Business

The public-access golf industry comes together at Golf Course Expo—the only national trade show and conference for superintendents, managers, owners, operators, and developers of public-access facilities—daily-fee, semi-private, resort, and municipal courses.

- **Save money by pinpointing exhibitors on the trade show floor**
We're serious about saving your money and time. Investigate vendors who are there for all your needs—equipment, chemicals, seed, builders, accessories, sod, golf cars, consultants, management software, fertilizers, architects, and marketing firms.
- **Get up to speed on new products and services**
Find out "what's new" to give your course the competitive edge. The key to success in the business of golf is staying on top of new trends, partnering with vendors, and finding creative solutions. And Golf Course Expo is a carefully designed event to provide all three—and give you the edge.
- **Participate in special show events—like Shop Talks—where you'll learn about products and services that impact your bottom line**
Shop Talks are vendor-sponsored sessions set up on the show floor. Participating suppliers will zero in on solutions, feature their products and services, and address critical industry trends. And it's all part of the show.
- **Solve problems by attending the multi-tracked conference program**
In the crowded public-access marketplace, maintaining quality conditions on your course in the face of high traffic, and at a reasonable cost is even more important. Marketing your course takes on added significance. And efficient management—doing more with less—becomes an absolute must. The conference offers easy-to-adopt ideas that really work.



"Very interesting information. Being new in the business, this is very informative and interesting."

Mark Clark, Food and Beverage Manager
Sandy Ridge Golf Course, Midland, MI

Bring the Management Team

Golf Course Expo is a must-attend for superintendents, managers, owners, operators, general managers, golf administrators, directors of parks and recreation, builders, architects, and developers. This is a great chance for everyone at your course who makes buying decisions to find key products and services that will help your facility operate more effectively and efficiently.



"This was a very worth while experience. It's always great to get people together who are in the same business."

Craig Immel, Director of Golf
Aberdeen Golf Club, Cleveland, OH

And because its sponsored by *Golf Course News*,
Golf Course Expo means business for you!

Circle November 9 and 10
On Your Calendar Now to be
Part of This National Event for
Key Professionals at Public-Access
Golf Facilities

✂ Cut Here

Send me more information on Golf Course Expo

- ☐ Send me information for attending the trade show free of charge
☐ Send me information for attending the conference
☐ My company is interested in purchasing exhibit space, please send me details

NAME: _____

TITLE: _____

COMPANY: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

TELEPHONE: _____ FAX: _____

Key code: AD

Return to Golf Course Expo, PO Box 997, 38 Lafayette Street, Yarmouth ME 04096
For faster service fax to 207-846-0657

GOLF COURSE



EXPO

ORANGE COUNTY CONVENTION CENTER
ORLANDO, FLORIDA
NOVEMBER 9-10, 1995

No belts. No pulleys. No kidding.

The Jacobsen HR-5111's exclusive Multi-Motor deck design delivers a whole new angle on rotary performance.

Individual hydraulic motors drive each blade for unmatched cutting power, while eliminating time-consuming routine maintenance. This design also enables the blades to rotate in opposite directions for more even clipping dispersal. Team that with our floating-decks, and you've got a cut so clean you'd swear it was done by a reel mower.

A full 11' cut and 51 horses of liquid-cooled diesel power let



Individual hydraulic motors drive each blade for unmatched cutting power and reduced maintenance.

you mow up to 65 acres a day. Plus, agile rear-wheel power steering, a compact design and hydrostatic 4WD allow you to cover ground that other production rotaries simply can't.

For more information about this serious producer, or to see one in action, contact your Jacobsen dealer today.

THE PROFESSIONAL'S CHOICE ON TURF.

JACOBSEN
TEXTRON

Jacobsen Division of Textron Inc.

CIRCLE #138

