# LF COURSE FAMS

Special Report
Weather stations P. 24

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

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#### INSIDE

#### A call for data

Cape Cod Study director asks for information on independent ground and surface water studies. ... 15

Laser technology



Source: National Golf Federation, GIRAL S.A.

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## **Bob blasts Cape Cod courses**

By Mark Leslie

It was a nightmare of force. Driven by 90- to 100-mile-per-hour winds, Hurricane Bob washed thousands of tons of sand and seaweed and as much as six feet of deadly salt water onto Cape Cod golf courses on Aug. 19, leaving them inundated with destruction.

Cleanup chores, turf treatment, reseedings, replantings and repaintings kept groundskeeping and clubhouse crews busy into September.



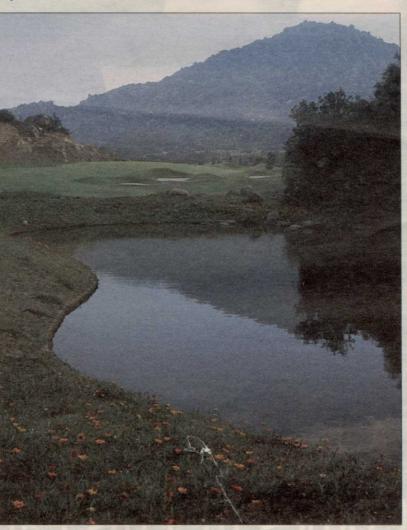
The ocean flooded in on New Seabury golf course, inundating the front nine holes.

Taking a breather 10 days into cleanup, a crew member at Fall River (Mass.) Coun-

try Club summed it up succinctly: "It's a mess."

Water was five to six feet

deep over parts of Kittansett Club in Marion, which sits Continued on page 17



The 295-yard 8th hole displays a portion of the beauty of Mt. Woodson Country Club in Ramona, Calif., the first Landmark signature golf course. For more on Mt. Woodson and other new courses, see pages 23-30.

# EEC to intensify competition in golf industry

By Peter Blais

The European Economic Commission's efforts to create a single European market by the end of 1992 has created opportunities and intensified competition among golf course developers and industry suppliers.

The 12-member European Community, which traces its roots back to the 1957 Treaty of Rome, is debating nearly 300 legislative initiatives designed to further enhance the free movement of goods, persons, services and capital between member countries. Most are scheduled for adoption by Dec. 31, 1992.

Continued on page 26

## Golf Course Europe gaining numbers

WIESBADEN, Germany—The third Golf Course Europe Conference here Oct. 7-9 looms so large that organizers already are planning the next show in Paris late in October of 1992.

Ellen MacGillavry of Expoconsult anticipates between 400 and 450 exhibitors, including a first-ever Japanese exhibit. Shunsuke Kato is involved in a

Continued on page 27

## Florida Golf Council's back to wall

TAMPA, Fla. — The continued existence of the fledgling Florida Golf Council is on the line as the state trade association conducts its second annual Golf Summit Oct. 3-4 in Tampa.

"There's a chance we won't

be here next year," said Jack Mathis, president of the yearold association formed to promote the interests of the state's \$5.5-billion golf industry to state legislators and regulators.

"I think we'll make it, but

we're at a critical stage. The government is paying attention to what we're saying. But our own industry is the key."

The problem is money. Mathis said the Golf Council needs several hundred-thou-

Continued on page 31



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# Urban Wildlife Institute cites DMW projects

TOWSON, Md. — The National Institute for Urban Wildlife has recognized seven projects of the local land planning firm of Daft-McCune-Walker, Inc., as certified "Urban Wildlife Sanctuaries."

Bob Galvin, DMW president, said: "Our research indicates that the integration of natural designs withnew development is extremely cost effective and creates a more marketable product. We have created approximately 268 acres of new communities which have received certification."

He added, "We strive to work as a team and include our environmental scientists and client in the design and landscape process."

# State approval paves way for \$1B PGA plan

JACKSONVILLE, Fla.—Close, but
—. A project involving \$2 million in
state road funds that, if not approved,
threatened to trapa \$1.1-billion project
featuring a PGA Tour Hall of Fame
and two golf courses for this city has
survived state scrutiny.

The Economic Development Transportation Fund Committee voted 43 to help build an interchange on Interstate 95.

State money for the cloverleaf interchange at Old St. Augustine Road was considered vital to attract project financing and was needed to improve access to the property.

Totalinterchange cost will be \$6.2 million. PGA Tour Investments will provide \$4.2 million.

In addition to the Hall of Fame and golf courses, there will be national headquarters of PGA Tour Productions, a resort and convention hotel and 4,500 units of housing and commercial development.

# Water recycling process to debut on public course

ELGIN, Ill. — A golf course community planned for two years for Elgin and St. Charles townships has received unanimous approval from the Kane County Development Committee.

The par 72 18-hole course will be ready for play within two years of construction start. Developer James Follensbee hopes to begin constructionnextspring of the 564-home luxury subdivision on the 744-acre project.

It is planned to use a revolutionary "circular water" recycling process, termed "environmentally superior." Water would be treated, aged for more than a month, then used to water the golf course.

Creation of the Otter Creek Water Reclamation District will enable overseeing of operation of the land application system County board approval on the requested rezoning should happen next month.

GOLF COURSE NEWS

## Audubon Project bestows first honors on Honors Course

FAR HILLS, N.J. — The Honors Course in Ooltewah, Tenn., has been chosen as the first golf course recognized for its conservation and preservation efforts under the Audubon Cooperative Sanctuary Program for Golf Courses.

In recognition of its achievement, The Honors Course, the site of the U.S. Amateur Championship in August, was presented an original oil painting by artist Adriano Manocchio depicting a view of the 9th hole.

The painting captures the

hole's natural habitat, nest boxes, and wildlife, such as the Eastern bluebird, pileated woodpecker and quail. It was accepted on behalf of The Honors Course by the club chairman, John T. Lupton at a ceremony at the club on Aug. 18.

The Audubon Cooperative Sanctuary Program is sponsored by the USGA and administered by the Audubon Society of New York State.

It seeks to protect and enhance wildlife habitat on existing and

planned golf courses, enhance the image of golf courses as sanctuaries for wildlife, and encourage all those associated with the game to become more knowledgeable about environmental issues and take an active role in conservation practices on golf courses.

Several factors contributed to the decision to recognize the practices of The Honors Course. The course was constructed in harmony with the existing site topography, thereby minimizing the negative environmental impact of excessive

oil disturbance

Naturalized tall grasses are encouraged to grow in areas between greens, tees, and landing areas.

Native shrubs and tall grasses border the roughs, streams and pond shorelines. Nesting boxes for birds are located throughout the course.

Superintendent David Stone remains an avid naturalist and has instituted several programs to help identify, monitor and encourage a variety of wildlife species utilizing the course environment.

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#### Sludge dump site of new Chicago course

CHICAGO — The International Port District, the agency regulating the port of Chicago, intends to translate more than a decade of dumping sludge on undeveloped land north of Lake Calumet into an 18-hole golf course with clubhouse.

The port district's recently filed lawsuit said that in 1989, in return for being allowed to dumpits sludge there, the Water Reclamation District agreed to build a golf course and clubhouse on the site by 1993.

The lawsuit said the depositing of sludge was supposed to be preliminary to transforming the site to a recreational area. The suit seeks \$11 million in damages for breach of contract and \$15 million as non-payment compensation.

# Long wait ending for city officials in North Augusta

NORTH AUGUSTA, Ga. — It's been a troubled 10 years since North Augusta's riverfront golf course first was broached, but city officials are sidestepping the latest snag and planning to complete the project.

A principal Asian investor has been linked to a bank fraud scandal, but Mark Bennett of North Augusta, a project developer, plans continued work.

The city is equally undismayed. Having established the North Augusta Redevelopment Commission, made upofthemayor and council members, it has the power to seize land in the 15,000 acres of riverfront property in the city's redevelopment district. The golf course site is within the district.

Developers have bought more than 230 acres for more than \$1.85 million.

The council could take the land through eminent domain and develop it or find a new developer.

"A golf course is probably the land's best use, considering the flood plain," said North Augusta Mayor Tom Greene.

## Water park could be course amenity

MACON, Ga. — County Commissioner Joe Allen is pushing for a public golf course at Lake Tobesofkee, combining it with a water park.

He has discussed with an unnamed Atlanta firm the possibility of the county furnishing a 160-acre tract of land it owns off Old Columbus Road and the firm developing the course as a joint operating venture.

Said Allen: "If we put the Georgia Sports Hall of Fame on Riverside Drive, the Music Hall of Fame downtown and the golf course and water park at Tobesofkee, we'll have I-75, I-16, I-475 and U. S. 80 locked

"People will come to Macon."

## Member makes literal stink out of added walking fee

MIAMI — The "all clear" signal has sounded at Miami Shores Country Club, and members no longer play golf with their noses in the air.

A member, disturbed that the free fee for walkers had been changed to a \$5 "trail fee," vowed

that she'd dye before she paid a red (s)cent. She made a raincoat, hat and sunglasses her fashionable golf attire and furtively sprinkled foulsmelling chemicals over the course.

The distinctive odor quickly penetrated her disguise.

Course superintendent Rob Haas

tracked her down without the aid of bloodhounds.

Three attempts by Haas and clubhouse personnel to expunge this unwelcomed hazard made little headway. But Nature and \$4,000 worth of scrubbing eventually cleansed the odious fairways.

The 72-year-old woman was charged with felony criminal mischief.

Assistant professional Mike Walsh wondered why the woman would rather spray than pay. Head pro Randy Webber said only, "The fee will stay for those who play."

## Minnesota County plans to develop two golf facilities

ST. PAUL, Minn. — The Ramsey County Board will seek proposals to develop, operate and manage two golf sites in Shoreview and one in St. Paul.

The largest course, projected as 18 holes, would be on 240 acres along the Rice Creek Regional Trail corridor in northwest Shoreview.

At Island Lake in Shoreview, a

practice and instructional facility could go on 41 acres, possibly in combination with a small course.

At Battle Creek in southeast St. Paul, a nine-hole executive course

could be built on 55 acres.

Construction could begin next year. Island Lake and Battle Creek sites might be open in 1993, the Rice Creek course in 1994.

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#### All-senior course deadlock result

HEMET, Calif. - Public golf course plans will remain intact in the Tres Cerritos housing development project in west Hemet, but it now will be an all-senior setup.

The Hemet Unified School District had sought up to \$6 million to cover the cost of providing classrooms for students who would have moved into the development.

The LaVerne Co. said the district's demands nearly tripled the state-requiredrate of \$1.58 per square foot. As a senior-only project, the fee would be 26 cents per square foot...

## Mega-projects get good, bad word in Hawaii

#### Fasi on warpath when impact fee settled at \$50M

Two Hawaiian golf course-related projects seem set for the next development step, but a third has received discouraging word.

Honolulu Mayor Frank Fasi hoped to block construction of the proposed Royal Kunia project —which would have 2,000 homes and two golf courses —unless developer Herbert Horitapaid \$200 million in "impact" fees for the two courses.

The state Land Use Commission voted 7-0 to accept \$50 million and stick with an earlier decision to reclassify 708.6 acres mauka of the Village Park subdivision from agricultural to urban use.

Fasi has vowed to sink the project.

#### \$500 MILLION PROJECT

Nansay Hawaii's total project investment for a planned Puako residential golf community on the Kohala Coast of the Big Island will

be more than \$500 million. There will be six golf courses on 3,000 acres located on most arid lava land sloping upwards from Queen Kaahumanu Highway across from the Mauna Lani Resort.

Also included are 2,000 singlefamily and multi-family residential units, a golf academy and commercial center. Project completion is projected by the year 2002.

#### JAPAN MEMBERSHIPS ON LINE

Plansfor 18- and 36-hole golf courses and "resort houses neighboring the courses" have raised a red flag among Maunawili residents.

Reportedly, golf course memberships will be sold in Japan for \$200,000.

Community residents who successfully opposed a state proposal to locate 200 homeless persons on eight acres owned by the golf course developer are trying a new tack against the latest encroachment.

A delegation plans to go to Japan to tell prospective golfers just how rainy Maunawili Valley can be. Presumably, none will be from the chamber of commerce.

\$40,000 soil tests

#### show course OK OAK LAWN, Ill. - Soil tests commissioned by the Oak Lawn

Park District at a cost of \$40,00 showed that it was safe to build an 18-hole golf course on a former land

Therefore, district members voted 3-2 to approve the \$5 million project that lists nine regulation and nine par three holes on 77 acres.

Part of the course may be lighted for night golf, said course designer Carl Goetz.

Preliminary tests last summer indicated potentially hazardous chemicals present in groundwater on the course site.

#### Alabama turning resources to course

BIRMINGHAM, Ala. - Natural resources once set aside for steelmaking may one day be converted to one-family homes near the clubhouse of the golf course being financed by Retirement Systems of

That course is scheduled for completion by the end of the year.

Hopefully, the Oxmoor Valley's 8,000 acres of largely pine trees between Birmingham and Bessemer will be transformed into homes, businesses, golf courses and schools as Lakeshore Parkway is extended from Mountain Brook to Alabama 150.

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## Adjoining lots will make or break Nevillewood

Nicklaus, Palmer designs add challenge to housing marketers in Pennsylvania

PITTSBURGH, Pa. — Success of Nevillewood, a housing and golf course community being built in Collier, likely will rest on attracting those who, like A. Jay Buckley, wish to locate next to a golf course.

Buckley is president of LeNickel Inc. in Findlay and president of the Valley Brook Country Club in McMurray. Developers believe that as many as 75 percent of their buyers will be golfers.

Donald E. York, an appraiser in Washington, said the value of lots adjacent to a course probably are worth \$10,000 to \$20,000 more than lots located further from the course.

Nevillewood, an 18-hole layout designed by Jack Nicklaus, opens in July 1992.

Other 18-hole golf-housing developments include Treesdale in North Hills, Hickory Heights in South Fayette, the Colony at

Chestnut Ridge in Indiana County, and Southpointe in Washington County.

Treesdale, designed by Arnold Palmer, opens in July 1993; Hickory Heights, designed by Hurdzan Design Group, in July 1992; The Colony, designed by Ault, Clark & Associates, in mid-1992, and Southpointe, designed by Arthur Hills & Associates, in June 1993.

Development of Golden Maple CC, a 650-unit development in Sewickley, Westmoreland County, has been delayed.

# Chesapeake Bay program director named by EPA

WASHINGTON, D.C. — William Matuszeski has been named director of EPA's Chesapeake Bay program.

Matuszeski has been the associate assistant administrator for EPA's Office of Water since March 1990.

The Chesapeake Bay program is charged with protecting the water quality and living resources of Chesapeake Bay. The program coordinates Bay restoration efforts of the federal, state and local governments, and citizen, scientific and environmental

groups. It is overseen by the Chesapeake Bay executive council.

William K. Reilly, EPA administrator, at that council's recent annual meeting unveiled the council's strategic directions for the Chesapeake.

They are re-examination of nutrient reduction goals; a new focus on pollution prevention; a reinvigorated campaign to protect the Bay's living resources and habitats, and a special outreach to cultural and economic groups.

#### Course OK'd, but life will be brief by plan

TINLEY PARK, Ill. — Village trustees and plan commissioners approved a nine-hole public golf course here, but the links life span may be short.

The course must eventually give way to office or light industrial development.

Developer James Gray said that after annexation and special permit are approved, the layout on 50 acres and between 2,400 and 2,750 yards long could be ready in 18 to 24 months.

## Hawaii council suggests denial

KANEOHE, Hawaii — Developer Pacific Atlas wants to expand its private par-3 Bayview Golf Course into a full-scale 18-hole course, but the Kaneohe Bay Task Force will recommend that the City Council deny the required permits.

Instead, the task force will urge the city to buy the course and turn it into a Hawaiian cultural center and park.

Pacific Atlas agreed last February to pay the city \$20 million for the right to expand its course. Expansion initially was approved by the council, 5-4.

## NGF formalizes 4th Golf Summit

ORLANDO, Fla.—Golf Summit 92, the U.S. golf industry's fourth biennial leadership conference, will be held at Marriott's World Center here Oct. 21-23, 1992.

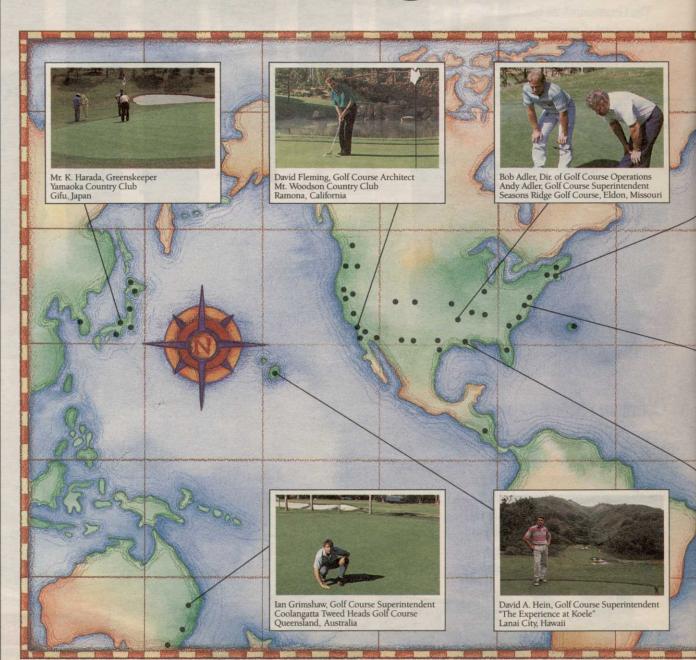
More than 600 industry representatives attended the National Golf Foundation's Golf Summit 90 to exchange insights on the challenges and opportunities impacting golf's growth in the 1990s.

Topics included: the interaction of supply (courses) and demand (players), environmental and other issues impacting golf course development, the growing international market, and opportunities for increasing women and minority golf participation.

For further information, contact the Golf Summit 92 office at NGF, 1150 South U.S. Highway One, Jupiter, Fla. 33477; 407-744-6006.

#### BENTGRASS

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## West Virginia man nominated to succeed Spaeth for USGA

Stuart Bloch has served as vice president since 1989, and has served on 15 committees

PALM BEACH, Fla. - Stuart F. Bloch of Wheeling, W.Va., has been nominated as the United States Golf Association's 52nd president. Election will take place at the USGA's 98th annual meeting here

Bloch would succeed C. Grant Spaeth of Palo Alto, Calif.

Others nominated were Reg Murphy, Baltimore, and M. J. Mastalir, Jr., Denver, vice presidents; Judy Bell, Colorado Springs, Colo., scretary, and F. Morgan Taylor, Hobe Sound, Fla., treasurer.

Renominated to the executive committee were Raymond B. Anderson, River Grove, Ill.; Thomas Chisholm, Birmingham, Mich.; D. Ronald Daniel, New York City; Trey Holland, Indianapolis; Paul G. Jenkins, Palm Springs, Calif.; John D. Reynolds III, Augusta, Ga.; Gerald A. Stahl, Rochester, N. Y., and Peter T. Trenchard, Sister Bay, Wis.

New executive committee nomi-

nees are James A. Curtis, Seattle; John F. Merchant, Bridgeport, Conn., and Reed K. Mackenzie, Chaska, Minn.

Since becoming an executive committeman in 1985, Bloch has served on 15 committees, most recently as championship committee chairman in 1990 and 1991. He has been vice president since 1989, and was secretary in 1988.

Amember of the Broadmoor Golf Club in Seattle, Curtis was a founding member and member of the executive committee of the Pacific Northwest Golf Foundation.

Merchantis a member of Rollings Hills Country Club in Wilton, Conn.

A member of Hazeltine National Golf Club in Chaska and a member of USGA committees since 1978, MacKenzie was general committee chairman for the recent U.S. Open championship at Hazeltine and Minnesota Golf Association presidenfrom 1988 through 1990.

#### Pate brothers designing course in Tennessee

PICKWICK, Tenn. — Former U.S. Open golf champion Jerry Pate and brother Jeff, partners in Jerry Pate Golf Design in Gulf Breeze, Fla., are overseeing construction of Shiloh Falls course here.

Shiloh Falls, which will be completed in 1992, will carry the Pate name along with that of PGA Tour pro Fred Couples, a consultant on the property.

The Pates do all course designs on computer. They have six projects under contract, four for 18-hole

Jerry Pate's interest in design was heightened in 1975 when he visited a course under construction near Birmingham, Ala. - Shoal Creek.

#### **Pabst Farm** site for \$470M development

OCONOMOWOC, Wis. - An 18-hole golf course will be a feature of a proposed development of historic Pabst Farms in the town of Summit and the village of Oconomowoc Lake and bordering Oconomowoc

The 1,662 acres owned by the brewery family since 1906 are north and south of Interstate 94 at Highway 67 in Waukesha County.

The development, to be built over 15 to 25 years, eventually may be worth nearly \$470 million.

Plans call for single-family and multifamily homes, shops, business space, recreational facilities and environmental corridors. The development would have a Bavarian theme, reflecting the Pabst family heritage.

#### Taxpayer group determines to fight project

ROCHELLE, N. Y. - Approval of a \$2 million 18-hole golf course at Skare Park, northwest of Rochelle, has a taxpayer group scared - and

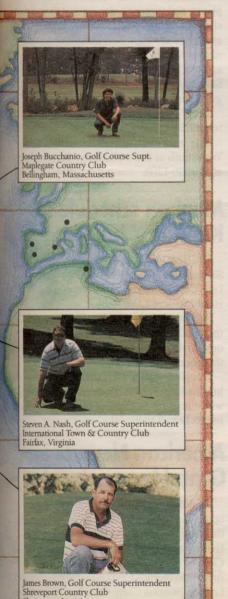
The Flagg/Rochelle Community Park District voted 4-0 to undertake the installment purchase contract. Packard Incorporated of Chicago will be the architectural firm.

Because of a donation of 15 to 25 acres of land by Rochelle businessman Jim Walker southeast of the park, it will be possible to create the course and still avoid the Indian encampment and barn owned by the late Norman Skare, who donated land for the park.

Tax increase opponent Robert Furjanic said the golf course was especially unwarranted, since plans had been announced for a housing development and a \$1 million 18hole course three miles west of Rochelle.

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## N.J. state park project hits another snag as \$5M landfill cleanup needed

JERSEY CITY, N. J. — The proposed 250acre Liberty State Park Golf Course has encountered formidable obstacles ranging from cost to environmental problems.

Golf course architect Brian Silva of Amherest, Mass., said the state must spend at least \$5 million just for clean landfill. It would cost \$12 million and take more than a year to complete.

Golfers on the 12th, 13th and 14th holes would be walking along an area contaminated with dredge spoils. Nearly 100 acres are covered with 650,000 tons of contaminated sediment, according to the state Department

of Environmental Protection, adding that tests reveal 3,444.6 parts of contamination per million parts of clean soil.

Meanwhile, New Jersey's Department of Environmental Protection has ruled that an 18-hole public golf course can be built around wetlands and alongside two other new courses and hundreds of luxury homes in Rockaway Township.

The ruling requires developer Samco Rockaway 90 Inc. to design 50-foot buffers, or undeveloped land, around wetlands on the 400-acre site. The public course is part of Samco's proposed 1,700-acre Copperas Ridge project, which includes two golf courses and 306 homes.

## Banker banks golf on rise in N.Y.

Studies say Baltimore County needs 10 new courses; here comes the first

HAMPSTEAD, N. Y.—A former banker now immersed in bunkers may help solve Baltimore County's projected golf course crisis.

Leland Snyder, building a course here, is banking that golf is on the rise, that more women and working-class people are taking up the sport. "Golf is something the 40-plus set can do for the rest of their lives," Snyder said.

Regional developers agree with the assessment of Keene Gooding, a management analyst with the Baltimore County Department of Recreation and Parks.

Gooding estimates a county need for 10 new courses to meet an estimated demand for 1.5 million rounds of golf each year. This is more than twice the 680,000 rounds now played on local public and private county courses.

The county is completing acquisition of land to add 18 holes to its Diamond Ridge Golf Course in Woodlawn.

Anne Arundel County has bought land for a new course, but can't afford to build it yet.

Howard County has identified two sites for 18 hole courses to be built by the county or a developer for public use.

Three courses are in the approval process or under construction in Carroll County. In the planning stage are Challedon, off Md. 27 north of Mt. Airy, and River Downs in Gamber.

# Water-efficient land symposium readied by city, industry

PALM DESERT, Calif. — The city, Atlantic Richfield Co. and local green industry associations are co-sponsoring a water-efficient landscape symposium here on Nov. 25.

Three general morning sessions will focus on the future of water, successful water efficient landscape projects and drought-tolerant plant materials.

Afternoon sessions will touch on irrigation, plants, maintenance, design and the responsibilities of the public sector. Six hundred attendees are expected including members of symposium co-sponsors California Landscape Contractors Association, American Society of Landscape Architects and local golf course superintendents associations.

Forty display booths are available for water-efficient products, services and materials.

For more information contact John Wohlmuth at 619-346-0611 or Randy Myers at 619-399-4260.

#### Muni on schedule for Kentucky July 4 bang

RICHMOND, Ky. — Construction of the \$3 million 227-acre Gibson Bay Municipal Golf Course may next summer gild the restored 70-acre Lake Reba.

An optimistic Mayor Ann Durham said, "If the weather cooperates and the grass grows on schedule, we might tee off with a bang on the Fourth of July."

Coupled with a \$350,000 four-lane road into the Lake Rebarecreation area, the project will mark the beginning of park improvements linked to the lake's restoration.

#### American Nevada is Grand Legacy builder

An article on Las Vegas golf course development in the August issue incorrectly stated that Summa Corp. is developing Legacy at Green Valley and TPC at Summerlin. Summa Corp. is developing TPC at Summerlin, but American Nevada Corp. is developing Grand Legacy. Summa Corp. President Mark Fine was president of American Nevada Corp. before joining Summa Corp. The Grand Legacy project is now being directed by W. Bradley Nelson, vice president of American Nevada Corp.

## THE COMPLETE COMMERCIAL

## MOWING SYSTEM FROM "A" TO "Z"

Kubota has introduced a complete new mowing system, the FZ2100 Front Mower. From "A" – Auto Assist Differential (AAD) to "Z" – Zero Diameter Turning Radius (ZDT), it increases your power and mobility to handle all your mowing needs.

Equipped with 20 horsepower and four-wheel drive, the new FZ2100 Front Mower's zero diameter turning radius gives you the agility and power to get into the tightest spaces effectively. You can mow around trees, hedges, flower beds and other obstacles much more precisely and in less time. And, with the Auto Assist Differential drive system the machine automatically switches between 2WD and 4WD to match operating conditions and terrain, providing more traction and eliminating slippage. This increased productivity in all mowing conditions, and the FZ2100's ability to turn com-



Kubota's FZ2100 with Auto Assist Differential and Zero Diameter Turning Radius.

pletely around in one spot without damage to the turf, cuts way down the time spent on labor-intensive hand trimming jobs.

The FZ2100's front wheels rotate freely through your tightest turns, and Kubota



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has designed round shoulder tires that virtually eliminate turf damage. And, the FZ2100 offers all the durability and innovation commercial operators have come to expect from Kubota. Like our powerful Kubota liquid-cooled diesel engine, hydrostatic transmission, 55 degree tilt deck for easy access and blade maintenance and optional grass catcher.

Your authorized Kubota dealer can show you the complete commercial mowing system with the power and maneuverability to handle your tough jobs from A to Z. For more information write to:
Kubota Tractor Corporation P.O. Box 7020-Z

Compton, CA 90224-7020.

### Members say 'sell' Calgary, buy another

CALGARY, Alberta, Canada — Recent poor condition of the Calgary Golf and Country Club course has prompted some members to pressure the board of directors to consider selling the prestigious layout.

The land could fetch "well in excess of \$20 million," said one source.

General manager Jim Sherlock said the only way to improve the course would be to "dig it up" and begin again.

Some members want to buy another piece of property to build a 36-hole course on. Sherlock doubted many board members would be in favor of selling the property the club has occupied since 1911.

#### Ohio town takes Parkview GC by eminent domain

MAYFIELD, Ohio — An ordinance to take Parkview Golf Course by eminent domain has received 6-0 Mayfield Village Council approval.

Negotiations for the 78-acre parcel had stalled. Course owners Pat LaConte and son Richard reportedly asked \$5 million for the land. Last summer, an appraiser hired by the village set the value at about \$2.2 million. LaConte, in a federal lawsuit against the village, said the village interfered with his attempts in 1986 to sell the parcel for \$3.68 million.

#### \$150M project for course, 600 homes off ground

SALEM, Ore. — City requirements for a \$150 million South Salem golf course and housing development took a year to fulfill, but Larry Tokarski now is set to begin construction.

The 18 hole, 140-acre golf course phase of the project that would include 600 homes and condominiums will be finished by the summer of 1993, said Tokarski, president of Coldwell Banker Mountain West Real Estate Inc.

Portland architect Jim Hardy and professional golfer Peter Jacobsen will design the course.

# Haney leaving Stonebridge to build center

STONEBRIDGE, Texas—Reinforced by \$1.2 million from investors, Hank Haney is vacating Stonebridge Ranch to build a golf teaching center just south of Stonebridge.

Tour professionals Mark O'Meara and Chip Beck will assist in design of a nine-hole layout.

## Members say Facility for handicapped puts out call for gear

Laundry list' includes balls, baskets, carts, signs, storage building

AKRON, Ohio — Dedication of the three-hole golf course and teaching facility/driving range for the physically disabled at Edwin Shaw Hospital took place Aug. 21 during the NEC World Series of Golf tournament, but facility use won't happen until spring.

Afairly large list of items is needed to make this project a complete

success, said William C. Butler, Challenge Golf program coordinator

The facility recently received a nice boost when Wittek Golf Supply Company, Inc., of Chicago, Ill., donated range ball dispensers, range pickers and ball washers.

Butler's "laundry list" of further needs includes such turf care equipment as green mower, fairway mower, tractor, truckster, aerifier, leaf blower and spraying equipment.

Other items of value would be range balls, ball baskets, powered golf carts, signage, storage building and maintenance products.

Butler stressed that such equipment need not be new. "Good condition would do the trick." Properly maintaining the course and teaching facility is a prime concern of Butler.

Wadsworth Golf Construction Company, Hurdzan Design, The Ohio Contractors Association, Kurtz Brothers and Lesco Products have been among significant contributors.

The hospital's address is 1621 Flickinger Road, Akron, Ohio 44312.

#### No bus service to course causes townsman's anger

RHINEBECK, N. Y. — Failure to plan year-round shuttle bus service for a golf-oriented housing development brought criticism from Rhinebeck town board member Dennis Demoster.

Noting that developers propose to use open space by the golf course for hiking, jogging, biking, cross country, skiing, ice skating and sledding, Dempster said there could be uses for bus service other than the 27-hole golf course.



The latest 'word' in bentgrass is PennLinks.

# Paul Latshaw is spreading the word.

Paul Latshaw holds the distinction of being the only superintendent of golf clubs hosting 3 major tournaments. With Paul's reputation, expertise and candor, he's a powerful promoter for PennLinks.

"I know PennLinks to be the finest creeping bentgrass available. I know it's been time-tested on the North Course greens here at Wilmington Country Club since fall of 1984.

"I know PennLinks has an extensive root system, heat tolerance, and requires very little grooming or verticutting because of its upright growth.

"The upright growth habit convinced me to overseed the fairways at Wilmington. I know time will prove I made the right choice. And I like that, too.

"PennLinks. Spread the word."

Paul Latshaw



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## Town's 1st public course centerpiece of project

PELLA, Iowa — Plans for a \$3.2-million, 135-acre public golf course, eight years in the dream stage, soon may be a reality here.

The Pella City Council has entered a public-private partnership with Bos Landen Development Group for the town's first l8-hole and first public course as the centerpiece of a \$60-million develop-

ment with up to 250 single-family houses and 140 townhouse, condominium and apartment units.

Kurt Kettler, whose idea it was, recruited homebuilder Darrell Van Hall and Central College Assistant Professor Bob Bruns.

They began buying land.

Members of the families that operate Pella's two largest firms — Rolscreen Inc. and Vermeer Manufacturing Inc. — teamed with Kettler, Van Hall and Bruns to form Bos Landen, which is Dutch for "land of the trees."

The city is financing \$1.7 million of course construction cost, the developers \$1 million and the Rolscreen Foundation \$500,000.

### Bighorn Institute upset, feels course a bother to wildlife

PALM DESERT, Calif. —The proposed 18-hole Altamira Country Club golf course received 3-2 City Council approval to the dismay of neighboring Bighorn Institute.

A sizable amount of open space will be required between homes and the research center.

Council members Buford Crites and Jean Benson wanted a larger buffer area to shield the institute's lambing pens from human intru-

# Paradise Valley course to be built by Flint

FAIRFIELD, Calif. — Flint Golf Course Construction Company of Sacramento has been awarded the construction contract for the \$2.3 million Paradise Valley Golf Course here.

A2.26 million bid from Cagwin & Darwin of Novato was rejected because "it did not meet the necessary experience required by the city." That company's background was limited to nine holes at Bing Maloney Golf Course in Sacramento, said Charles Beck, Fairfield assistant public works director.

The Flint group has built 14 courses in 14 years, Beck noted.

# N.J. community gives go-ahead to \$100M plan

MILLVILLE, N. J. — The Planning Board has given the green thumb to the Flower Time golfing complex in the form of unanimous preliminary approval.

The 630-acre golf/residential golf development will straddle the Millville-Fairfield Township boundary on Route 49 and feature two 18-hole golf courses, a nine-hole executive course and an English-style clubhouse.

Developer Robert Ench said foreign financing for the \$100 million project is nearly lined up, and construction could begin by late fall.

## 1,000-home project wins OK

FRESNO, Calif. — The Fresno County Board of Supervisors has approved plans of New Cities Development Corp. of Carmel for an 18-hole golf course and 1,000 housing units for Quail Lake Estates, a community east of Clovis.

sion

Developer Jim Hayhoe plans to build a \$350-million project that would include 450 luxury homes, an 18-hole golf course and a 40,000-square-foot clubhouse.

# Connecticut developer hopes to keep golfers in the North

RIDGEFIELD, Conn.—New York City developer Peter Friedman, borrowing from an idea popular in the south, wants to build 300 homes around an 18-hole golf course on 255 acres in rural Ridgebury.

Sal Monti, a member of the town golf committee, there would be a demand for homes costing between \$350,000 to \$450,000. "With basically six months of golf weather here, people paying that kind of money would rather go further

south," Monti said.

Henry Paparazzo, developer of Heritage Valley in Southbury and Heritage Hills in Somers, N. Y., sees appeal for permanent residents in the Ridgefield project. "For a vacatdion home, a place in the Carolinas is OK, athough it gets hot in the summer," he said.

Paparazzo added that most residents in his communities don't play golf. "Mamy like to live on the golf course because it's anice environment."

# At 2.21 Redefines T

Whoever said you had to sacrifice aerating speed for hole quality must be working for the competition. Introducing the Toro Fairway Aerator. Now you can aerate 61,000 square feet an hour at speeds up to 2.2 mph with exceptional hole quality. That's about four times as fast as other reciprocating models. A wide swath pattern and fast speed put the Toro Fairway Aerator way out in front.

By trying to match Toro productivity, the competition sacrifices a tight coring pattern, and opens up their spacing.

The competition can offer you speed with their non-reciprocating models, but you'll pay for it with poor depth and hole quality.

The Toro Fairway Acrator gives you clean, consistent hole quality plus adjustable coring depth control. Up to 5" with the two-tine head and up to 3" with the six-tine head. All easily adjustable with brackets on each side of the unit.

When you do heavy-duty work, you need heavy-duty components. With an all gear drive and tapered roller bearings, the Toro Fairway Aerator is built to withstand the punishment of high capacity aeration. And there are no belts or chains to slip or break.







## Int'l Irrigation Expo focusing on new technologies

SAN ANTONIO, Texas — "Water. Enough for Tomorrow" is the theme of the 1991 International Irrigation Exposition and Technical Conference Nov. 10-13 at the Convention Center here.

More than 300 exhibitors will display and demonstrate state-ofthe-artwater management products and services and reveal 1992 new product lines.

Technical presentations and seminars involving experts from industry, government and academia will address environmental and

economic challenges of water conservation.

Outlined will be ways in which water management techniques can help preserve dwindling water resources and maximize the quality of agricultural, recreational, commercial and residential lands.

Chemigation will be explored in

A concurrent session features a comprehensive picture of the current product liability issues by LaVerne Stetson, U.S. Department of Agriculture; Richard Freidrick,

Alta Engineering, and Dale Hicks, attorney. Agricultural technology sessions include talks by Barbara Lovett, Yardney Water Management Systems, Riverside, Calif., and Dr. Les Sheffield, University of Nebraska.

Joe Henggeler of the Texas Extension Service, Fort Stockton, will discuss "Managing Automatic Systems for Better Uniformity."

Bill Smith, Motorola's Land Mobile Products vice president and senior quality assurance manager, will give the keynote address

Dr. Don A. Rice, Texas A & M University, will discuss profit improvement strategies, and David S. Hefter, manager of economic studies for DuPont in Wilmington, Del., will target current and predicted economic trends and their effect on the irrigation industry.

In addition to the 30 seminars and exposition events, there will be a school of irrigation and landscape irrigation auditor training course, and certification examina-

#### Judge clears up misunderstanding and clears way for Texas course

LA MARQUE, Texas - The proposed \$3 million Jack Brooks Park golf course will not involve county funds, County Judge Ray Holbrook has told county commissioners

To clear up "considerable misunderstanding," he made it clear that the course will be constructed with private fnancing, with the cost to be paid over a period of 20 years with course revenue.

He added, "It's posible that the Commissioners Court may have to advance an architect a down payment to prepare plans, but once financing can be arranged and a construction bid accepted, those architect's fees will be repaid to the county."

Meanwhile, the BSL Golf Corp, the consulting firm awarded the bid for course work by the Galveston County Beach Park Board of Trustees, is contemplating a suit seeking \$200,000 payment for environmental studies and design work.

#### Green industry how-to conclave is organized

The University of Massachusetts and the Green Industry Council are collaborating on a recycling "How To" conference for the green industry and a workshop series on varied subjects.

Recycling will be reviewed from 8:30 a.m. to 4 p.m. Oct. 8 at LaCava Campus Center, Bentley College,

Eastern Agriculture Center, 240 Beaver St., Waltham, will be the site of the new regulations workshop series Oct. 29 and Nov. 4. Outlined will be pesticide record-keeping, drinking water protection regulations, and the endangered species act.

Pesticide recertification credit will be available.

Contact Phyllis Gillespie, Green Industry Council, P. O. Box 171, Sutton, Mass. 01590, 508-476-3007.

#### **UMass turf school** deadline nears

AMHERST, Mass. — Registration deadline is Oct. 1 for the University of Massachusetts' Turf School Jan. 6 to Feb. 1, 1992.

The school is an in-depth and practical study of the culture and management of turfgrass, especially appropriate for golf course and grounds maintenance professionals.

Contact Trudie Goodchild, division of continuing education, Room 608, Goodell, UMass., Amherst, Mass. 01003.

#### Credit NGF

Source credit should have been given to the National Golf Foundation for a map showing areas of the country where more golf courses are needed that appeared on page 1 of the September issue.



## GCN launches marketing conclave, int'l editions

CHICAGO - From the day Golf Course News was launched, we've billed it as "the newspaper for the golf course industry.

Our objective always has been to inform you on all aspects of the industry. In keeping with that objective, I'm excited to tell you about two "firsts"

As I write this column, Golf Course News is in the second day of our first conference venture - marketing products and services to golf facilities. The highlight to this point has been the superintendents panel. Although the session lasted two hours, the unanimous opinion could have been an allday session.

Panelists were John Potts, Peoria Park District; Tim Hiers, John's



Charles von Brecht publisher

Island Club, Vero Beach, Fla.; Kevin Downing, Willoughby Golf Club, Stuart, Fla., and Roger Stewart Jr., Stonebridge CC, Naperville.

Jack Frost, president of Marketing Resources Group in Elkhorn, Wis., was panel moderator.

The session also included a panel discussion on the subjects of marketing to management companies and to architects, builders and developers; global marketing opportuinities, and environmental marketing.

Andrew Snook of the National Golf Foundation in his introduction used a well-produced video that was shown at Golf Summit 1990.

In another bold move, we have launched a special edition to the international market. Golf Course News - Europe was distributed at Golf Course Europe '91 in Wiesbaden, Germany. The response to this issue has been very

positive. Many American and international advertisers participated in this first overseas venture.

We plan to make the marketing conference an annual event, and also hope to publish Golf Course News -Europe regularly in the future. Also, our plans call for publication of another special edition - Golf Course News -Asia — to be distributed at the Golf Course Asia Conference in Singapore March 26-29, 1992.

As we gear up for 1992, I want to reiterate that we are committed to providing you with all the news for the industry. Please keep your comments and questions coming.

Publisher

Charles E. von Brecht

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## Global sharing would help golf industry

Dramatic — and sometimes abrupt - changes throughout Europe and the Soviet Union in the recent past, and a dynamic metamorphosis just ahead among the Common Market countries, have the eyes of the world focused on this part of the globe.

Tentative, yet hopeful, would-be golf course developers are investigating financial angles, environmental obstacles, and political ramifications as the planned European Community draws near its late-1992 deadline for implementation.

The golfindustry should continue to hope, and pray, for the best. But at the same time it must be ever mindful of words of wisdom concerning government.

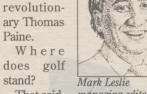
"Agovernmentthatis big enough to give you all you want is big enough to take it all away," said former U.S. Senator Barry Goldwater.

"Government is an association of men who do violence to the rest of us," said Leo Tolstoy.

"Government, even in its best state, is but a necessary evil; in its worst state, an intolerable one," was

the assessment of American revolutionary Thomas

Where does golf stand?



That said, managing editor those in the golf industry must look at golf's prospects in the midst of all this political evolution.

Outside the United Kingdom, where golf took root and grew globally, Europeans have just in the last several years started to really "discover" golf.

Though total numbers of golf courses is low, growth rates in some European nations is phenomenal.

From 1986 to 1989, France's number of courses nearly doubled, from 160 to 300. Finland's more than doubled during that time, from 15 to 32, while Sweden's grew from 165 to 260, The Netherlands' from 32 to 52, Italy's from 60 to 105.

The United Kingdom and Ire-

land remained fairly stagnant during those three years, but business was booming elsewhere.

Where do these countries stand

National boundaries will, in many ways, become almost a thing of the past in another year.

Many developers see that as a

Many suppliers to the golf industry do, also.

The idea of a United Europe, or One World Government — and the many doctrines such associations may one day embrace — can be a frightening thought.

People in golf might do well to pray that, being involved in a sport, they are insulated from political changes even if they are a direct partner in social change.

In the meantime, they can learn from shared experience in many areas. They can work cooperatively, share data and research.

They can communicate. What's the latest seed research? The latest information on bentgrass, pesticide leaching, aeration, verticutting, restaurant and pro shop management? How effective was isolite in saving water on golf course test plots?

Scientists, golf course superintendents, and college researchers are gathering information on myriad such topics worldwide.

How much research is being duplicated and money wasted because information is not shared in one succinct way and one physical place? Probably a ton.

In the United States the U.S. Golf Association in Far Hills, N.J., National Golf Foundation and Professional Golfers Association in Jupiter, Fla., and University of Michigan are clearinghouses for this sort of information.

The Golf Course Superintendents Association of America is researching educational needs in other countries and investigating ways to share its agronomic knowledge with others internation-

Annual conferences like Golf Course Europe, the IoG Sports and Leisure Exhibition, Golf Asia and

Continued on page 13

## Courses in dire need of scenic environmer

By Stephen J. Rusbar

I have actively played golf for 25 years, having been brought up through the junior ranks and participated in many state and local amateur events. Having played various courses throughout Louisiana and Mississippi, one very noticeable condition has emerged.

As golf courses are built and enter maturity, the new development and construction surrounding them erodes the visual quality and uniqueness these courses possess. Additionally, the course's functional requirements of parking lots, roads, utility buildings and other elements contribute to overall degradation of the visual quality and character of the course.

These elements are a permanent part of every course. But need they

The visual image, beauty or

character each course projects is tied directly to its scenic surroundings.

If no scenic environment



Stephen Rusbar

complements a course, it has no particular uniqueness and, more importantly, the level of enjoyment derived from playing it is minimal.

A major golf course design flaw in practice today that supports this view is the virtual or near total elimination of on-site vegetation during construction. When this occurs, the course is forced to rely solely on offsite plant material to help create its visual image and character. Then, because of the subsequent periphery development, this off-site plant material is routinely and systematically reduced to a splattering of miscellaneous trees and shrubs that have no real meaning or environmental impact at all.

The point here is that golf courses in this country would benefit immensely from relying on their own planted material to create, enhance and preserve their uniqueness because plant material in general and trees specifically are the only true physical elements that create scale, add interest and create the uniquenessthatgolfcoursesstrive to achieve.

Let's face it: golf course construction is about as environmentally sensitive as runway construction. No wonder, then, that the visual appearance of many golf holes resembles that of an airport.

There are more than 140,000 par-4 holes in the United States alone. What separates the good holes from the crummy? Beauty? Scenic value? Uniqueness? Visual integrity or character? Aesthetics? Are they enjoyable holes that are fun to play?

I am certain it is the hole's design and its relationship to the natural environment that creates the uniqueness and the unforgettable image in your mind.

The intuitive, creative and "plantwise" designer is an asset golfneeds.

Trees represent an investment in the course's future, not an expense.

Because trees and support plants greatly influence the design of any golf hole, short-range and longrange tree planting programs or goals need to be established and realized now, so that the visual quality of where we play mirrors the thinking of the creative designer.

Golf course design has to become more ecologically oriented to sur

Continued on page 13

## Cape Cod Study director defends findings

To the Editor:

The article on the New York attorney general's report attacking golf courses was balanced, thorough and interesting (GCN, Sept. '91, pp. 1, 1,7, 19).

The article summarized statements made by one of the study authors, Dr. Michael Surgan, attacking the Cape Cod study. I was the director of the study, and first or sole author of the two articles published on it.

I would like to respond to his statements

"Some of the wells were dug too deep to detect surface applied pesticides

This is an incorrect statement for several reasons, First, all monitoring wells "... were screened at or just below the water table" (Cohen et al., Ground Water Monitoring Review 10 (1), 160-173, 1990). In other words, the sampling points (the screens) could not be placed any shallower. Second, the average depths to water in non-background (non-control) wells was 21 feet at Bass River, 35 feet at Falmouth, 6.5 feet at Eastward Ho, and 10 feet at Hyannisport. The range was 5.28-35.63 feet, the average 18 feet.

I have been working in the field of pesticides in ground water since 1979 and do not know anyone who

would consider these depths "too deep," especially when one considers the sandy subsurface.

Third, these depths are similar to ground water depths in the areas discussed in the "Toxic "Fairways" report, the subject of the GCN ar-

For example, in our review of aldicarb in ground water (Lorber, Cohen & DeBuchananne, Ground Water Monitoring Review 10 (1), 127-141, 1990), we summarized the approximately 12,000 detections on Long Island. One study cited in our text documented significant detections in ground water around 100 feet deep, much deeper than the Cape Cod sites.

Others (wells) were placed upstream from where the pesticide applications were made, so that the chemicals had no chance of flowing past the well...

If Dr. Surgan is referring to the background wells, he is correct and I appreciate the compliment. That is the point of background wells. If he is describing the green, tee or fairway wells, then that is not a a correct statement. All those wells were drilled at the edge of those areas so that ground water would be sampled that was influenced by turf management of greens, tees or fairways as appropriate.

Perhaps he is noting correctly that we did not place our wells as one would do in a hazardous waste landfill study. In such investigations, one normally places most of the monitoring wells downgradient of the whole site, near the property boundary.

In our study we were interested in determining whether there were differences in ground water quality under areas with different turf management programs. (And there were differences, as noted in the first paper cited above, as well as the one published in Golf Course Management (58 (2), 26-44, Febru-

"The Cape Cod study authors acknowledged the deficiencies.

Anything is possible, but this is news to me. I have never discussed this with Dr. Surgan, nor has my geologist-coauthor, Joe Senita.

The only deficiency we ever acknowledged was in the method used to install the wells. The drive-andwash method may have caused vertical cross contamination down the boreholes, thereby increasing the number of detections than we otherwise would have seen.

I hope this clarifies the issue. Sincerely,

Stuart Z. Cohen, president Environmental & Turf Services

#### Trett/Triplett management firm omitted

To the editor:

Peter Blais' article about management companies (Augustissue) provided a good profile of the growing acceptability for such contracted services. It also conveyed the professionalism, stability and effectiveness these firms offer owners, developers and club

Disappointingly, TrettCo/ Triplett Services was not among the firms listed in your chart of golf course management companies, even though we proudly manage and operate country clubs throughout the state of Michigan. We also consult to owners and club boards in all regions of the country. Information about the services of TrettCo's club management division can be obtained by contacting J. L. Fournier or Raymond F. Zall at TrettCo, Inc./Triplett Services, 33469 Fourteen Mile Road, Farmington Hills, Mich.; 313-661-

> Cordially, Raymond F. Zall

Letters to the editor are welcomed. Please address them to: Letters, Golf Course News, P.O. Box 997, Yarmouth, ME 04096.

ued from page 12

GCSAA International Golf Course Conference and Show close many gaps in knowledge.

But organizations should, together, decide to gather, store and share their knowledge.

The hallmark of success is the same everywhere. Have a good foundation of knowledge and follow it up with righteous decisions.

#### RIGHT CHOICES

That's another crucial factor for golf's future: How it is perceived by the public. One bad pesticide application by one greenskeeper reflects on all greenskeepers. One bad decision by a land developer reflects on all his colleagues.

Likewise, the developer who agrees a wetland should be protected or replaced twofold will win goodwill for not only himself, but other developers as well.

Golf has always been a sport of highest standards. Unlike soccer, hockey-oreven baseball-which are marked by brawls and unsportsmanlike conduct, golf stands erect as a gentleman's game... even when played by a young boy or elderly lady.

Those who are the backbone of the sport — the "insiders" who design, build and maintain them- should also standerect as righteous decisionmakers. That has got to be the bottom line — and the common line.

#### bbery add depth, character and impact Trees, shru scenic

Continued from page 12

vive the future. It is much more satisfying to play golf in a spectacular botanical environment-native grasses and wildflowers inclusivethan to play on a green rug surrounded by "civilization."

Creative design or renovation does not overburden the superintendent with a phenomenal quantity of repetitive physical work. Rather, the truly creative design allows for minimum routine maintenance while creating the visual character and environmental "signature" of the course.

Sweet Bay Island in south Louisiana is a golf course arboretum currently in the preliminary design and development state. Figure 1 illustrates the proposed layout of thepar5,553-yard 2nd hole. (Could be Anywhere, U.S.A.) Figure 2, however, illustrates the proposed native plantings that support the design and create visual unique-

Please note that the shaded areas on the plan indicate native grass, cane or wildflower plantings. The tree massings create the density of twig and branch development necessary to mirror the cypress and maple groves common in Louisiana.

These trees and shrubs massings will then be heavily mulched to retard weed development and eliminate the necessity to mow in and under each and every tree. Turf maintenance is restricted to the fairway, tee and green areas.

Lake perimeter out-of-play is planted with native aquatics that visually reinforce the ecological diversity found in Louisiana.

Figure 1 represents approximately 11 acres (less water) that would normally be "maintained." Figure 2 represents the true maintenance responsibility of only 4.7 acres. And this is just one hole.

The maintenance program for Sweet Bay Island is designed to be top-heavy with required maintenance for the first five-year period after opening. Then, because of the work performed within that five-year period, the maintenance responsibility is expected to steadily decline because of the "self-sufficiency" achieved over much of the course.

Sweet Bay Island represents a

unique opportunity for golf to help provide a passive recreation or leisure experience for the "other" 85 percent of the population that amazingly does not play golf. Small boating, fishing, picnicking and nature trails are expected to peacefully coexist with golf within this 380acre native plant arboretum.

Trees add depth to a golf hole if correctly placed. They create scale and add interest to the shot. Your club or course can begin to concede areas out of play to wildflower and tree plantings.

Correctly selected tree species add privacy and aid the player's concentration. Your course can also implement a good tree-planting program to create diversity and add interest and character.

Trees reduce visual pollution, screen undesirable views. organize space, stop erosion and help ease surface water evaporation.

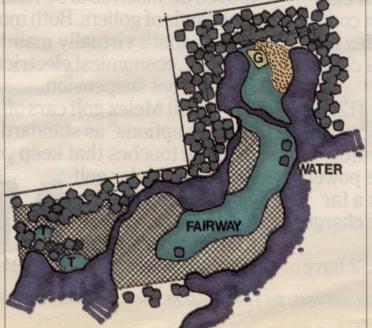
Trees create sunlight and shade patterns and provide habitat and a food source for birds.

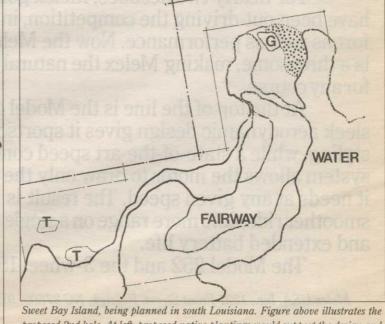
Developing a "no mow" strategy for certain areas of any golf course will surely reduce maintenance vol-

Because of the large area of land used, golf courses should evolve toward providing a more complete recreational or leisure experience not only for the golfer but for every-

Golf needs to assume a lead role in environmental repair, ecology and native plant use. Golf courses today should not only be a tremendous asset to the communities they are a part of, they could make a more significant contribution as bird and wildlife sanctuaries and as nature preserves or native arboretums.

But ultimately, should treeplanting programs reach fruition, the level of enjoyment derived from playing golf will rise and the number of rounds played will follow. Stephen Rusbar is a registered landscape architect in Louisiana and frequently contributes his design talents on golf course projects in his





proposed 2nd hole. At left, proposed native plantings would support the design and create visual uniqueness.



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#### Briefs



#### CALIFORNIA APPROVES JILL REPORTS

FRESNO, Calif. — The California Environmental Protection Agency has approved use of reports generated by JILL, the pesticide reporting software developed by Orange Enterprises, Inc.

The reports can reduce significantly the paperwork and time required for pesticide use reporting.

The paperwork reduction is achieved by including the pesticide use of several blocks in a single report. For example, a grower with tenadjacent grape blocks can use the program to produce a single report versus ten, eliminating 90 percent of the paperwork.

All California growers are required to file a monthly summary report and a detailed report each time they intend to apply a restricted material

For more information, contact Orange Enterprises Inc., 2377 W. Shaw Suite 205, Fresno, Calif. 93711.; 209-229-2195.

#### **UST DEADLINE EXTENSION PROPOSED**

WASHINGTON, D.C. — The U. S. Environmental Protection Agency has proposed extending the compliance deadline for financial responsibility for underground storage tank owners from Oct. 26, 1991, to Dec. 31, 1992.

The proposed extension affects owners with 12 or fewer tanks at more than one facility, fewer than 100 tanks at a single facility and non-marketers with a net worth of less than \$20 million.

The extension is part of a broader effort to reduce the cost of these regulations on small businesses while ensuring the protection of human health and the environment.

#### UST OVERFILL LAW AMENDED

WASHINGTON — The U.S. Environmental Protection Agency has issued an amendment to the Underground Storage Tank overfill prevention requirements.

This final amendment allows overfill equipment to be used closer to the top of the large bulk storage tanks (those tanks frequently located at retail gasoline stations) because it acknowledges that sufficient volumes to receive excess petroleum or waste still would be available.

Overfilling UST systems is a common source of petroleum releases onto the surface of the ground.

#### TOMA KEYNOTE SPEAKER

MYRTLE BEACH, S.C. — George Toma, who has prepared every Super Bowl playing surface, will be the keynote speaker at the fourth annual Southern Grounds and Turf Exhibition and Conference at the Convention Center here Nov. 19-20.

Toma's main job is caring for the Kansas City Royals baseball and KC Chiefs football fields.

More than 1,000 "heroes of the sod" will learn of the latest information and innovations in turf maintenance and landscape design.

Morethan 175 exhibitors from as far as Oregon will demonstrate state-of-the-art equipment, services and supplies for the grounds maintenance industry. Industry professionals will present 23 seminars on current and future trends of grounds and turf management.

For more information, contact the Specials Events Management division at 803-737-9355.

## UK's 'brain drain' to Europe said serious

Vern Putney

nited Kingdom groundsmen and greenkeeper associations are aware of a "brain drain" to Europe because of increased golf interest there, but think the flow of expertise is of no great concern at the moment.

While some may try to discourage exodus, many key figures in these specialized fields view the trend as more beneficial long run than harmful. The bottom line may be bigger paychecks and long-overdue recognition.

What greenkeepers overseas need is a Walter Hagen, observed William H. Bengeyfield, former national director of the United States Golf Association's Green Section.

The American golf professional took Europe by storm in the Roaring Twenties. He hobnobbed with kings and queens, startled the British and rocketed the pros from back door to celebrity status. The Haig's irrever-



What greenkeepers overseas need is a
Walter Hagen.
— Bill Bengeyfield
former national director,

USGA Green Section

ent approach to society's strata set up immediate acceptance of his peers' status role.

Greenkeepers in the British Isles too long have been content to stay in the background despite their prominent part in the day-to-day success of course operations. They've lacked the dashing, glamorous image and a leading spokesman.

Perhaps that mantle can't be assumed, but they can speak fairly forcefully by taking their talents to the highest bidder. Club members, conceded to be astute businessmen, understand that economic message.

As it stands now, a rather generous annual salary for a highly regarded greenkeeper is in the neighborhood of \$25,000, Bengeyfield ventured.

Derek Walder, secretary for the Institute of Groundsmanship, based in Milton Keynes,

Continued on page 19

## Career Center for college students planned again at Mid-Am show

The Mid-Am Trade Show is holding its third annual Career Center for college students and companies seeking graduating students during its 1992 show, Jan.-16-18 at the Hyatt Regency Chicago.

Horticultural students from more than 50 regional colleges and universities will be invited to participate, as will horticulture industry employers from the Midwest.

The Career Center will provide students seeking full-time employment in nursery, garden center, landscape maintenance, design, exterior landscaping or interiorscaping industries with an opportunity to meet briefly with companies seeking qualified employees. Companies will be able to conduct brief introductory interviews with participating students.

Invitations will be issued to college and



university horticultural departments and industry companies this fall.

The show is sponsored by the Illinois Nurserymen's Association, Illinois Landscape Contractors Association, and Wisconsin Landscape Federation. It is endorsed by Iowa Nurserymen's Association, Minnesota Nursery & Landscape Association and Nebraska Association of Nurserymen.

For further information, contact the Mid-Am Trade Show, 1000 N. Rand Road, Suite 214, Wauconda, Ill. 60084; 708-526-2010.

# New department created to help members abroad, GCSAA says

The Golf Course Superintendents Association of America has formed a new department to develop and implement programs for its 734 international members.

Tom Akins, GCSAA director of planning, will head the department and assume the new title of director of planning and international programs.

"This new department is part of GCSAA's commitment to share ideas about sound golf course management with the rest of the world," said Executive Director John M. Schilling

The department has started surveying superintendents, university researchers and golf industry representatives worldwide to identify specific course management needs. "International requests for assistance and information have steadily increased over the last several years," Akins said. "We're excited about the opportunity to focus our efforts on the international arena and provide tools for superintendents outside of the United States."

Akins noted that GCSAA will examine such options as education, publications and trade shows

"Many countries already have established golf federations and associations that are providing quality professional development for their membership," he said. "Our desire is to work cooperatively with those associations, lending our expertise while learning from their unique methods."

Of the more than 10,800 current members of GCSAA, 734 live and work in 47 countries outside the United States.

#### Sports Turf Managers updated at conclave

PASADENA, Calif. — The Sports Turf Managers Association recently held its ninth sports turf institute at Brookside Park.

Speakers and topics were Mark Doble, Western Sod, "New Sports Turf Construction: Planning for Water Conservation"; Steve Cockerham, Univ. of California, Riverside, "Sports Turf Renovation"; Lynda Wightman, Hunter Industries, "Sports Turf Irrigation"; Dale Hansen, Kramer Sports Surfaces, "Alternative Solutions: When the Grass Doesn't Grow", and Mark Hodnick, Pasadena Parks and Forestry, "Budget Programming for the Drought."

The program provided insight into managing sports fields under water use restrictions imposed because of drought conditions in the western states.

# Send data from independent water studies at courses

To add substance and bulk to the limited amount of research data on turf chemical runoff, *Golf Course News* is asking superintendents nationwide to let us know if a ground water or surface water study of any kind has been or is being done at their course.

"The Cape Cod Study was a good one, but it was only one study. There is a critical need for data on the impacts of turf chemicals on our water environment," said Stuart Cohen of Environmental & Turf Services, Inc., who directed the Cape Cod Study.

Cohen said he has discovered several instances of isolated, limited golf course runoff or leaching studies. Those were usually conducted as a result of state or local requirements for special circumstances, such as gaining a zoning permit.

"When the results of studies are favorable, there is no press release from the state agency," said Cohen. "Since I know studies have been held and there has not been a media cry of 'dangers of golf courses,' my guess is that these studies are favorable to the industry."

Superintendents are asked simply to write, listing:

- a contact name and phone number;
- the pesticides being monitored;
- whether it is a surface or ground vater study;
- if monitoring wells were installed;
- if the study was a condition of a permit; and
  - if a final report was issued.

Cohen, who will follow up on this initial information, has agreed to compile the results and summarize them in an upcoming issue of *Golf Course News*.

Knowing superintendents may be too busy to expand on the study, Cohen asked that they at least identify a contact person and the time period during which the study was done.

"Most studies may have just a handful of data," he said, "but taken in total, it could be another step in drawing the whole picture of the multi-year impact of golf courses on the environment."

People are asked to send the information to Cohen at Environmental & Turf Services, Inc., 11141 Georgia Ave., Suite 208, Wheaton, Md. 20902.

## Hammock Dunes duties a dream come true for Portz

From farm work to greenskeeping, soil remains critical to Pa. transplant

By Vern Putney

PALM COAST, Fla. — At 16, Dave Portz traded life on a farm in his native Emmaus, Pa., for maintenance work at Wedgewood Country Club in nearby Allentown, but he's never left the soil and the outdoors he so eniovs.

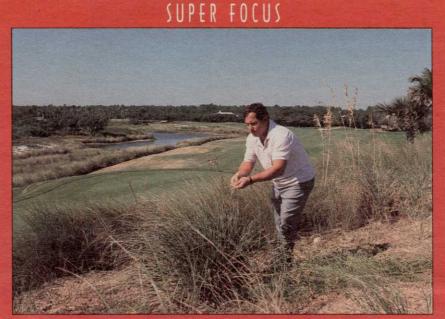
The breathtaking beauty of the private oceanside Hammock Dunes Club is a far cry from Portz' roots. But the personal magnetic attraction of location and unique challenge from a course superintendent's standpoint makes for a heady combination.

Noting Portz' love of the environment and his desire for course improvement, Wedgewood superintendent Dave Linde encouraged Portz to pursue a career in golf.

Portz agreed, to his own and eventually Hammock Dunes' mutually good fortune.

Portz graduated from Penn State University's winter course in turfgrass management in 1973, then accepted a position with Brookside CC in Allentown. He remained there 17 years before succumbing to the lure

Sheraton Steamboat



Dave Portz checks plantings along the 7th fairway of Hammock Dunes Links Course.

Relocation to the South was somewhat difficult because of Portz' limited exposure to Southern grasses. But Fred Kleinfelder, director of golf maintenance for ITT Corp., hired Portz to grow in Gary Player-designed Cypress Knolls, Sunsport's fifth golf course in a 2,250-acre community featuring five miles of oceanfront.

Soon afterward, Hammock Dunes course superintendent Dwight Kummer switched to Arnold Palmer's swank Bay Hill Country Club in Orlando. Portz was tapped as Kummer's replacement.

It was just the job Portz coveted - ocean breezes, continuous salt air, natural dunes, sandy soils and high water tables affording opportunity to test his skills in managing grasses in a demanding but rewarding set-

Hammock Dunes ownership stresses protection and care of surroundings. That's nicely tailored to Portz' philosophy. He has taken full advantage of that support and remarkable course design by architect Tom Fazio of Jupiter.

Fazio's environmentalist view is reflected in his fitting the course to the site's natural beauty and characteristics. He enhanced beach, dune, wetlands, marshes and forest with rolling contours and elevated greens and tees, extending the dune line through

Portz' focus is on cultural practices frequent vertical mowing of greens, tees and fairways, additional aerification to help reduce thatch accumulation, and frequent top dressing.

the course and creating dramatic ocean views

Portz intends to maintain natural integrity while providing the best possible playing conditions. His focus is on cultural practices - frequent vertical mowing of greens, tees and fairways, additional aerification to help reduce thatch accumulation, and frequent

An Integrated Pest Management program is monitored, and the use of chemicals strictly limited. The course's monitoring wells are tested regularly for products certified for use.

Each product must be evaluated by Hammock Dunes' safety department, headed by Candy Kilpatrick, and the environmental department, headed by Frank Meeker. This strict policy has necessitated using other resources to produce quality turf.

Fertility levels also are monitored carefully. Sandy soils and the amount of water necessary to maintain an oceanside course allow for more than average leaching. Therefore, Portz found that lighter and more frequent application suited his program. It provided less chance for excessive nutrients to reach the water table.

With the expertise of assistant Jim Lycans and a staff of 22, Portz feels the par 72 18-hole course equidistant of St. Augustine and Daytona Beach is kept in championship condition.

The facility encompasses 120 acres of grounds and includes a formal clubhouse directly on the ocean.

Hammock Dunes, opened in April 1989, was nominated that year for Golf Digest's "Best New Private Course" award, named to 14th place on Florida's best course list by Golfweek and named to that publication's top 50 courses in the Southeast.

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1990; Par Aide Products Co., St. Paul, MN.

# Hurricane Bob leaves Cape Cod bent and brown; grounds crews still cleaning up

Continued from page 1

on Buzzards Bay.

New Seabury Country Club, a week away from hosting an American Junior Golf Association Tournament, was left with as much as a foot of sand and seaweed and another foot of salt water.

Hyannisport Club lost five greens to severe salt damage despite hectic - and at first promising — efforts to save them.

Thousands of trees - including 500 at Kittansett Club and 800 at New Seabury CC -were snapped or felled by the winds.

Woods Hole Golf Club saw almost the entire stand of trees lining the 12th hole come

New Seabury CC faced the most immediate problem — preparing for the tournament. The eye of the hurricane passed directly over the front nine of the facility's famous Championship course, depositing thousands of yards of sand and pockets of water, completely covering the cart path that runs along the ocean, and changing the shape of the 2nd and

The storm struck in the morning and was gone in hours. In the midst of it, superintendent Tommy Colombo drove to the 1st tee and saw "the 2nd and 3rd fairways were now ocean, with waves crashing down. The 2nd through the 8th holes were totally inundated.'

Colombo and Danny Coon, supervisor of golf operations and management director, set an emergency plan in motion.

Before nightfall, the course's five 300-gallonper-minute pumps were draining salt water from a three-acre fresh-water pond and the fairways. Wednesday night a 1,200-gpm and a 800-gpm pump were pumping the ocean back into Nantucket Sound.

Assessing damage to the rest of the 36 holes with retired University of Massachusetts Professor Joseph Troll, Colombo was "kind of in shock." They found tall pine trees toppled everywhere. The Challenger course appeared relatively unharmed, but the front nine of the Championship course needed major help. The entire front nine, except the 1st and 9th holes, was submerged. The 2nd and 3rd fairways were ruined, and the 8th green was an island.

The storm had caused an estimated \$350,000 damage to the course — \$122,000 on the 3rd hole alone. But the front nine was covered by a catastrophic insurance policy.

Blessed with a 100-man crew made up of waiters, busboys and lifeguards from the local contractors and his groundskeepers, Colombo moved to neutralize the three threats to the turf - salt, sand and standing water.

At dawn the next day the crew worked to remove the water, then shoveled and bulldozed as much as two feet of salt-laden sand back onto sand dunes at the ocean's

Next, gypsum was spread over the course, helping to leach the salt through the soil profile and limit salt damage. The greens were then watered twice that day and the next. The quick work saved the greens.

In mid-September trucks were hauling in new root-zone mix for the 2nd and 3rd fairways. Sodding had to be done to be ready for yet another competition, the Massachusetts Mid-Amateur Tournament, scheduled Sept.

Colombo said that before the storm: "I realized it (front nine) was vulnerable. Everyone always wondered what would happen if a really big storm hit. Now they know.



The front nine holes of New Seabury's Blue Course is flooded with water following Hurricane Bob, which passed over Cape Cod on Aug. 19. Photo by Steve Heaslip/Cape Cod Times

Compared to Bob, Hurricane Gloria in 1985 had only flooded about 60 percent of the 3rd fairway and it was wet for only one day, Colombo said. "No comparison. Here (Bob) there was so much water and you can only do so much, so fast.'

#### **ELSEWHERE**

Meanwhile, at Kittansett Club, superintendent Lenny Blodgett faced a massive task of

"Water was five, six feet over the 1st, 2nd, 5th, 6th, 17th and 18th fairways. The 1st, 5th, 6th and 17th were destroyed, and parts of the other two," Blodgett said.

Since he has no irrigation he had to rely on rainfall. Even though Hyannisport Club, just 25 miles to the east, received 1-1/4 inches of rain, Kittansett got none.

"I'm slicing, seeding in, putting on gypsum and a lot of starter high phosphates on the fairways, if it ever does rain," Blodgett

He said the greens were under water for a day, until the tides were out. "Then it was all hand-shoveling. We had seven to eight inches of debris on all the greens. The salt killed

Blodgett spike seeded eight to 10 different ways into six ruined greens and on damaged tee areas. And at nights he had "50 to 60 people in working on the course - loggers, loaders, backhoes. I had to rebuild the 3rd hole with cranes.'

He used a blend of ryegrasses because they need less water than bentgrass.

"I'm waiting for nature," he said. "I'm watering lightly three or four cycles a day. I've put on Subdue so I don't get damping off on

"I've had a lot of coastal storms but not this bad, except Gloria because Gloria didn't have rain afterwards. If I had had rain it would have saved a lot. Plus I was out of power so I couldn't run my booster pumps.

Golf pro Tom Shea said everything "10 feet and below" was damaged in the pro shop and

The course was closed until nine holes were opened Aug. 31.

Superintendent Charlie Passios said besides losing 300 trees, his Hyannisport Club had "severe salt damage on five greens that were under water.'

He said: "We put down gypsum, prayed for rain, got 1-1/4 inches of rain the next day. We watered more; aerated once with big tines to pull out material at a pretty wide space; aerated again with real fine, solid tines to poke more holes, get more water in it and close in the bigger holes a little bit."

But, a couple of days later — "just when it looked like the course would recover" - the damage showed.

That left Passios, assistant Mark Egan and their crew working to restore the lost turf.

#### OTHER COURSES WERE LUCKIER

Henry Coffin III, superintendent at Sankaty Head Golf Club in Siasconset on Nantucket Island, said the handful of courses on the island were spared serious damage because they are on the high side of the island.

We had high winds and all our trees turned brown from the salt spray. But we lost just three big pine trees," Coffin said.

The Taunton River overflowed and submerged Fall River Country Club's 10th fairway, half the 4th fairway, and the 3rd fairway halfway up the apron of the green.

Thomas Ohlson's crew treated for salt, watered a lot, and got their hoped-for rain for two days after Hurricane Bob.

In Maine, the storm mostly left behind limbs and other debris from trees

One major exception was Falmouth Country Club, where superintendent Kevin Ross and his crew had to contend with an overflowing Presumpscot River that inundated the green half of the 13th hole and one-third the tee half of the 14th hole.

The major financial damage, Ross said, was done to his irrigation control system. Three satellite clocks, costing \$1,300 apiece, were submerged and one control-

Beyond that, Falmouth suffered severe bunkerwashouts, some cart path destruction and loss of 75 to 100 trees that were snapped or uprooted.

Just when the water subsided from the fairways 48 hours after a storm, a rainstorm dropped another inch and a half of water and "compounded everything," Ross said. "We were back in the slosh again."

He said his crews had to wash off silt from the river with high-pressure hoses, then aerate heavily.

He said cleanup probably won't be complete until December.

Elsewhere in Maine, superintendent Gregg Grenert of Samoset Resort golf course said, "We dodged the bullet." Samoset sits on the ocean's edge in Rockport.

## Val Halla escapes Bob but drubbed by twister

What the Weather Bureau labeled a two-minute "wind burst" was to Val Halla Golf Club course superintendent Iim Hodge and staffers Al Swanson and Tom. Hansen a scary brush with disaster.

The rain and 100 mile-an-hour wind storm, hard on the heels of Hurricane Bob, claimed between 750 and 1,000 trees at the Cumberland, Maine, 18-hole public course.

Its timing couldn't have been worse at 5:45 p.m. Wednesday with a threeday member-guest tournament booked Friday through Sunday.

Hodge's sole concern just prior to that terrifying experience was for the safety of his crewmen. The sky was ominous as Hodge sped out on the course to pick up his men.

Rain clouds were breathing down their necks as they raced for the shelter of the maintenance building.

That hardly was a secure sanctuary. A tree toppled onto the building. While the trio pondered their fate, the winds suddenly stilled.

Surveying the damage a few minutes later with course manager Bob Leighton, tourney cancellation seemed the only

They reckoned without club members. The next morning, 30 volunteers showed up at daylight to begin the work of restoration. Damage was greatest on the right side of the ninth hole, about 200 trees wiped out.

Members Bob Anderson and Dane Brimigion brought in heavy equipment, tractors and chain saws appeared, and tree wood was cut and stored.

Hodge marked off more red hazards, and a frantic 12-hour work day paid off.

Twenty volunteers Friday morning finished the cleanup job, the tourney was on, and all went well.

By comparison, Hurricane Bob was a zephyr, uprooting only 100 trees and washing out culverts and bridges.

There may be a slight bright side to the wind strike Hodge dubbed "After The Storm." Federal disaster funds may be forthcoming.

Hodge and aides won't soon forget, though, the "Sheet of White" rain chasing them to cover.

#### Nominations sought for turf awards

SAN DIEGO, Calif. — The Sports Turf Managers Association is seeking nominations for its annual awards program. Awards will be presented at its annual meeting here Dec. 4-7.

Award categories are: Football Field of the Year; Soccer Field of the Year; Outstanding Commercial Affiliate; Excellence in Research, and Lawn Ranger Award for best groundskeeper.

Sports Turf Managers Association membership is an eligibility requirement. Nominations should be submitted to Greg Petry, Waukegan Park District, P.O. Box 708, Waukegan, Ill. 60079. Attn: STMA Awards.

## Schwall becomes 1,200th CGCS

With David R. Schwall of Sky Top Lodges in Sky Top, Pa., joining the ranks, there are now 1,200 certified golf course superintendents.

Schwall completed the testing process required to become a certified golf course superintendent through a program administered by the Golf Course Superintendents Association of America.

"Few people realize the skills, talents and education needed to manage a golf course today," said Stephen G. Cadenelli, president of GCSAA.

"For 20 years, our certification program has spurred superintendents to new heights of expertise and given the golf community a better understanding of the level of professionalism required to provide great conditions for great golf."

To earn the CGCS title, the individual must have had five years experience as a golf course superintendent and be employed in that capacity.

The candidate must pass a six-hour examination covering turfgrass management, pest management, financial and organizational management and the rules of golf.

In addition, an on-site inspection of the candidate's golfcourse operation is conducted by two certified superintendents.

Certification must be renewed every five years.

## Wise duties at St. Lucie West expand, include maintenance for entire project

PORT ST. LUCIE, Fla. — St. Lucie West's Richard C. Wise has added project maintenance for the Thos. J. White company's 7.5-square-mile development to a growing list of maintenance and improvement duties. His new title is project manager.

The 38-year-old Wise has managed golf course operations since St. Lucie West opened its first 18 holes in October 1988. Since April he has been responsible for the care and keeping of the baseball fields in and around Thomas J. White Stadium, the Florida home of the New York Mets and Class A Florida League St. Lucie Mets.

Wise came to St. Lucie West Country Club from the 54-hole Meadows Country Club in Sarasota, Fla. He helped complete construction of St. Lucie West's Jim Fazio course, assisted in the grow-in, and has since



Rich Wise

been in charge of the home of the International Women's Open.

His earlier superintendent posts were at the Tampa Airport Resort Golf & Racquet Club and Lake Region Yacht and Country Club in Lakeland, Fla.

Awarded a PGA scholarship, Wise graduated from Lake City (Fla.) Community College. His earliest assignments involved Sun & Lakes Country Club in Lake Placid, Fla., and Inverarry Country Club in metropolitan Fort Lauderdale, Fla.

## Hritsko new super at Bardmoor North

Stephen J. Hritsko has been named golf course superintendent for the Bardmoor North Golf Club course.

Hritsko's responsibilities will include su-

pervising and maintaining the championship course, which was the former site of the JC Penney Classic.

Hritsko has been with Bardmoor for eight years, acting as the assistant superintendent for the past two



Stephen J. Hritsko

years. He previously assisted with the care and maintenance of The Bayou Club golf course for two years. Prior to moving to Florida, he was with Lawsonia Links in Green Lake. Wis.

Hritsko attended Golf Course Operations School at the University of Massachusetts. He is also a member of Florida Golf Course Superintendents' Association, the Golf Course Superintendents' Association of America and the Florida Turfgrass Association.

"I'm very excited about my new responsibilities," said Hritsko. "The Bardmoor North Golf Club course is one of the finest in Florida, and I am looking forward to providing an excellent golfing experience for all our guests.

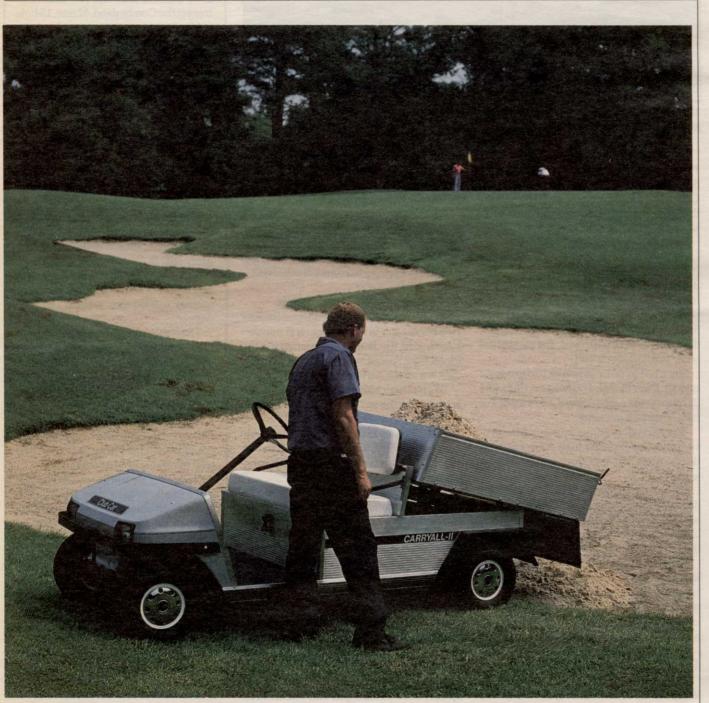
#### John Yancey joins Colleton River Plt.

HILTON HEAD ISLAND, S.C. — John Grayson Yancey has been named superintendent at Colleton River Plantation, the 700-acre country club community where a Jack Nicklaus golf course is under construction.

Yancey will be responsible for maintaining the condition of the course, as well as the Augusta National-type par 3 course being built at Colleton River Plantation.

Prior to joining the Colleton River team, Yancey was greens superintendent for five years at Lake Nona Golf Club in Orlando, Fla.

Yancey has held the same position at Deland (Fla.) Country Club and at Shipyard Plantation on Hilton Head Island. He is a graduate of Central Florida Community College in Ocala and Abraham Baldwin Agricultural College in Tifton, Ga. He is also a Class A member of the Golf Course Superintendents Association of America.



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## UK superintendents leaving for fertile European ground

Buckinghamshire, England, thinks the threat of skilled shortage will lead to new awareness by employers of the value of Walder's fellow professionals.

That, in turn, will mean a new look at current wages. "Anywhere grass is grown," he declared, "our members are prominent. Far from just moving around plants and ornamentals, planting shrubs and decorating, they are recognized in Europe as distinctive craftsmen. They are paid accordingly.

"If this movement means an economic upturn for groundsmen, so much the better. The paycheck is important."

The British International Golf Association echoes that stand. Several members of that greenkeeper or course superintendent group have been attracted to the greener cash fields of Europe

Jack McMillan may be the leading example. The first president of the English & International Golf Groundkeepers Association and past chairman of the British & International Golf Greenkeepers Association "defected" to greener, more financially fertile pastures and golf course consultant status in the spring of 1990. He's since been involved in a number of major projects in Europe and the UK.

Prior to his invasion of Europe, McMillan had been for nine years head greenkeeper at prestigious Sunningdale Golf Club, Surrey, England. For more than 30 years a head greenkeeper, he has trained on-course 20 of England's head greenkeepers, and authored many articles on greenkeeping.

While a number of high specification, quality golf courses have been constructed in France and Germany, McMillan feels that, in order to sell the game of golf to the French and German masses, they must be able to play at reasonable cost.

He believes good, hard-wearing public courses could be built, reasonably priced, along the lines of the many public and local authority courses in the UK that give so much pleasure to so many persons.

Scotsman McMillan ruefully gives the green fee price "prize" to Pebble Beach, Calif. He played that world-renowned links after parting with \$200. "I thought I'd bought part of the course," he reflected.

The availability of woodlands gives France and Germany an advantage over the UK in course building selection, McMillan said. Dense population and limited space hamper course development in the UK.

One problem confronting the golf course industry in the UK and shared by the courses in the temperate climate zone in the United States is the increase in golfing traffic. Much of this is over winter months, when soil temperatures drop but weather conditions allow play to continue.

McMillan claims traffic has increased in his lifetime from 5,000 rounds of golf annually to nearly 50,000 rounds. This has influenced course condition more than any other change, he said. It also has been the major reason for the great changes in the way courses are managed.

Prolonged heavy traffic during frost on courses with a short growing season and year-round golf leads to deterioration in playing surfaces and causes the greenkeeping industry serious concern.

It is, he feels, the reason for the breakdown in the relationship between greenkeeper and golfer in recent times.

He feels two greens at every hole must be considered to spread this increased traffic.

At least providing a well-prepared, well-manager temporary green would help relieve the situation. If managed year-round, it may be GOLF COURSE NEWS

more acceptable to the golfer, he contends.

McMillan thinks European golf course construction is too lavish. More "bread and butter" courses are the answer, he believes. At present, too many are out of pocketbook reach for the general golf public, he declared.

As in much of the Northwest portion of the United States, many courses in the UK are played hard in a comparatively short seasonal span. Because of the climate, there is insufficient natural recovery time.

Switzerland, he noted, is leaning more to golf, but "tremendous snow" is discouraging.

While there may not be a strong greenkeeper organization in Europe, individuals are surfacing with strong opinions and leadership qualities. Among them is Jaime Ortiz-Patino, president of Valderrama Golf Club, a course in Spain Bengeyfield and others considers the best conditioned in Europe.

Six years ago, Petino wanted to build an American-style course. Green Section's Bengeyfield responded to his consultant inquiry. This led to other Spain course projects.

Petino has been quick to lend a helping hand to others golf-minded. He supplied materials, equipment and stolons for the first public course in Spain, being built next to Valderrama in the town of Guadiaro by townspeople. U.S. architect Robert Trent Jones Sr. contributed course aid in the form of staffers experienced in grading.

There has been some mutual disillusionment among some Spanish golf club officials and aspiring young course superintendents from America, lured overseas with glowing promises

Many Americans lacked the background to handle course problems, and others complained of being short-changed financially.

Leading British professionals have taken a leaf from the carefully kept notes of top-notch U.S. pros - South Africa's Gary Player, Australia's Greg Norman, Spain's Seve Ballesteros and Germany's Bernhard Langer.

According to Bengeyfield, they are venturing rather deeply into course design.

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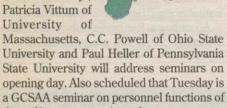
#### Northeast

**NEW YORK TURFGRASS CONFERENCE** 

ROCHESTER, N.Y.—The New York State Turfgrass Association's annual conference

and trade show, Nov. 5-8 at the Riverside Convention Center here, will feature nationally prominent speakers.

Drs. Patricia Cobb ofAuburn University, Patricia Vittum of University of



the golf course superintendent.

The keynote address Wednesday will focus on the 1993 World University Games and their economic impact on the Greater Buffalo area. The 1990 Citation of Merit will be awarded at that time.

Golf course sessions Wednesday and Thursday will target management issues. Steve Cadenelli, Golf Course Superintendents Association of America president, will discuss current and future issues for the golf course superintendent. William Meyer of Turf Seed Inc., will focus on grasses of the future.

Other golf course speakers are Dr. Harold Van Es of Cornell University, Richard Klein of Community and Environmental Defense Associates, and Vittum.

Additional topics are: "Maintaining Multi-Use Fields," by Dave Huff, O.M. Scotts; "Sanctuary Concepts for Golf Courses, by Michael Ermisch, Stetson-Harza, and "How to Comply With Regulations," by Michael Cook, Alpine Tree Care, Inc.

A Wednesday session will be devoted to athletic field maintenance, and the Friday morning program will cover monitors and sprayer control systems, calibrating granular spreaders and controlling vertebrate pests.

#### SCHOLARSHIP CANDIDATES SOUGHT

The New York State Turfgrass Association seeks candidates for two \$500 scholarship awards.

Candidates must be New York State residents, a junior or senior in a four-year college or university, or a second-year student at a two-year college working for a degree in turfgrass science. Preference will be given those attending a school within New York State.

Letters of application should be sent by Oct. 1 to NYSTA, P.O. Box 612, Latham, N.Y. 12110, and should include home and school addresses and phone numbers. Educational background and goals, career objectives and reasons for applying for the scholarship and related employment history also must be included.

#### **NEW JERSEY EXPO**

The New Jersey Turfgrass Association will present Expo'91 on Dec. 2-4 at the Garden State Exhibit and Convention Center in Somerset.

The expo will combine workshops, education sessions and a two-day trade show to serve the interests and needs of the various facets of the turfgrass and landscape

industry.

The N.J. Turfgrass Association, Rutgers Cooperative Extension and Cook College, Rutgers University are coordinating the event.

More information is available from Rene Conlon, program coordinator, at 908-932-9271 or Bob Dickison, Expo '91 chairman, at 201-916-5391.

#### **Mountains**

#### CONSTRUCTION TECHNIQUES SEMINAR SET

ST. GEORGE, Utah — An Intermountain GCSAA seminar will be held at the St. George



Hilton, Nov. 12-13. Cactus & Pine GCSAA members have been invited.

"Golf Course Construction Techniques and Management" will be the chief topic. Cost is \$175 for members or non-

members attending with a GCSAA member from the same facility.

The Intermountain GCSA's annual meeting is Nov. 14-15 at the same site.

Golf is booked at the new Sunbrook Golf Course the first day. Dr. James Watson, vice president and agronomist for the Toro Co., will speak Nov. 15. Cost for this event is \$30 for GCSAAchaptermembers,\$50fornon-members.

Further information may be obtained by calling Steven R. Budge, Intermountain vice president, at 801-377-8228.

#### **North Central**



#### HOPES HIGH FOR OHIO CONFERENCE

CINCINNATI—More than 4,000 industry professionals are expected to attend the Ohio Turfgrass Foundation Conference and Show Dec. 2-5.

Athletic turf, lawn care and budget concerns will be prominent topics.

Athletic turffocus will be on grass selection, marking and painting, reinforcement materials and improving methods of drainage. Cutting costs, defining field playability, the care of skin areas and safety and liability also will be discussed.

The all-day lawn care session will highlight new chemical herbicides, timing of applications, and the effect of post-herbicide irrigations. The weather's influence on insect control strategies will be probed, as well as factors affecting off-target movement of pesticides.

Ed Wandtke of Columbus will discuss budgeting during lean times and also conduct a workshop on "O-Based Budgeting." Another workshop will examine proper bidding.

For further conference information, phone 614-292-2601.

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#### Southeast

Cecil C. Johnston is the winner of the 1991 Florida Golf Course Superintendents Association's Distinguished Service Award

which honors a member for outstanding achievement in promoting golf course management.

Johnston, now working in Thailand, will receive the award during the CCSSA Convention in New Orleans in February.

A longtime volunteer

editor of the Florida West Coast Association newletter, he has been president of the West Coast group and the FGCSA. Where once there were no organized chapters, there now are three.

Recipients of the FGCSA President's Awards for lifetime service were Tom Mascaro, John Hayden, Harvey Phillips, C. R. "Bud" Pearson and Carl Smith.

Mascaro, currently a consultant with Turf Tec International, Miami, designed and built 21 products for turfgrass aareas. He has been Pennsylvania Turfgrass Council president, received GCSAA's Distinguished Service Award in 1976 and The USGA's Green Section Award in 1971. He edited the Florida Green's monthly column for 10 years.

Hayden began his turfgrass career in Michigan, where he operated a nine-hole facility. He was superintendent at Jacksonville Beach GC and San Jose CC in Jacksonville.

President of the North Florida chapter, he was

amember of the board of directors of the GCSAA, Florida Turfgrass Association and FGCSA.

Phillips has been course superintendent at Bellevue Biltmore for 40 years. He was instrumental in growth of the West Coast chapter as well as the FTGA, receiving that group's Wreath of Grass award in 1977.

Pearson, veteran superintendent at Palma Sola Golf Club, was the West Coast GCSA's first president, and for ten years wrote a monthly letter for that chapter. He received the Wreath of Grass award in 1976.

West Virginian Smith began the Florida portion of his golf course career in 1956 as superintendent at PGA GC in Palm Beach. He moved to Palm Beach CC in 1964, remaining there until retirement in 1982.

While continuing consulting work with Jack Nicklaus, Smith helped organize the FGCSA's Palm Beach chapter. His expertise in the agronomy field expanded to include training many turf students.

#### **South Central**



SOUTHERN TURFGRASS SHOW

MEMPHIS, Tenn. — The Southern Turfgrass Association's annual conference is

due Nov. 17-19 at the Memphis Cook Convention Center.

More than 100 exhibitors will provide firsthand information on thousands of turfgrass products. In addition to these displays of new techniques and equipment, there will be educational seminars.

For more information, call Carl D. Case, STA director of administration, 615-794-6689.

#### West

#### CALIFORNIA LAW

A California regulation in effect July 1 requires several new employee protection measures

The Illness Prevention Program requires that employers train workers on the hazards of employment, including those associated with equipment operation.

The new law also requires inspections of facilities and equipment to prevent injuries.

The regulations contain "whistle blower" provisions concerning the reporting of unsafe working conditions and encourage formation of safety committees within the workplace.

#### PACIFIC COAST SHOW

SEATTLE, Wash. — The third annual Pacific Coast Turfand Landscape Conference and Trade show will be held Dec. 3-4 at the Washington State Convention and Trade Center.

Western Washington's main event, hosted by the Western Washington Golf Course Superintendents Association, will include 33 educational seminars and a two-day trade show.

The seminars will be featured in three separate tracts covering a wide variety of topics. Tract I will encompass seminars designed for pesticide applicators. Licensed pesticide applicators can receive up to nine re-certification credits for attending the seminars in this tract.

Keynote speaker, Dr. Robert Shearman from the University of Nebraska, will discuss "Integrated Pesticide Management - How Can We Make It Work?" Other topics include an EPA Look at Contamination Sources, Safe Pesticide Handling, and Causes and Symptoms of Plant Damage.

Tract II will contain inspirational and educational sessions that cover the daily work challenges other than pesticide use. Dr. Bree Hayes, owner of Management Consulting, will speak on "Professionalism-How To Think Like, Act Like, and Be One." This tract also includes tree and ornamental care and turf rejuvenation.

Tract III will cover hands-on equipment operation and maintenance for mechanics and operators that do their own shop work. Topics will range from aerification and topdressing and equipment operation safety to drip irrigation systems and tank mixing, calibration and nozzle selection.

More than 100 manufacturers and distributors of turf and lawn care products, supplies and services are expected to exhibit at the trade show.

For more information, contact Scott White, Convention Services Northwest, 1809 Seventh Ave., Suite 1200, Seattle, Wash. 98101; 206-292-9198 or 800-275-9198.



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RANSOMES



Bob Farren's motto is "Be Prepared." So, Farren, assistant director of golf course maintenance for Pinehurst (N.C.) Resort & Country Club, is alreadyplanningfor 1994, when Pinehurst No. 2 will be the site of the U.S. Senior Open. He is not only preparing the renowned No. 2, he has gotten in the spirit with a new customized license tag.



## Ohio show taking form

CINCINNATI- More than 4,000 industry professionals are expected to attend the Ohio **Turfgrass Foundation Conference** and Show, Dec. 2-5.

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#### GEORGE OPENS DESIGN COMPANY

RICHMOND, Va. - Lester L. George has opened Colonial Golf Design, Inc., a golf course architecture and design firm.

George, who co-founded Virginia Golf Development owned by California golf course architect Algie M. Pulley, was for three years lead design coordinator and project manager for Pulley's East Coast projects.

He was involved with almost every facet of golf course development, from preliminary planning and design through construction

George believes there is a demand for quality affordable golf course design and architectural services in this state, especially for clubs needing remodeling, renovation or restoration but lacking the budget to hire more celebrated architects.

He is working on three golf course master plans in Virginia and one in North Carolina. He plans to apply for membership in The American Society of Golf Course Architects.

George's address is Colonial Golf Design, Inc., 19 Plaza Drive, Manakin-Sabot, Va. 23103; 804-784-5469.

#### HIRSH STARTS ANALYSIS FIRM

HARRISBURG, Pa. - Hirsh Valuation Group, a full-service real-estate appraisal and consulting firm, has established Golf Property Analysts

Golf Property Analysts will specialize in the appraisal, consulting and feasibility analysis for golf courses and related real

Laurence A. Hirsh, president of the firm, said: "The real-estate appraisal industry has not given enough attention to golf courses as a special-use property and it is a property type requiring a complete understanding of not only the business of golf but the game of golf as well.

"Through a specialized program of education, data gathering and management and the combination of both real-estate and golf industry professionals, we feel we can elevate the level of valuation services now available to the golf industry."

Hirsh recently authored the article "Golf Courses - Valuation and Evaluation," published in the January issue of The Appraisal Journal and has lectured at numerous golf development conferences and to college realestate students on the subject of golf course valuation and analysis.

#### MANSUR ADDS GOLF TO PORTFOLIO

FISHERS, Ind. — Mansur Development Corp., an Indianapolis-based developer, sees golf in its future.

Involvement in an 18-hole golf course as part of five upscale housing communities here has whetted Mansur's appetite for more

Its current course under construction, designed by Arthur Hills of Toledo, Ohio, will be part of The Hawthorns Golf and Country Club. The course is expected to be ready for play in mid-1993.

Golfcourse development is part of Mansur's business plan to diversify.

## El Conquistador golf course transformed from development to semi-private

(Editor's note: This is the second of two stories on converting courses from one type to another. This article deals with the conversion of El Conquistador Golf & Tennis Resort in Tucson, Ariz., from a development complex to a semi-private facility. Last month a story concerned the change of private Marietta (Ga.) Country Club to a municipal course.) By Lynn Tilton

Superintendent Marty Wells remembers when 100 rounds was a busy day at El Conquistador Golf & Tennis Resort's two courses. After a \$4.5-million renovation that turned the 45-hole development complex in Tucson, Ariz., into a semi-private facility, bookings now run 160 to 180 on each course and play has been speeded up from five hours to four hours and 15 minutes.

"I couldn't get you a tee time in the next three weeks even if you were my mom," Wells confessed.

The owners, ITT Sheraton and Metropolitan Life, have raised green fees to try to cut demand at the Sunset Course, which is open to daily-fee play; the Sunrise Course, played by homeowners in the original development; and a nine-hole course played by hotel guests.

Golf course architect Jeff Hardin, who designed the course in 1982, was in charge of a redesign that featured several steps to quicken play. As a result, officials have been able to set tee times seven minutes apart.

A seven-year improvement program began with spotting new tees all around. Sheraton rebuilt the 12th hole on the Sunrise course,

and the 1st, 7th and 16th on the Sunset Course. The 17th on Sunset was rearranged.

The new management gave its people the task to make over the course to play faster, then gave them the room to perform it. The goal was accomplished in several ways:

- · Hardin opened up the desert landing areas to reduce the number of lost balls.
- · Desert broom, which is extremely bushy, has been eliminated from the roughs. In its place are decorative cactuses and desert flowers
- · Signage was improved. Markers are clearly visible 200 yards away, so there is no hunting for the next hole.
- Wells spent \$500,000 for new equipment "selected to enhance playability rather than Continued on page 25

## Paintbrush exhibits Hurdzan's artwork

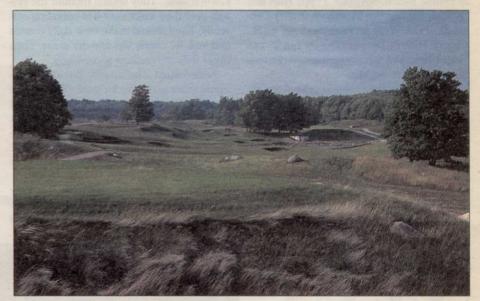
#### Second course no petty matter for Trivial Pursuit creators Haney, Abbott

CALEDON, Ontario, Canada — Trivial Pursuit co-inventors Chris Haney and Scott Abbott have attacked golf development with the same enthusiasm they devote toward board and card games.

In September they opened Devil's Paintbrush, an 18-hole gem that combines with neighboring Devil's Pulpit high in the mountains above Toronto to give area golfers almost a new world.

Designed by Michael Hurdzan of Columbus, Ohio, the Paintbrush boasts features he feels may give it even higher acclaim than the Pulpit layout, which won immediate critical kudos when it opened last year.

The Pulpit cost \$25 million to build. It encompassed moving 1.7 million cubic yards of dirt; laving 100 acres of sod; building four acres of greens (averaging 8,000 to 8,500 square feet), 120 tee areas, 128 sand bunkers and 80 grass bunkers; constructing seven miles of cart paths; installing a 1,200-sprinkler head irrigation system; and building in such extras as a 250-yard-long stone wall that runs one to three feet above water along a



The 6th hole displays the beauty of The Paintbrush course—the darling of Trivial Pursuit's Chris Haney and Scott Abbott that is set high above the city of Toronto

Photo courtesy of Hurdzan Design Group

The Paintbrush, built on 166 acres, cost a fraction of that amount (in the neighborhood of \$5 million in Canadian dollars, says Hurdzan project manager Dana Fry)... But!

Fry enumerated features that will characterize the 6,700-yard, par 72 Paintbrush as an extraordinary design and as a links course on the order of the classics in Scotland

- It contains 106 sod-wall bunkers andsix railroad-tie bunkers. Some of the bunkers are so deep they are in shadows at high noon.
- · Perhaps the largest sod-wall bunker in the world is the menace of the 17th hole. It is 16 feet at its highest point and 70 vards across. Crews had to put up scaffolding to

Continued on page 27

## **Builders** association works to define future

The Golf Course Builders Association of America has a new name and a special new committee under its new leader.

Executive Director Philip Arnold said the cosmetic change is adding "Association" to the group's name. The substance, he believes, will come from the new strategic planning committee.

Created to define the GCBAA's mission in a number of areas, the panel is composed of Arnold, President Perry Dye, Paul Eldridge of Wadsworth Construction, Paul Clute of Clute Construction, Jim Kirchdorfer of Irrigation Supply Co., Doyle Jacklin of Jacklin Seed, David Truttman of Buckner, Jerry Pierman of International Golf Group and John McDonald of McDonald & Sons, Inc.

The committee will meet Oct. 24 or 25 in Chicago to decide such questions as a business plan, decide whether the group should be all-inclusive or restrictive, whether to put together a publication or construction statistics or just service its members, and what areas of the golf industry the GCBAA should affect.

"I'd like something to present to our members at the annual meeting in February," Arnold said.

Arnold said the GCBAA has grown from 72 to 93 members in the last few months. Fifty attended the annual summer meeting.

New golf course construction 1985-90 No. of Courses 800 700 600 500 400 300 200 100 0 1985 1986 1987 1988 1989 1990 In planning **Under construction** Opened for play Source: NGF

## Winds blow favorably for weather stations

By Peter Blais

Faced with water shortages and rising water costs, superintendents are increasingly turning to weather stations as integral parts of their water management programs.

The weather station collects and records data on temperature, wind speed and direction, solar radiation, relative humidity and rainfall. It uses that information to determine an evapotranspiration (ET) rate—the amount of water lost due to plant usage and evaporation from the soil.

Using the ET figure, plus personal knowledge about his own course, a superintendent can more accurately determine how much water to put on his turf daily.

"Just about all new courses are putting them in. They are becoming so important that many government agencies are requiring them before issuing golf course building permits. They want to see something better than just human judgment," said Roger Gordon, president of Gordon's Irrigation Consulting, which has helped install systems at Pebble Beach, Spyglass, Poppy Hills and Spanish Bay on the Monterey (Calif.) Peninsula, PGA West in Palm Springs, Calif., Cherry Hills in Denver, Desert Inn in Las Vegas, Nev., and many other famous courses throughout the world.

Weather stations range in price from approximately \$5,000 to \$15,000. Most are being installed on new courses, although they can be retrofitted to accommodate existing irrigation systems.

"An extra \$5,000 or \$10,000 is no big deal when you're paying \$1 million or more for a new irrigation system. It can be a little harder sell to a greens committee at an older course with an existing system," said Ray Davies,

'They are becoming so important that many government agencies are requiring them before issuing golf course building permits.'

— Roger Gordon, president

Gordon's Irrigation Consulting

superintendent at Virginia Country Club.

"I wish I did," he answered when asked if his course had one.

The information can be collected directly from the station on a daily basis or, as is increasingly the case, it can be tied into the course's computerized central irrigation control system.

The weather station can automatically determine how much water needs to be replaced. But superintendents generally use the information as a guideline rather than a final number.

"Superintendents are reluctant to turn total control of their watering over to a machine," Gordon said. "They should monitor the system until they make sure it is operating correctly. They should make their daily rounds and look for overly wet and dry areas. Then make their corrections accordingly."

Added Kurt Thompson, Buckner's national sales manager for golf: "We use the premise that these guys (superintendents) are professional turf managers in tune with the needs of their grass. Besides, it's dangerous to use empirical data alone. Our superintendents use the weather station as a reference tool."

Weather stations are limited in that they measure conditions at a single spot. Manufacturers recommend placing them in an area that is typical of most of the course.

"The ideal spot is in the middle of a par-4 fairway. But that's hard to do," Gordon said.

Even if a fairly typical site can be found, the station still measures the ET rate in that single location. And as any superintendent will tell you, there can be many microclimates within a single course.

"Weather stations are very useful, but they are not perfect," said Tim Deutscher, superintendent at Tijeras Creek Golf Club in Rancho Santa Margarita, Calif.

The 18-hole public course installed a weather station when it opened last October. The course's computer divides the course into 17 distinct areas and uses the ET rate and Deutscher's expertise to determine watering rates for each location. New technology will soon expand that to 80 specific areas.

Despite the limitations, weather stations "are definitely worth the investment," Deutscher said. "They can help save a tremendous amount of water."

"They help minimize water use, no question," concurred Kenneth Solomon, director of the Center for Irrigation Technology at California State University at Fresno. "Superintendents tend to over-water since too little water can mean their jobs. But overwatering can cause many problems related to disease and fertilizer leaching."

Government agencies and television stations were the only ones that could afford weather stations before the mid-1980s, according to Rod McWhirter, golf manager with Rain Bird. They came into vogue on golf courses in the mid-1980s, about the time computer-controlled irrigation systems started coming on line and water shortages began hitting the headlines, he added.

Some of the early models worked poorly.

"I remember one of the first ones we installed," Gordon recalled. "It was in sandy soil and 'we had to replace 4.4 inches of water the first week. There is no place in the world that needs to replace that much water in a single week. The last three or four years we haven't seen anything like that."

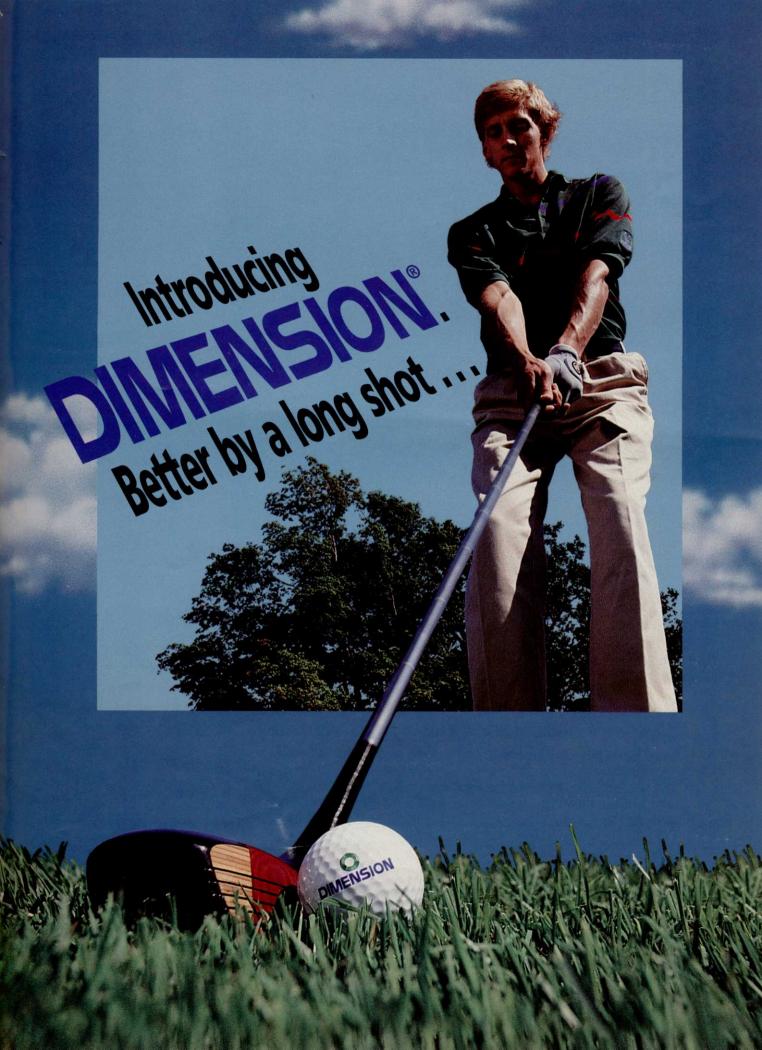
The newer models are much more reliable and affordable, McWhirter agreed. Technological advances, such as solar-powered batteries and telephone modems, allow stations to be placed farther from the central control station. Speed and storage capacity have been increased.

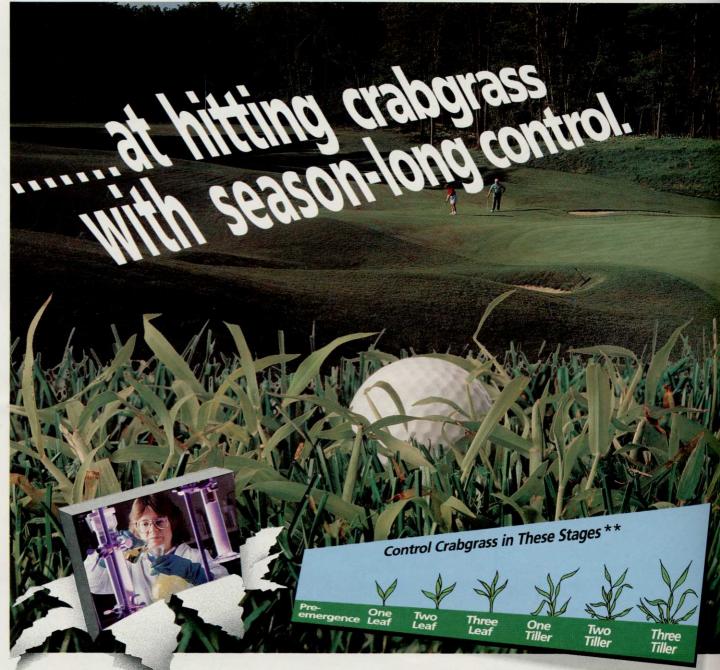
Still, technology has not overcome the need for routine maintenance.

"Failure to maintain them is the biggest problem we see with weather stations," said Jon Williams, golf project manager with Toro. "When someone reports a problem, the first question we ask is, 'When was it maintained last?"

"We see courses spend thousands of dollars for equipment, but forget to do some simple things. Some of the sensors have to be replaced every six months. Leaves and bird droppings can mess up the sensors. It takes about 15 minutes every three months. That's a small investment to maintain an expensive piece of equipment."

GOLF COURSE NEWS	Buckner Inc. 4381 N. Brawley Ave. Fresno, Calif. 93722 Dave Truttmann 800-328-4470 Circle #201	Rain Bird Sales, Inc. 145 N. Grand Ave. Glendora, Calif. 91740 Mike Catalano 818-963-9311 Circle # 202	Thompson Mfg. Co. 5075 Edison Ave. Chino, Calif 91710 Mike Bravo 714-591-4851 Circle #203	Toro Irrigation Div. 5825 Jasmine St. Riverside, Calif. 92504 Jon Williams 714-785-3392 Circle #204
Exclusive Survey	Buckner 39760 COPS	Rain Bird WS-100, WS-200	Thompson 012	Toro NW8001 AC & SP
Methodology — Temperature	Yes	Yes	Yes	Yes
Humidity	Yes	Yes	Yes	Yes
Wind velocity	Yes	Yes	Yes	Yes
Wind direction	No	Yes	Yes	Yes
Solarradiation	Yes	Yes	Yes	Yes
Rainfall	Yes	Yes	Yes	Yes
Other			Rain intensity	
Does the station store data?	Yes	Yes	Yes	Yes
How long does it store data?	30 days	9 days	Indefinitely	4 days
Does station interface with irrigation control system?	Yes	Yes	Yes	Yes
Will station automatically adjust irrigation?	No	Yes median protection of	Yes	Yes
Station's power source	Electric w/battery back-up	Electric, solar, battery	Electric, solar, battery	Electric, solar
How is information relayed?	Wire, radio, phone	Wire, phone	Wire, radio, phone	Wire
Maximum distance from station to controller	Wire-10,000 ft.; radio 2 mi.; phone-unlimited	Wire-20,000 ft.; phone-unlimited	Wire-4,000 ft.	Wire-2 mi.
Can station interface with non-irrigation controls?	Yes	Yes	Yes	Yes
Price range	\$4,000-6,000	N/A	N/A	\$4,500-10,000





## Break-through chemistry provides unprecedented control with one application.

Only DIMENSION® turf herbicide gives you true season-long control of crabgrass—with just one application. New break-through chemistry keeps Dimension working, month after month.

		Length of	of Crabgras	s Control		
MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT
	Other Pr	reemerg	ence He	rbicides'		

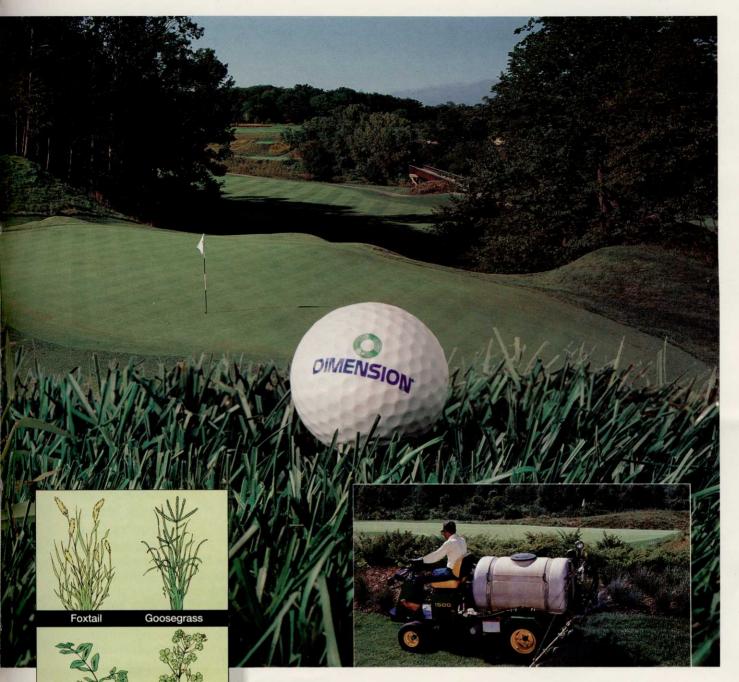
#### **DIMENSION**"

That means you can always expect great-looking turf—even late in the season. So you won't have to waste time re-treating because of breakdowns in residual. Nor will you risk discoloration or thinning of turf due to postemergent herbicides.

# Preemergence and postemergence crabgrass control in one product.

The advanced chemistry in Dimension also introduces both preemergence and post-emergence activity in one product. No other turf herbicide gives you so much flexibility.

This wide application window lets you schedule treatments with Dimension around other tasks such as spring cleanup, trimming and aerating. It also allows you to delay crabgrass treatments to optimize control of goosegrass and summer annuals.



## Controls more than crabgrass.

Spurge

Dimension herbicide doesn't stop with crabgrass. Its broadspectrum activity targets a variety of annual grasses and broadleaf weeds. This control includes foxtail, goosegrass, spurge and oxalis.

## Permits fall overseeding.

The break-through chemistry used to formulate Dimension gives you yet another advantage. You can conduct normal fall overseeding three months after an application. Dimension eliminates the need to choose between season-long control and overseeding safety.

## Apply Dimension with confidence.

You can apply this unique, new herbicide over a variety of turfgrass species without fear of discoloration or root injury. A wide range of cool- and warm-season grasses have shown excellent tolerance to Dimension. You can even use Dimension on bentgrass without injury. In addition, Dimension won't harm adjacent ornamentals, trees or shrubs when used as directed.

## DIMENSION° Turf Herbicide

\*Based on a single application.

\*\*For control of tillered crabgrass, tank mix Dimension with Acclaim¹ or MSMA.

Oxalis

by Monsanto

# Join the professionals who get more beautiful turf with just one shot of Dimension.

Wes Mathany, CGCS Superintendent Glen Echo Country Club St. Louis, MO



"I get judged on the quality of my turf. If I can cut the weed

population to 10 percent or less, it makes me look better. With Dimension, I'm getting that control and the turf safety I need."



Tom Werner, CGCS Superintendent Colonial Country Club Fort Worth, TX

"The best thing about Dimension is if you get your application down late, you're still going to get control of crabgrass. If we

have Monday events and can't spray and then the weather turns on us, or we wait another few weeks, we still get control in one application."

Randy Brehmer, CGCS Superintendent Bear Slide Golf Club Cicero, IN



"Postemergence crabgrass control is a very 'iffy' situation. The advantage of a material

that can be applied both pre- and postemergence is big. Dimension does that. We saw excellent results with no detrimental affect to desirable turf in postemergence applications."



Don Brown, CGCS Superintendent White Manor Country Club Malvern, PA

"I like Dimension because of the flexibility of application. Timing isn't quite as critical because it can work pre- or

postemergence. With other products, we spray around April 1 and we're back a second or third time. With Dimension, we can put it down in mid-May and get good results in just one application."

Call Monsanto toll-free 1-800-323-1421



The toughest thing to emerge since crabgrass.

ALWAYS READ AND FOLLOW LABEL DIRECTIONS FOR DIMENSION TURF HERBICIDE.

© Monsanto Company 1991 Dimension® is a registered trademark of Monsanto Company.

¹Acclaim is a trademark of Hoechst AG.

## Different clientele meant course changes at El Conquistador

Continued from page 23

for mass mowing."

• Cutting heights were lowered—fairways from 3/4 to one inch down to 5/16; and roughs, from three inches to 1-1/4 inch. Greens are being cut to a scant 9/64 of an inch and tees to 3/8 of an inch.

This is a challenge when temperatures soar to 120 degrees in June. But brown spots are hard to spot, thanks to crew vigilance.

A labor-intensive mowing schedule includes split shifts, seven days a week.

• "We're also vigilant considering dawdling players," Wells said. "We have a ranger for each course. Our rangers are experienced golfers who can politely tell a foursome (including hotel guests) they have to speed up."

Wells said the skilled diplomats have limited ruffled feathers, and playing speed is maintained.

• The grounds crew makes sure golfers can play through, no matter how busy they are. They cut engines while golfers prepare to stroke the ball.

"Courtesy is more important than five minutes of lost working time," Wells said.

Sheraton has not finished with improvements.

The director of golf emphasized, "We still have five years intensive work ahead of us."

Officials want to add shrubbery and trees,

Officials want to add shrubbery and trees, and to upgrade bunkers to provide consistent play.

"We also want to improve the desert garden appearance," Wells said.

Then there are cart paths, restrooms, and food and beverage outlets to consider.

While Hardin's design and Wells' maintenance practices are cutting playing time, irrigation specialist Mike Britt trimmed the water bill 15 percent, or \$70,000 annually.

The savings came by correcting sprinkler placement.

When built as a development course, only the center of the fairway was to be watered. As a semi-private course, the fairway is kept green wall to wall.

Some heads had to overwater in order to lay down enough liquid along the rest of the line.

Britt will oversee an upgrade in the irrigation system to further improve water use.

Wells and his 43-man crew face many challenges maintaining the 45 holes in the desert heat and fast-play environment.

With tee times seven minutes apart, it is more difficult to mow, or apply darkening agents, surfactants, or even to overseed.

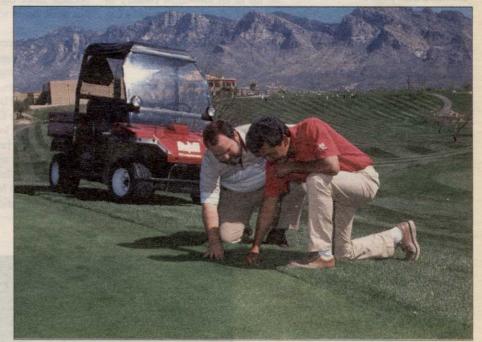
"You have to be careful with transition," Wells said. "We overseed in late September-early October so we're ready to play intensively by Thanksgiving, when most of our winter visitors return. By then the course is in picture postcard condition.

"We plan as far out as three years, but keep flexible so we can make changes as quickly as in just one week."

Wells' three assistant superintendents — Jim Heath, Darrell Lewis and Ernie Guadarrama—keep atop potential problems so they can act rather than react.

For example, if weather conditions indicate the possibility of a pathogen problem the next day, they won't wait for pythium to show but will make a preventive spray that day.

When it rains in Tucson, water is a problem. Storms are generally short, intense and complete with lightning and eroded slopes.



Marty Wells, left, discusses turf conditions with assistant Ernesto Guadarrama at Sheraton Tucson El Conquistador Golf & Tennis Resort.

Photo by Lynn Tilton

Crews must act quickly once the rain stops.

"We handle July with a lot of shovels, rakes and backhoes to clean up rocks and dirt washed into playing areas," Wells said. "Our goal is simple: Lose no grass."

Despite the 320-plus days of sunshine, Wells keeps a daily weather and temperature log, evapotranspiration rates, and other data to ensure the course stays in good condition.

"We've had no serious pathogens hit the course in the past two years. We had a little

fairy ring last year. That's a water issue, and always a problem in desert areas," Wells said.

Meanwhile, developers of the surrounding housing project have also benefitted with the change in management.

When they were responsible for the 45 holes, the average new homeowner built a basic 1,600-square-foot house that retailed for around \$150,000 to \$160,000.

"Now," Wells said, "some homes are in the \$300,000 neighborhood."

## Newly planned U.S. courses

Location California	Contact
Auburn Clovis	Mike Fluty New Cities Dev.
Corp., Escondido Fairfield Oceanside	David Rainville Flint GC Const. Lightfoot Planning Group
Pleasanton San Diego San Diego San Marcos	Mayor Ken Mercer Scott Miller Ted Robinson Ted Robinson
Colorado Canon City Dacano Florence Connecticut	Gordon Hecker Jack Finley City Council
Ridgefield Seymour Florida	Peter Friedman Chris Bargas
Bradenton	University Commons LP, Sarasota
Melbourne Melbourne Orange Cnty	Coy A. Clark Co. Tara Group Vista Group
	Jim Davidson
Atlanta	Woodbine Dev. Corp., Dallas
Macon	Cnty. Comm. Joe Allen
Hawaii — Honolulu Illinois —	Y.Y. Valley
Waverly	Gary Delaney, Jacksonville
Winfield Indiana —	Klein Creek Corp.
	CHOULD DOWN OUT

d U.S.	courses
Louisiana -	
Goodbee	Stephen Rusbar
West Branch	LoPatin & Co. Robert Stuart, Cilo
Minnesota Winona Nebraska	James Carlson
Papillon	Mayor Goodman
Nevada —	61

Papillon	Mayor Goodman
Nevada -	Robert Helms
New Jerse	y —
Lawrence	Hopewell Twp. Planning Bd.
Newark	Brian Silva
Vineland	Planning Board
New York	
Croton-On-H	ludson Robert T.

New TORK	
Croton-On-l	Hudson Robert T.
	Jones Sr.
North Car	olina —
Gastonia	1st Colony Investors
North Dak	cota —
Fargo	THK Assoc.
Oregon -	
Hillsboro	Meriwether Nat'l
	GC
Portland	John Green,
	Carinafield

Portland	John Green, Springfield
Pennsylvan Limerick South Caro	David Platt
	City Mgr. Bowers
Baytown Utah	Blue T Golf Inc.
Oluli	B 1 1

Washington -	h.
Sedro-Woolley	
Wisconsin Ad	ministration Div.

LaCrosse CC

Cnty. Planner

LaCrosse

Golf Course News is publishing these lists monthly. The list below includes courses that have been approved around the country in the past month. The chartat left contains the sites and contacts for new courses and renovations in the planning stages. When those courses are ready to begin construction they will be listed again in this "Courses newly approved in the U.S." chart.

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

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

## Courses newly approved in U.S.

Location	Course Name	Туре	Holes	Address	Architect/Contact
California				0.000,5,000,000	this eyem and house in
Merced	Merced Community GC	D	18	Bellevue & Lake Rds.	Ken Dye/Golf West
Palm Desert	Altamira CC	N/A	18	Hwy. 74	Jim Hayhoe
Vallejo	Blue Rock Springs GC	M	18	N/A	Robert Muir Graves
Georgia					of the same of the same of the
Acworth	Lake Acworth GC	M	18	4190 Ragsdale Rd.	Ken Dye/Golf West
Albany	Twisted Pines GC	D	18	N/A	Donald Cottle Jr.
Idaho				SALEMBINOS SALEMBINOS	
Blackfoot	Blackfoot Golf Assoc.	N/A	9	Teeples Dr.	Gary Baumgartner
lowa					
Pella	N/A	D	18	N/A	City Council
Missouri -				THE RESERVE AND ADDRESS OF THE PERSON OF THE	
St. Louis	St. Peters GC	M	9	Salt Lick Rd.	Alan Ollar
New York -				08012-01-1	
Lockport	Lockport Town & CC	P	9	N/A	Harry Bowers Assoc.
New Hempstead	New York CC	P	18	Union/Brick Church Rds.	Rockland Dev. Corp.
Oregon				- semantin	losses our beginning
Albany	River Oaks GC	D	18	Riverside Dr.	Randy Tripp
Pennsylvania -					
Wilkes-Barre	Huntsville Golf Club	P	18	Lehman Twp.	Rees Jones
Wisconsin				- I standa	The state of the s
Lisbon	Songbird Hills	D	18	Hwy. J	Hal Hoffman,
				SITE II NOOM	New Berlin

City Commission

Kentucky

## European market should open up with EEC, experts say

Continued from page 1

The rewards could be great for companies in member countries of the EC, a market 30 percent larger than the United States. And the market could grow. Several countries have applied for membership, and others are expected to follow as Eastern Europe moves from a communist to a market economy.

But for now, the changes in tariffs, quotas, technical standards, currency exchange and taxes have applied to the 12 member nations—France, Germany, Italy, Belgium, The Netherlands, Luxembourg, Great Britain, Ireland, Denmark, Greece, Spain and Portugal.

What have and will the changes mean for various golf industry suppliers?

British architect Howard Swan gave a bottom-line perspective.

"It means I'll get paid more regularly," he quipped. "These are exciting times. Removing those restrictions will improve everyone's confidence. We still have a recession going on. This should give developers more confidence to invest internationally."

John Wilson, general sales manager of grass machinery for Ransomes, expects good things to come out of the changes for companies in EC member nations.

Abolishing tariffs and quotas has "made everything more equal" for companies in EC member countries, while making it more difficult for non-members to compete in that market, Wilson said.

EEC technical standards dealing with safety, noise and vibration levels are still being developed and are expected to be fairly strict.

"If a company conforms to EEC standards, it should be able to meet the standards just about anywhere else in the world," Wilson said.

The free flow of currency has made it easier to sell goods in member nations than five or 10 years ago, Wilson said.

Some progress has been made in harmonizing taxes on income, employment, corporations and payroll. It remains an ultimate goal, but one that will be extremely difficult to fully achieve, Wilson said.

"Everything has become more competitive because of the freer exchange of currency, goods and services," Wilson said. "And it looks like there are going to be even more players."

One of the EEC's most difficult tasks has been adopting principles regarding pesticides. European Community-wide standards are expected to be drafted within a year and should be in effect by 1993, according to Felix Muhlebach, spokesman for Ciba-Geigy Ltd.

Farm and turf chemicals are registered together in all EC countries, Muhlebach said. No special rules apply solely for golf course chemicals.

Plans are for manufacturers to register their products with the EEC, Muhlebach explained. If the product passes muster, then it will be up to an individual country to demonstrate why a chemical's use should be forbidden within its borders. The burden of proof that a chemical is unsafe will rest with the country wanting it banned.

Muhlebach said there was little chance any Ciba-Geigy products currently in use or in planning will be restricted under new EEC guidelines.

The trend toward fewer farm supports could be a side benefit for golf industry suppliers, Muhlebach said. Without subsidies, agriculture will become more competitive. Some marginal farms will likely fail, he said.

Golf courses could become one of the major users of the extra acreage, providing additional markets for suppliers. Prime development land could become available in a country like Germany, where many farms are located near metropolitan areas, he added.

The changes will have little direct impact on club management, according to Jim Maser, chairman of Club Corporation International, one of the world's largest golf course management companies.

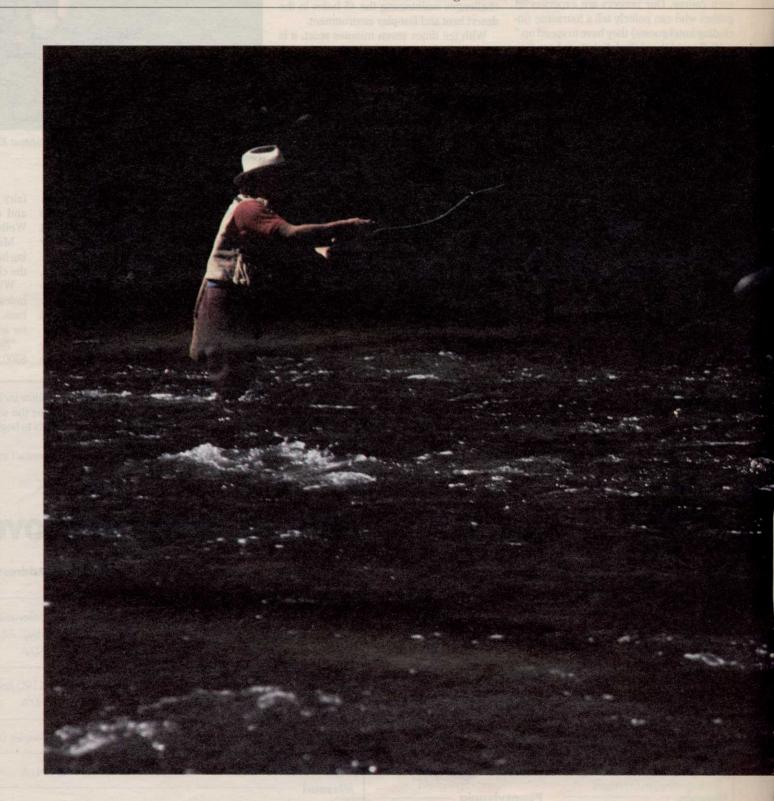
"But in the long term, with people feeling more comfortable about moving across borders and commercial activity increasing, tourist activity at golf courses is bound to increase," he said.

Among the proposed EEC initiatives is language dealing with movement of heavy machinery across international borders, according to Mark Pierson of Brian D. Pierson (Contractors) Limited, an international golfcourse builder.

The current documentation is extensive, making it difficult for golf course builders to shift their equipment from country to country, he said. Pierson is hopeful the paperworkwill be reduced, perhaps to a single document.

Importation of grass seed is regulated by government agencies in each of the 12 member nations, said Pierson. He hopes common regulations among EC members will make it easier to introduce new grass seeds in Europe.

Continued on page 27



## **European Community**

Continued from page 26

The banding together of EC countries should also help stabilize currency values among member nations, Pierson added. That would make it easier to bid on jobs since movements in exchange rates can affect the future value of construction contracts.

"You have to look very carefully at contracts now," Pierson said. "If the currency of the country where youare working might move against you, that can mean bidding higher to protect yourself."

## A triple green, 16-foot bunker, two-green hole...

Continued from page 23

install the 66 skids of sod, enough to sod an entire rough on a par-5.

- A double green serves the 2nd and 5th holes. A tree stands in the middle and is surrounded with a stone wall.
  - The 3rd hole has two greens.
- A triple green serves the 11th and 18th holes and is the practice green. Thought to be the largest green in the world, it covers more than 50,000 square feet and has about a 20-foot elevation change. (By comparison, Geoffrey Cornish's

The list of out-of-the-ordinary features goes on for Hurdzan and his Trivial Pursuit clients.

The International at Bolton, Mass., sports the largest green in the United States—27,000 square feet.) Two railroad tie bunkers and five sod wall bunkers surround it.

- There is no pavement on the entire course. Crushed stone was used for cart paths, entrance roads, parking areas and walkways.
  - Rock piles galore, from two to

nine feet high, dot the course. Many were on site before building began. Others were stacked during construction.

• Numerous stone walls add definition and beauty. Most are between holes and along the entrance road. Elsewhere, a stone wall crosses the 8th hole's fairway at 220 yards off the back tee. Holes 4

and 17 have stone walls just off the side of the green and the 10th has a stone wall just behind the green.

- Fescue grasses dominate the course. All in-play areas except greens are fine creeping red fescue. Out-of-play areas are 50 percent red fescue, 40 percent hard fescue and 10 percent Kentucky bluegrass. Greens are Penncross bentgrass.
- The clubhouse will be built on an Irish pub theme. Haney and Abbott wanted it to have a thatch roof, but the fire marshal would not allow it. But — if a golfer wears knickers, their first beer is free, and only British beer will be served.

 The irrigation system has 650 sprinkler heads.

To get as much of the touch of Scotland as possible, Haney and Abbott sent Fry, Pulpit superintendent Ken Wright and director of golf Doug Ball on a tour of Scottish courses before the Paintbrush was designed.

Fry related that St. Andrews' and Royal Dornach's superintendents said they have all sod-wall bunkers. St. Andrews has 150 and rebuilds 50 each year.

Wright's response was "We're using all fescues, why not all-sod walls on the bunkers?"

From the sod-walled bunkers to the rock piles (typical of the Scottish highlands), the stone walls and the fescues, the Paintbrush emits visions of Scotland.

Which precisely was the owners'
— and Hurdzan's — intent.

Hurdzan's favorite hole? The 17th, a 545-yard par 5. From the 17th tee a golfer hits downhill to adouble fairway, which is divided by an old barn foundation sunk six feet into the ground. The second shot is blind over the large sod-wall bunker. From the tee you see the stone foundation and bunker, with Toronto's CN Tower in the background.

While golf at the Pulpit is played through the air, at the Paintbrush it will be played on the ground because the ball will run so far once it lands, Hurdzan said.

"British golf course playing techniques will be helpful," he added.

#### Golf Course Europe expands

Continued from page 1

variety of golf-related developments in Asia and elsewhere.

The influential European Golf Association will be prominent in one of three pre-show panel discussions emphasizing environmental problems. Of prime concern is how golf associations, course architects and designers and environmental authorities can work in harmony to control and expand the growth of golf in Europe.

United States and European architects, golf course authorities and environmentalists will huddle on guidelines on current conditions and future construction. Constraints vary from country to country.

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# Landmark's first signature design opens to kudos outside San Diego

RAMONA, Calif. - Mt. Woodson Country Club is the first Landmark signature golf course to

Near San Diego, the par 71, 6,200 -ard layout is the center of residential development by Davidson Communities. The course has housing at the perimeter, not between fairways, in the style of older California courses such as Riviera or La Costa.

"We integrated the course into a fantastic natural environment of mature trees, chaparral and rock outcroppings. This creates a dramatic look and requires accurate shotmaking," said Brian Curley of Landmark Golf Course Design in La Quinta.

"We have featured the existing natural rock terrain by using rocks as lake edging, as retaining walls and as locations for tees. We have used existing rock formations and manicured fairway edges to expose outcroppings. The result is a dramatic contrast between green turf and the exposed rock."

Head professional Scott Bentley added: "Many new courses must start from scratch and plant new landscaping. We have the advantage of using groves and oversized oak trees here 40 or 50 years. We will have a mature, established look at opening."

Amy Strong Castle, on the Register of Historic Landmarks and symbolic of mission and classic California craftsman design, will be preserved as the Mt. Woodson CC clubhouse.

# Building without permits costs developer \$15,000

ST. LOUIS - Stephen J. Apted, partment deputy discovered the developer of an 18-hole golf course under construction in western St. Charles County, has been fined \$15,000 for failing to obtain required permits.

Contractor Bill Marcrander had started work on the golf course at a point farthest from frontage along Foristell Road. A dam near the road was high enough to obscure construction work, but a building dework while driving by.

Grading on the project had been nearly completed and a \$650,000 underground irrigation system installed without permits or inspec-

When asked about sewage disposal in an area not served by a public sewer system, Marcrander said two septic tanks served the

## nging Rock on 'magnificent' Va. spot

SALEM, Va. — "People come expecting just another public golf course, and they can't believe it," said the golf director at Hanging Rock Golf Club here.

K.C. Jones Jr. said Hanging Rock architect Russell Breeden "took an absolutely magnificent piece of land and designed a challenging, fun course with whatever you want."

Located in Roanoke County, near Salem, Hanging Rock is the first strictly public course to open in southwestern Virginia in more than

Nestled into Fort Lewis Mountain in the Blue Ridge Mountain chain, its every hole is cut out of a forest and panoramic 20- to 30mile views are everywhere, Jones

Highlights include greens averaging more than 8,000 square feet, fairways defined by more than 250 mounds, 75 tees, and a two-green 18th hole — one surrounded by water and the other having no water to negotiate.

Jones said: "Versatility may be our strong suit. By offering so many teeing stations, the course can be reduced to 4,600 yards or stretched out to more than 7,000 yards.

Although moderately bunkered and being challenged by water on just four holes, most golfers will find their handicap probably insufficient to match par (73) from the back tees."

Rob Coulter, formerly at Hidden Valley in Salem, has taken over the superintendent duties.

# Willoughby's clubhouse garners national honors

at Willoughby Golf Club here continues to garner accolades of professionals in the field of design.

In addition to the recent "Best of Show" Pinnacle Award, the clubhouse design has won the 1991 Aurora Award in the category of recreational facilities.

Designed by the architectural firm of CYP, Inc., based in Ft. Lauderdale, the design blends the graceful lines of a traditional style within the clubhouse while provid-

STUART, Fla. - The clubhouse ing a dramatic statement for the exterior.

> The 25,000-square-foot clubhouse includes spacious men's and women's locker rooms, golf shop, administrative offices, formal dining room, casual grill room and the Willoughby Room, named for Capt. Hugh Willoughby.

> Interior design was provided by Judy Corr of Correct Interiors of Atlanta, Ga.

Willoughby is a private golf club community.

## **Nugent and Western Golf Properties transform Bent Tree**

DALLAS, Texas - In less than a year, Bent Tree Country Club underwent extensive renovation and was pronounced in excellent shape by competitors in the Texas Golf Association Mid-Amateur Championship Sept. 20-22.

Dick Nugent Associates of Long Grove, Ill., transformed a very good layout into an outstanding course.

Architect Dick Nugent, who codesigned Kemper Lakes, site of the 1989 PGA Championship, with the aid of Joe Black, president of Western Golf Properties, Inc., in Scottsdale, Ariz., skillfully remodeled the 18 holes.

No hole was left untouched in the \$800,000 project. Five greens were rebuilt, the other 13 resurfaced with Penncross bent. Fairway and greenside bunkers were reconfigured on every hole. New sand and tile eliminated a longtime drainage

Six bunkers were added, bringing the total to 88.

Six new regular tees and two forward tees were built. Mounding was added for separation of holes and to create a more rolling look. Fairway bunkers added in critical positions tightened driving areas.

Addition of a stream that runs the length of the right side of the long par four second hole changed a

wide-open hole into one with two tight landing areas.

Back nine changes were more subtle, except for the completely rebuilt 17th hole. Originally a 211yard par 3 on which the player couldn't see the green, it was shortened to 176 yards by moving the green forward and to the right, bringing a creek into play.

Bent Tree was designed by Desmond Muirhead in 1976.

## **Howard County** golfers get what they've desired

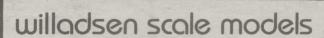
GLENWOOD, Md. - Cattail Creek Country Club, conceived late in 1988 by avid Howard County golfers and businessmen, held groundbreaking ceremonies July

The more than 500 guests included 150 founding members who formed a non-profit organization and in 1989 acquired 320 acres straddling Route 97 in Glenwood.

Grading has begun for the 6,800yard par 72 course. Development plans call for grading to be completed next May. Overseeding of the course and greens will begin in the spring of 1992. Opening is due early in 1993.

Willard Boyd, architect and designer of the Atlanta Country Club course, completed design and routing last April.

The McEwen Group, of Sarasota, Fla., designed the clubhouse.

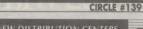


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# The European challenge

## Expert says mutually accepted environmental standards needed

By Vern Putney

Ignorance of environmental issues exists in both the camps of golf course developers and environmentalists, according to a United Kingdom-based consultant specializing in "golf ecology."

David Stubbs, managing director of Environmental Golf Services, said: "Arguments have become polarized, but the truth is that golfcourses can only benefit the environment ifproperly planned, developed and managed."

Stubbs said organizations like the Golf Course Wildlife Trust and the proposed European Golf Environment Commission are needed to solve the problem.

"Only when there are widely accepted standards, recognized both by leading environmental organizations and the golf industry, and applied to new projects, can we really expect to see positive results and an effective counter to the misinformed and blinkered opposition that currently afflicts golf projects," he said

Amember of the Species Survival Commission of the International Union for Conservation of Nature, Stubbs said environmental constraints must be identified and addressed at the appraisal stage of a project — before a large investment is committed.

"Until now, this has rarely happened because developers have consistently followed the design-led approach and, at best, paid mere lip service to environmental concerns. Calling for an ecologist at the last minute to resolve unforeseen difficulties is both more costly and a sign of inept project manage-

This negative, reactive approach engen-

ders a bad image across the golf development industry," said Stubbs, who has been involved in more than 80 sites in nine European countries and was the first conservation officer of The Golf Course Wildlife Trust.

Doing environmental homework and taking a pro-active attitude will gain developers cost benefits, he said, adding that golf feasibility, commercial viability and the environment are integrally linked.

"Failure to appraise each of these at the right time — that is, from day one — can be the route to ruin."

Stubbs said golf has a poor environmental image in Europe because of "the insensitive approach so often adopted in new development, not because of any inherent incompatibility between golf and the environment."

But, he warned, developers must recog-

nize that some sites are too sensitive, and conservation must outweigh golf in those cases

He said involving a full mix of professional disciplines on a project team is necessary to change from a fighting, and losing, situation to a cooperative and winning one.

He said experts should consider water supply, storage, treatment and run-off; wildlife; history and archaeology; the landscape, including countryside issues; and access, including public amenity and the project's impact on traffic.

"Better golf courses are cheaper to build and manage because they are site-responsive and involve less planning hassle, while better conservation is achieved because the sites are properly managed," Stubbs said.

## Dramatic changes mean developers should 'go slowly,' says Benz

By Vern Putney

Brad Benz has two words of caution for those in the golf course business eyeing Europe as a fertile field for expansion and profit. "Go slowly."

"Things are changing dramatically overseas," said the Los Gatos, Calif., U.S., golf course architect, who has been involved the past five years with projects in Europe. "As in America, the economy is shaky. In addition, environmental laws are particularly harsh in many countries."

Southern Europe, Benz said, is touristoriented. He estimates that industry has declined 80 percent. "Without the visitors, there aren't enough natives golf-inclined or sufficiently prosperous to support courses."

Benz cited recent experiences in the south of Spain, where he has a course under construction and two ready for launch. "Of 27

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Environmental laws are particularly harsh in many countries.'

- Brad Benz

projects reported in the works, few got off the ground."

Europeans, he noted, have a different attitude toward sports than do Americans. Rather than pursue a recreation outlet such as golf zealously, they tend to enjoy multiple recreation activities.

Europe, as a whole, has a strong agricultural bent, is fiercely protective of land use and insistent upon preservation of acreage character. The preservation of a rural landscape character is of paramount importance. Golf courses are perceived to be "urban intrusions."

Planning authorities don't take kindly to those who profess to be golf course architects, haven't a clue about ecology-sensitive and minimal land manipulation and the classic values of golf course architectural design and, in the process, despoil terrain. A few such experiences have soured the market for "foreign" interests.

Employing European developers frequently is more practical, he said. "In any price bidding, they usually have the edge," Benz conceded.

Surprises await the American golf course architect that will supremely tax his resourcefulness. Europeans are very respectful of traditional ways of golf course design, construction, maintenance and facility management.

In America, for example, some golf courses use a million gallons of water a day for irrigation. Treasured water in Europe can be re-

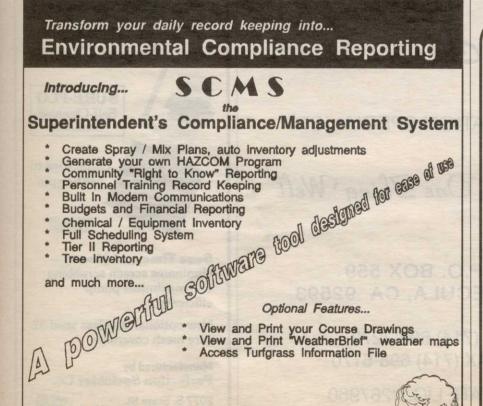
stricted to 150 cubic meters a day (40,000 gallons) for the same purpose. That quantity is barely sufficient to irrigate greens and tees only. The balance of the golf course must rely upon what Nature provides. In drought years, the consequences are serious, Benz said.

Crashing or developing golf course markets in European countries can be like carrying a tee shot over 250 yards of pond. One might as well whistle Dixie as try to plant a construction foot in the yodeling territory of Switzerland. And Austria remains more inclined to ski slopes than the gentle swings popular in U.S. golf architecture, he said.

Germany's regulations can be formidable. England's edicts are difficult, but there is ample room for discussion "if their rules are followed," Benz observed.

Benz is a speaker at Golf Course Europe's conference, Oct. 7-9 at Wiesbaden, Germany.

October 1991 29





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## Dai-Ichi negotiations for Landmark Land real estate end with no sale

The sale of Landmark Land Co.'s real estate, which includes many well-known golf courses, to Japan's Dai-Ichi Real Estate Co. will reportedly not happen.

Regulatory delays and dwindling Japanese interest in U.S. real estate are responsible for quelching the deal, the Wall Street Journal

The \$739 million sale has been in the works

since late December. But falling U.S. real estate values and Dai-Ichi's own financial problems reportedly caused the deal to fall through.

'I don't think Landmark can survive without the deal," Kenneth Campbell, president of Audit Investments Inc., a real estate securities money management firm, told the financial newspaper.

The deal's collapse could lead to the fed-

eral takeover of Oak Tree Savings, the company-owned thrift that financed many of Landmark's purchases

Carmel, Calif.-based Landmark must sell its properties because of the Financial Institutions Reform, Recovery and Enforcement Act of 1989 that raised the amount of capital savings and loans needed to keep their real estate holdings.

Last year's effort to sell Landmark's prop-

erties to California developer Barry Hon failed when the federal Office of Thrift Supervision rejected a deal that had Oak Tree financing 75 percent of the \$967 million purchase price.

Among Landmark's golf properties are California's La Quinta Hotel Golf & Tennis Resort, Mission Hills Country Club and PGA West; Oak Tree Golf Club in Edmond, Okla.; and Kiawah Island in South Carolina.

## Rees Jones' new Golden Horseshoe layout sits next to Dad's design

WILLIAMSBURG, Va. - A second championship course opened in mid-September at Golden Horseshoe Golf Club at Colonial Williamsburg.

Designed by Rees Iones, the Green Course joins the Gold Course designed by Rees' father, Robert Trent Jones Sr., at Williamsburg Inn.

The new par 72 course is cut from 250 acres

of virgin timberland. Jones was free to take best advantage of the nature features, including vegetation and dramatically-rolling topography.

Where the Gold Course plays across draws

from ridge to ridge, the new course is a combination of ridge and valley holes. The quality of the course is in its framing. Because trees are so tall, fairways were widened to get sunlight in.

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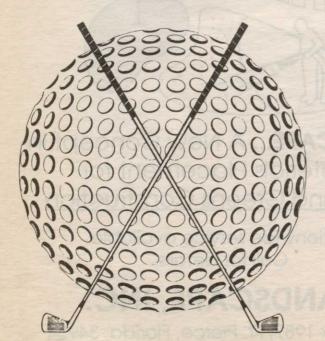
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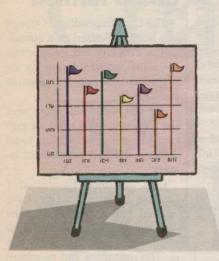
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#### Briefs



#### JAPANESE SAY NO TO DYE

DENVER — Dunlop Japan Ltd., which owns 33 percent of Dye Designs Inc. of Denver, has suspended negotiations to increase its ownership.

Dunlop's representative cited as pullback

- · Donald Hogoboom, president of Dye subsidiary Dye Designs International, pleaded guilty to fraud charges;
- the Internal Revenue Service is investigating company loans to shareholders;
- · company founder Perry Dye has moved from the company's headquarters; and
- · company earnings don't measure up to Dunlop's expectations.

Dye Designs is developing 11 golf courses around the world. Perry Dye said the company made money last year, but predicted it would post a loss this year because of the effect of the Persian Gulf War on overseas operations.

Dunlop's lawyer said Dye Designs lost more than \$1 million last year on revenues of

#### **ASPA CONFERENCE HITS VEGAS**

Las Vegas, Nev., will host the American Sod Producers Association's Midwinter Conference and Exposition, Feb. 5-7. Bally's Casino & Resort will be conference headquarters and house the educational program and exhibits.

Seminar topics range from media relations to production alternatives, with an emphasis on marketing.

Manufacturers and suppliers of machinery, products and technology will be featured in three days of open displays. The exhibit hall will open Wednesday, Feb. 3, amid a welcoming reception and reopen Thursday, and Friday, Feb. 4-5, for extended luncheon hours.

An ASPA-sponsored, members-only seminar focusing on marketing strategies will offers hands-on techniques for marketing in varying economic conditions. Jim Whitt, a trainer and consultant with expertise in marketing, agriculture and turfgrass sod will conduct the seminar.

#### NCA REVISES CONFERENCE SCHEDULE

WASHINGTON, D. C. - The National Club Association has revised the Club Leadership Conference schedule in order to concentrate on the Pinehurst and Broadmoor

The revised spring conference schedule: March 22-25 — Pinehurst (N.C.) Hotel & Country Club; May 6-9, The Broadmoor in Colorado Springs, Colo.

For registration information, write NCA headquarters, 3050 K St., N.W., Suite 330, Washington, D. C. 2007, or phone 202-625-

## Mauck to paint positive club image

New NCA presidentseeks to overcome charges of discrimination, pollution

By Peter Blais

Spreading the word that private clubs benefit society will be his most important task for the next year, according to Victor Mauck Jr., recently elected president of the National Club Association.

"Private clubs serve their communities well," Mauck said. "They do a lot of good things. There are some areas of club operations that should be reviewed. But private clubs are not bad things.'

Private clubs have come in for a lot of abuse over the past few years. Charges of discrimination have hounded the industry since last summer's debacle at Shoal Creek. Private golf clubs have been targeted by environmental groups claiming golf courses pollute the environment with pesticides.

Lost amid those headlines, Mauck noted, are the private clubs that open their facilities free of charge for charitable tournaments; the amount of money clubs pump into their local communities; and the many jobs the private club industry provides.

Mauck knows whereof he speaks. He is president of the St. David's Golf Club in Wayne, Pa. and past president of the Golf Association of Philadelphia, which he has served as director the past 18 years. He has



New NCA President Victor Mauck Ir.

Private clubs serve their communities well. - Victor Mauck Jr.

been a NCA board member since 1983 and succeeds George Squibb as president of the 1,000-member association.

"The increasing number of right to privacy cases involving private clubs in the state and federal courts has been the biggest change," during his tenure on the NCA board, Mauck said. "That continues to be the key issue. Some of the rulings have presented real challenges that the industry's had to deal

"The continuing environmental problems with wetlands and underground storage tanks will also be major issues. It will be confusing until the federal government draws up guidelines that everyone can work with. Unfortunately, we still have 50 states interpreting environmental laws in 50 different ways."

Mauck received a bachelor's degree from Princeton University and attended the Wharton School of Business at the University of Pennsylvania. He was an administrator with John Wood Co., a metal fabrication firm, for 20 years before opening a radio station and box manufacturing company of his own.

He is currently president of the Montgomery Health Foundation, a fund-raising agency for Morristown, Pa.'s Montgomery Hospital.

Mauck said he will be "very active" in setting the NCA's agenda and coordinating the association's efforts with other groups, like the Golf Course Superintendents Association of America and United States Golf Association.

"Victor is very active in the golf industry, not to mention being a 6-handicapper," said NCA Executive Vice President Gerald Hurley. "He knows and understands golf clubs."

## Managers can run clubs ethically and profitably

By Peter Blais

Private club managers can run their businesses ethically and profitably, according to a professor of ethics.

The words 'Shoal Creek' should remind managers that private clubs have not escaped the debate over ethics that has swept the country in the past 10 years.

Not that ethical dilemmas are new to club managers, according to Mark Pastin, professor and director at the Arizona State University Center for Ethics and consultant to major corporations, presidential candidates, political bodies and clubs throughout the

Club managers have long dealt with ethically difficult situations such as doing business with members; hiring members' relatives; becoming personal friends with members; and avoiding favoritism.

It is just that with the rapid change of society, ethics has become a hot topic in every arena - medicine, law, accounting, business, defense, media, and government. Golf clubs are no different, Pastin said.

There are some people in clubs who are racist and sexist and all those things. But that's not what the ethical crisis is about. The crisis is that people are being caught within the dynamics of change and not knowing how to survive," Pastin said.

The two biggest ethical problems facing managers on a daily basis are being close to members while remaining impartial and expecting a high performance level from employees who are poorly paid.

"You're asking too much to get more than the base-line effort for base-line pay," Pastin



Mark Pastin around him.

Aperson's ethics are the ground rules by which he or she acts, Pastin said. Ethics can be learned, understood and influenced. A club manager's job is to influence the ethical decisions made by those

"Amanager's goal should be to be a source of influence in ethics," Pastin said.

How does a manager do that and run a successful business? By following several rules which Pastin has given the acronym ACT TRAC. The letters stand for Assumption, Challenge, Turnabout, Truth, Risk and

Continued on page 35

## Golf summit marks critical juncture for fledgling group

Continued from page 1

sand dollars annually to operate effectively. The state golf industry, which funds the association's operations, has come up with just half that amount, he said.

"Theeconomy is a problem in raising money," Mathis conceded. "But there is also a certain amount of apathy, especially among course owners. The feeliing is 'Tm making money so I don't have to worry anymore.' But those are the people, those who aren't planning ahead, who are going to be hit the hardest by the increased cost of water, requirements to change to effluent and tax increases.

"A lot of courses don't know, for instance, that they have to renew their water management policies every few years. Many are going to have to change to effluent. But many clubs are run by greens committees that simply don't realize what's coming. That's why we've geared many of the Golf Summit

seminars to shock them into the reality of what's happening out there."

The first wake-up call will be delivered during Thursday's opening joint session with representatives of the state's five water management districts, who are also in town for their 16th Annual Conference on Water Management

An opening panel discussion titled "Exploring Direction in State Water Policy" will include State Rep. Sandy Safley and House Dean W.C. Fred Jones, co-sponsors of a bill that would add a 10-cent tax on every 1,000 gallons of ground water used on golf courses. Joining them will be Carol Browner, secretary of the state Department of Environmental Regulations and Peter Hubbell, executive director of the Southwest Florida Water Management

The response panel includes representa-

tives from major water users including Raymon Finch, chairman of the Florida Golf Council; Carl Loop of the Florida Farm Bureau Federation; and Paul Parks of an association called For Everglades.

"It should be a real interesting session," deadpanned Mathis.

A second opening morning panel entitled "How Do Golf and Water Mix" returns Browner and Safley along with Jacksonville University Golf Course Superintendent Ralph Simmons and Florida Golf Course Superintendents Association President Thomas

Other speakers and panelists during the two-day conference include Tom Fazio; Ed Seay of Arnold Palmer Design; Miller Rippey of Links Management; Mike Hughes of the National Golf Course Owners Association; and Rick Norton of the National Golf Foun-

GOLF COURSE NEWS

## Seminar focuses on running profitable operation

ORLANDO, Fla. - The National Golf Course Owners Association's seminar, "Building a Successful & Profitable Golf Operation," will give public golf course owners a comprehensive look at golf operations from the inside out, Oct. 7-8.

Officials from Chase Golf Management Group, Hillier, Wanless & Cherry, Pannell Kerr Forster, and Textron will provide information on critical issues and the latest strategies and techniques in golf management. Seminar site is Hyatt Orlando Hotel and Kissimmee Bay Country Club.

The two-day program is designed to help golf course owners, builders and managers operate their clubs profitably. It will combine the expertise of leading golf authorities with an in-depth tour of a golf facil-

The format consists of a full day of presentations, including a profile of three NGCOA members who will discuss golf course operations and construction from an owner's perspective. A golf workshop and tour will be held on the second day for attendees to

get a hands-on look at a golf facility. Attendees will wind down with a golf outing at one of Florida's premier golf communities, Kissimmee Bay Country

Topics will include management/ operational systems including the design of departmental budgets, cash management, and operations control; increasing membership development through properly structuring membership programs and advertising strategies; financing and investment options - how to borrow money and mortgage or

sell your property; avoiding legal liability in the areas of liquor liability, workers' compensation, employee sexual discrimination, and insurance liability; and understanding environmental issues focused on environmental protection, water conservation, and underground storage tank removal.

James Applegate, president of Gary Player Design Group, will discuss the intricacies of golf course renovation and redesign.

More information is available from the NGCOA office at 800-933-

#### Tax watchdog group formed

The Club Expenditure Council has been organized as a subsidiary of Property Tax Representatives, Inc., an ad valorem tax appraisal and consulting concern in Kansas City.

The CEC was developed to meet the club industry's need for current, accurate data relating to ad valorem tax and assessment is-

CEC National Coordinator Charles Sloan said: "We have worked with a number of clubs over the years and learned firsthand what a unique industry this is. The managers and members whose job it is to deal with their club's assessment and resulting property tax need a backup they can count on in managing this significant expense.

"Whether they feel their club is over-valued or under-valued, it's critical that they stay informed. The CEC will function as their inhouse specialist to help keep their club's real estate and personal property tax expense at its lowest possible level."

The CEC monitors the ad valorem tax scene nationwide and accumulates sales operating data specific to the club industry.

For more information contact Club Expenditure Council, 2 West 39th St., Suite 220, Kansas City, Mo. 64111 or call 800-950-CLUB.

#### NGF hosts W. Va. manager institute

WHEELING, W. Va. - The National Golf Foundation and the Oglebay Department of Continuing Education will host the ninth annual National Institute of Golf Management Jan. 12-17 at Oglebay Park Resort and Conference Center here.

Clubhouse and golf shop merchandising; course maintenance and security; food, beverage and range operations; personnel, customer and press relations; publicity and promotions; golf car economics; rules management and tournament play will be covered during the intense five-day program.

Students must attend two years to complete the program.

The faculty includes authorities from the USGA, PGA of America, Golf Course Superintendents Association of America, American Society of Golf Course Architects and the NGF, as well as course owners and operators, developers and manufacturers.

For further information or registration materials, contact the National Institute of Golf Management, Wheeling Park Commission, Oglebay, Wheeling, W. Va. 26003; the Department of Continuing Education at Oglebay at 800-624-6988, ext. 278, or the National Golf Foundation at 1150 S. U. S. Highway One, Jupiter, Fla. 33477. 800-733-6006.



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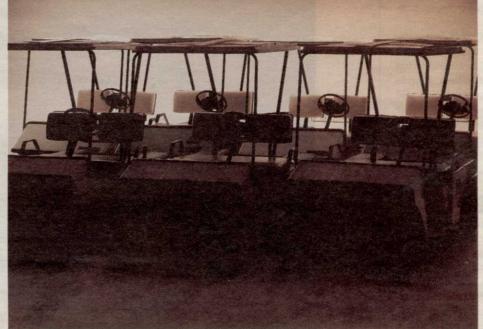
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all over the country telling you what they already know. If you're not running a Yamaha fleet, you're losing out.

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\*Tests conducted by Otto Labs, 1991. Test results available.

### Golf trends analyzed in new NGF publications

The National Golf Foundation has introduced the first three in a series of specialized research publications called Market Reports.

Trends in the Golf Industry, Golf Travel, and Stand-Alone Golf Ranges in the U.S. offer insights into a specific aspect or segment of the U.S. golf industry. Collectively, the reports provide a comprehensive overview of current trends in both golf supply and golf demand. They range from 14 to 20 pages in length.

"Not only will these smaller, single-subject reports be more useful and affordable to many in the golf industry. They allow us to take a more focused approach in unveiling the wealth of data collected over the past year, said Michael Russell, NGF's senior research director.

Trends in the Golf Industry describes national trends in golfs growth from 1986 to 1990 in terms of the number of golfers, rounds played, and golf courses supply and development.

Golf Travel combines material from several NGF surveys regard-

# Club Corp. opens consulting arm

DALLAS — Club Corporation of America, which claims to be the world's largest owner and operator of private city and country clubs, has formed ClubCorp Consulting Group.

The division offers consulting services for club and resort development, marketing and operations.

Services cover all areas of development and operations, including market analysis and feasibility studies, design/construction/operations start-up and operations management.

James L. Faubion, president of ClubCorp Consulting, said: "CCA sawaneed to provide flexible access to its asset management expertise. Now club or resort owners and management can benefit from CCA's extensive resources targeted specifically at their project's needs."

CCA operates more than 200 private city, country and athletic clubs.

# Marriott signs on Chardonnay Club

WASHINGTON, D. C. — Chardonnay Club, a 36-hole championship golf facility in the Napa Valley wine country of California, will be managed by Marriott Golf under a recently signed contract with Cooke & Andrews Investments Inc., the U.S. development unit of Japan's Systems and Engineering Corp.

Other facilities in the agreement are under development in Virginia and Georgia.

Roger Billings has been named director of operations at Chardonnay Club.

Marriott Golfearlier this year signed a long-term agreement with Golden Bear International to manage 15 public golf facilities to be developed over the next several years.

ing the golf travel habits of American golfers. Traveling golfers are profiled by age group, income and gender. Also discussed is how often they travel, leading travel destinations, and the estimated size of the golf travel market.

Stand-Alone Golf Ranges in the U.S. offers a unique look at the status of range operation and management. It profiles recently surveyed off-course ranges and includes information on tee stations, lighting, practice areas, seasonality, pricing and more.

Three other Market Reports are

soon to be added to the series and include:

America's' Attitudes Toward Golf in Their Communities — an examination of how Americans feel about the impact of golf courses on their communities; Women in Golf — a complete demographic profile of today's 6.5 million female golfers; and The Consumer's Cost of Golf — an analysis of golf expenditures and purchases such as green fees, membership fees and golf apparel.

Toorder, call NGF's Membership Services Department at 800-733-6006

### Lana'i names golf director

LANA'I CITY, Hawaii — Charles Ortega has been named director of golf for Lana'i Resorts. He will oversee operations and marketing functions for The Experience at Kiokele and The Challenge of Manele (to open in 1993), two championship golf courses on Hawaii's private island of Lana'i.

Before promotion to general manager and director of golf at Kiahuna Golf Club in Kauai, Ortega was the head golf professional and director of marketing there.



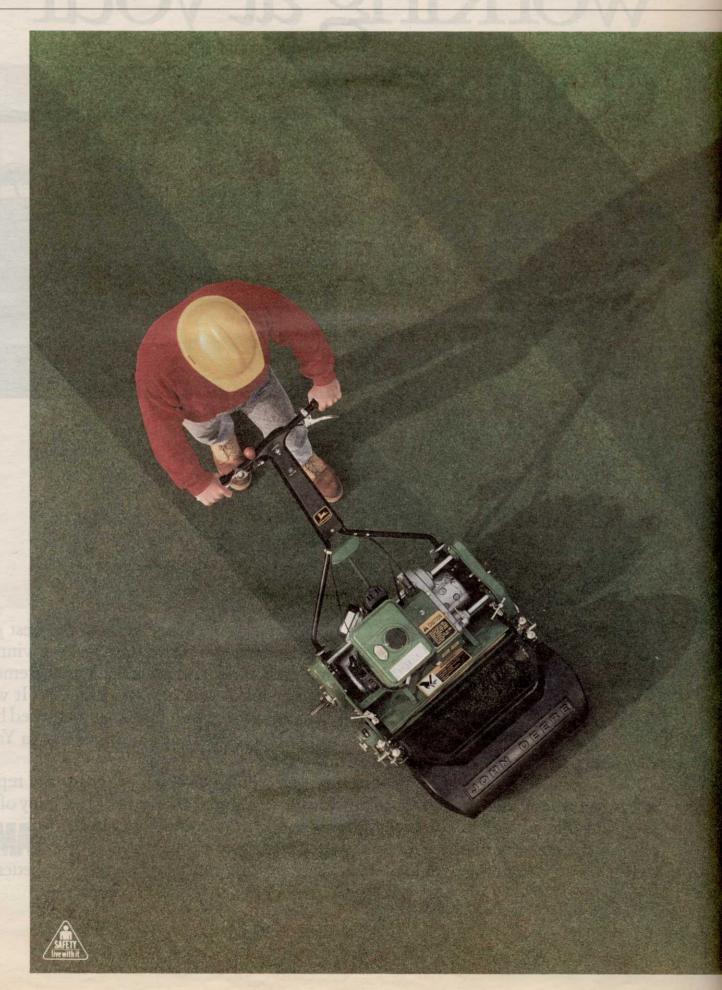
Charles Ortega

the new head golf professional at The Experience. He had been assistant professional at Skylinks Golf

Orlowski is

Course, Long Beach, Calif.

Voted "Best New Golf Course" by Fortune Magazine, The Experience was designed by Greg Norman and built by course architect Ted Robinson.



# Running clubs with an ethical eye on the bottom line

Continued from page 31

Candor.

Assumption: In ethics, the manager must get below the surface to discover the real issue. In the business arena, for instance, a club manager who assumes his competition is simply other clubs will soon findhimselfunemployed. Any other form of recreational and social activities are really competitors. The manager must realize that to sur-

The same is true when a community attacks a club's membership

policies. While the assumption is that the community is crying for ethnic balance, the real issue may be jealousy of the privileges private club members enjoy.

The assumption is what you have to get to in order to do some new thinking," Pastin said.

Challenge: The only constant in any business is change. Successful managers challenge assumptions about what people want, anticipate changes in their desires by getting ahead of market research and then act accordingly.

Turnabout: Turnabout involves fairness. That is, discovering a middle ground between what is fair in the manager's mind and what is fair in the employee's, customer's ormember's mind. Amanager can't do that if he is only concerned about what he thinks.

How can these first three ethical tools help a manager better run a business? A good example is the success of the Nordstrom's department store chain, the most highly regarded retailer in the country in consumer polls, Pastin

Assuming customers would take advantage of them, retailers have traditionally made it difficult for customers to return merchandise. Nordstrom's challenged that assumption, making it convenient for customers to return items without sales receipts or issuing credit slips instead of cash. The turnabout was that the trust Nordstrom's placed in its customers and the convenience the store offered really mattered to shoppers. That explains why Nordstrom's can charge more for

the same products than its competitors, but is still one of the most successful retailers in the country, Pastin said.

"That is perceived as an ethical way of doing business and people are willing to pay a lot for it," Pastin explained.

Truth: The president of Scandinavian Air Lines said that customers base their decisions on whether to continue buying from a company on brief, face-to-face moments of truth with company employees. A customer who shows up at the ticket window saying he was quoted a \$79 air fare over the phone, that the computer says costs \$129, will probably remain a customer for life if the ticket seller believes him and sells him the ticket for the lower

"In ethics, the moments of truth are the times when something goes wrong and there is a question of integrity. The person is looking in a staff member's eyes and wondering 'Is he going to go with me or is he going to go with himself?' That's the moment of truth. We all judge ethics not by what's written in the policy manual, but in the moments of truth," Pastin said.

Managers need to give staff members the responsibility to handle such situations without having to worry about their jobs.

Risk: The only way to adapt to a changing world is to take risks. Taking risks creates knowledge, growth, satisfaction and motivation. Even risks that don't work are worth

Candor: Managers need to encourage board members, club members and employees to tell them when something is wrong. Most ethical problems can be solved if addressed soon enough.

"How often have managers been blind-sided by a problem from an employee or a staff member that they could have solved if told about early enough," Pastin asked. "Every time that happens, it's a failure of someone to inform the manager early enough that a problem was out there.

People will tell managers what they need to know if they are encouraged to do so, rather than being punished, Pastin said.

### Pesticide damage insurance offered

MANCHESTER, Conn. - The Travelers PGA Edge customized insurance coverage for private, semi-private and public golf courses and country clubs has added protection against environmental damage caused by pesticide application.

In addition to environmental enhancement, the Travelers PGA Edge insurance program includes coverage for building ordinances, computers, bridges, sprinkler systems, signs and other property, including greens and golf car damage.

# You'll love its classic lines

### WALK-BEHIND GREENS MOWERS

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John Deere 22 and 22R Greens Mowers help send that message. Not only for major tournament sites like the 1991 U.S. Open and 1992 PGA Championship but for hundreds of other great golf courses-like yours-every day.

A split drive system is the key. Both the 22

The 22 and 22R both feature a split drive

available with a front gear drive assembly

to power a front brush or verticutte

system for superior tracking. The 22 is also

and 22R power their traction rolls separately. That means more consistent tracking,

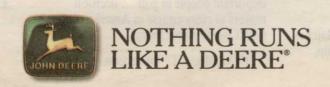
Up front, you get a precision cut with a nine-bladed reel of high-tensile strength steel.

straighter cut lines.

A standard 3 mm

bedknife combines with the reel to deliver cuts to 1/8-inch. Optional 2.5 mm bedknife delivers tournament-quality cuts to 7/64-inch.

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



THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

A UNITED PUBLICATION VOLUME 3, NUMBER 8 AUGUST 1991

### INSIDE

Nuisance water may be godsend

**User-friendly** 

'Toxo-terrorists'

fancy and unveiling fact are musts superintendents

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Japanese stay active in U.S. markethate.  Las Vegas thrives in face of recession
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Management companies do it all
Management companies do it as
SUPPLIER BUSINESS

# High Court ruling said 'scary'

By Peter Blais
The recent Supreme Court ruling freeing local governments to impose pesticide regulations that conflict with federal law could severely restrict the use of golf course chemicals, according to a Golf Course Superintendents Association of America official.

"It scares the hell out of me, It's

another step toward more regulations," said Charles Passios, government liaison to the GCSAA board of directors.
"It means superintendents are going to have be more pro-active than ever, participating in the process and taking a lead role to make sure our concerns are heard when towns want to pass regulations."



# Major changes expected in revisions of wetlands laws

open for handicapped

# End of drought won't solve Calif. woes

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" most informative golf course development publication?" "It covers subjects that are current, important and impact the industry," he contends.

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### Briefs



### NK MEDALIST ADDS TO SALES STAFF

GOLDEN VALLEY, Minn. - NK Medalist Turf Division of NK Lawn & Garden Co.

has added three turf sales specialists to its staff

Michael W. Tentis will handle sales and service in the Western region, which includes California, Nevada, Arizona, New Mexico and Utah. Tentis for-



Michael Tentis

merly was a technical representative at O.M. Scott & Sons

Luis B. Mendoza will cover southern Wisconsin, Illinois, Indiana, northern Kentucky and eastern Missouri. Mendoza had been with Cory Orchard & Turf of Indianapolis,

Lee Record will handle turf sales and service in the Southeast region. He has been associated with the U.S. Golf Association Greens Section and Chemlawn Corp.

NK Medalist markets improved turfgrass varieties and regionally-adapted mixtures and

### RISE MEMBERSHIP CLIMBING

WASHINGTON- The number of RISE members continues to climb, officials say.

Current membership in Responsible Industry for a Sound Environment includes such industry groups as basic manufacturers American Cyanamid, BASF, Ciba-Geigy, DowElanco, DuPont, FMC, Hoechst-Roussel, ICI, ISK Biotech, Mobay, Monsanto, Nor-Am, Rhone-Poulenc, Rohm & Haas, Sandoz and Zoecon.

Formulator members include The Andersons, Howard Johnson's, Knox Fertilizer, Koos, Lebanon Chemical, Lesco, Olympic Chemical, Parker Fertilizer/Purcell Industries, PBI/Gordon, Riverdale Chemical, Sanex, Scotts and Tyler Enterprises.

Distributors include Beckman Turf & Irrigation Supply, Estes, Rick Apgar Sales, Stephenson Chemical, Terra International, Turf Grass, Turf & Nursery Supply, UAP Special Products and Wilbur-Ellis

### **AGRIDYNE TAPS BEACH**

SALTLAKE CITY, Utah — Michael Beach has been named area sales manager for AgriDyne Technologies Inc., formerly NPI (Native Plants Incorporated).

Beach is experienced in sales and marketing of biological crop protection products, including biological insecticides, herbicides and plant growth regulators. He has worked in major agricultural chemical markets across the country and in Mexico and Chile.

Beach will lead the sales of Gibrel, a naturally occurring plant growth regulator used on grapes, citrus and other high value crops, as well as Azatin, an experimental, naturally derived insect growth regulator under review by the Environmental Protection Agency.

Beach will be based at AgriDyne's western regional office, Fresno, Calif.

# Europe proving a bonanza for some

France and Germany still hot spots but boom may be over

By Bob Spiwak

American companies involved with golf see a bright future in the European community. With varying amounts of experience and market penetration overseas, executives of golf-oriented companies, or subsidiaries, reached consensus on two points: France and Germany are the hottest markets for golf right now, and the "boom" in European golf may be over.

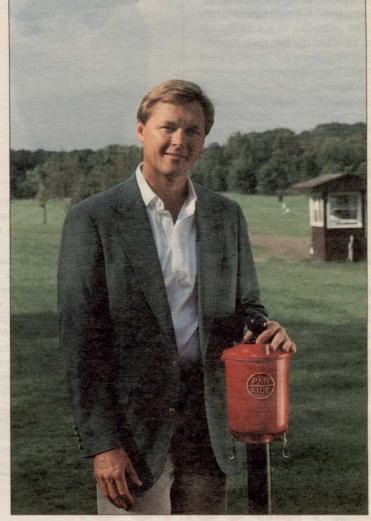
On the latter point, Charlie Barebo, vice president of sales at Otterbine-Barebo, doesn't agree. As a manufacturer of water aeration products, he sees the market still expanding. Having been in the Euromarket but four years, Barebo said his company "has planted the seeds" to what he sees as an eventual crop.

His optimism makes sense. Curt Kimfbeck, director of international sales at Jacobsen, cited growing signs of a world recession. Among causes of a golf slowdown is the "green" or ecological movement. Since Otterbine aerators reclaim water, that segment of the market seems to be in concert with ecologists' worries over excess water consumption and pollutant transportation.

Kimpfbeck said his company's primary strength is in golf course maintenance. Jacobsen, he said, introduced the first diesel powered triplex greens mower several years ago. While it is still resisted in the United States, he noted that it was a hit overseas because of the lower price of diesel versus gasoline and more stringent regulations placed on gasoline storage in Europe than in America.

Knute Jacobsen, founder of the company, contacted "someone in Switzerland" in the 1920s, and the company has had a firm foothold since, with about 30 percent of sales in Europe and Great Britain.

"The market (in Europe) is so huge that,



Par Aide President Steve Garske has made great strides into the European golf

if you manufacture a good product, the potential is always there," Kimpfbeck said.

It depends on the product. While optimistic, American turf seed distributors are frustrated by regulations on their products that they feel constitute trade barriers.

Mike Robinson of Seed Research of Oregon in Corvallis, Ore., said the licensing procedures for U.S. seeds "to a certain degree is a trade barrier. The Dutch have dominated the market for years.

Said Bill Rose, president of Oregon's Tee-2-Green, marketers of the Penn variety bentgrasses, "We've been working really hard the last four years to crack that mar-

Continued on page 38

# Infrared photos help find problems

DENVER, Colo. - The Innova Corp., formerly New Golf Concepts, Inc., has added infrared photography to its list of products for the golf and environmental

John Seid, an expert in the remote sensing technology who brought the use of infrared photography from agriculture to the golf course industry, has been named manager of infrared services.

This photography, applied to golf courses and other agricultural tracts, records changes in the photosynthesis of plants, an early indicator of stress or disease in plants and turf. It also detects breaks in irrigation systems, soil changes and drainage prob-

Full color enlargements, together with aerial slides and complete analysis, give superintendents concrete proof of problems that may not be visible to the naked

Innova, national distributor of Isolite soil amendments, plans to use infrared photography to graphically illustrate the effects of Isolite in the soil. Isolite, a porous ceramic soil conditioner, is said to reduce water consumption up to 50 percent, reduce compaction in soils, and improve absorption of



Innova infrared photograph shows trouble spots. nutrients

Through the use of infrared photography, it will be possible for courses to use Isolite more efficiently, officials say.

For more information on infrared services Seid may be contacted at (800) 533-

Innova headquarters can be reached by writing 8670 Wolff Court, Suite 220, Westminster, Colo. 80030 or calling 303-426-4383.

### Rain Bird unveils **Maxi** certification

GLENDORA, Calif. - Rain Bird Golf Sales, Inc., manufacturer of irrigation systems for golf courses, has unveiled the first multi-level certification program for the MAXI Computer Water Management Sys-

Designed to help golf course superintendents become more proficient in the daily use of their irrigation control systems, the four-level instructional course covers all aspects of MAXI operation, from computer basics to advanced schedule writing, detailed database implementation and diagnostic troubleshooting.

The first three certification levels consist of comprehensive seminars which cover various aspects of MAXI operation. The fourth level is an instructor level for irrigation consultants and others desiring to teach MAXI's many water management features to end users.

Level 1 participants must understand the basics of golf irrigation design, computer operation and fundamentals of DOS. Course exercises cover computer operating and MAXI basics, including schedule and database structures, writing schedules, hardware hookup and software loading.

Level 2 spans weather station interface,

Continued on page 38

# Many firms cashing in on lucrative European market

ket." Rose called the Euromarket "extremely restrictive," but sees a good future if his product continues to get on the approved list. To make the list, each country being wooed requires a fee ranging from \$500 to \$3,000. Every few years the license is subject to renewal.

Robinson noted that while Holland may dominate the market, there are countries, such as the Scandinavian, that do not wish to be dominated by another nation. They may ease the marketing process.

Seed Research has been involved in the Euromarket for eight years. "While the boom has peaked," Robinson said, "the popularity of golf in Europe is just taking off, resort and resident courses alike." His company has test plots of its SR 10/20 and SR 10/19 bentgrasses in a half-dozen

Rose mentioned that European interests have bought American seed companies Northrup-King and Ferry Morse. His concern is that government subsidies in the overseas market will place American seedsmen in a non-competitive situation. He feels that, long term, the former communist countries may be one of the best

Steve Garske, president of Par Aide which does business in nine European countries, said: "The European market will



continue to grow. We're going to see a settling down and tapering off. The boom growth has settled, and may have already peaked.

Garske feels Sweden and Germany hold the greatest potential for Par Aide.

The maker of cups, flagsticks and washers, among other products, has worked through dealers since entering the Euromarket in the 1960s. Garske feels his products get a boost through recognition by Europeans playing golf in this country.

We're pleased with what we've seen. We've done quite well against local manufacturers," Garske said.

Tim Young is director of sales and marketing for Rainbird International. Rainbird has been in Europe for two decades. He

While the boom has peaked, the popularity of golf in Europe is just taking off, resort and resident courses alike.' - Mike Robinson Seed Research of Oregon

said, "France is the hottest in a cooling market.

Young's focus appears to be on Berlin, an area he sees with the potential of burgeoning golf. Now that East and West are one, the region, and what once was "no man's land," offer land and populace to expand golf. Germany, he said, has the best chance to jump-start itself forward.

Rainbird's regional managers and staffs are natives to the countries in which they work - a Spaniard in Spain, a German in Germany and so on. Young feels this produces not only market savvy personnel, but people who are broad-based and culturally and linguistically sensitive to their

O M. Scott of Marysville, Ohio, markets about 20 pro-turf fertilizers and a commercial spreader line in Europe. International business manager Korbin Riley found France and Germany the greatest potential golf markets.

Pursuing business in the 13 West European countries, he said company involvement in the former Eastern Bloc countries is "not something we are rushing."

Riley's sense of the European market is that it is still growing rapidly but, put in perspective, should not be overstated. There were many years, he said, when nothing happened.

He acknowledges a steady growth in business for his company. He also is "very

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optimistic" about the coming former East German market. "We are going to continue to place a focus there, looking for good things in the future.'

Owen Towne of Ciba-Geigy said the Europeans, particularly the French, do not pursue high maintenance turf chemicals. His company, reputedly the world's largest in agricultural chemicals, has had some frustration in this regard.

He cited France as a country heavily into ornamental plantings, without a lot of emphasis on turf. He stated: "Europe is going through a growth phase as we did years ago. We're trying to convince them to get into the turf market, so far without much

Definite optimism for the future of the European golf market was tempered somewhat by the two seed companies. They see the subsidizing of Dutch growers and restrictive "approved lists" as a hindrance to doing business

And while France and Germany may be the current darlings in the expanding golf arena, the Mediterranean countries, including Turkey, are not being overlooked by American business.

And, the once-isolated "communist" nations in Eastern Europe, perhaps after drifting into a capitalist economy, present another market opportunity.

A trade show in Warsaw or Belgrade? In golfdom, anything is possible.

### **Biosys, Archer Daniels** reach mfg. agreement

PALO ALTO, Calif. - Biosys, a manufac turer of environmentally safe biological pes ticide products, has reached manufacturing agreement with Archer Daniels Midland Co.'s (ADM's) biochem products division.

The companies will mass-produce nematodes, insect-killing biological pesticides, at ADM's newly constructed biochemical facility in Decatur, Ill.

ADM will provide facilities and operation personnel, Biosys on-site technical staffing and expertise in nematode production tech-

Nematodes, microscopic organisms that kill a host of insect pests, are the active component in Biosys' family of biological insecticide products. Harmless to humans, plants and animals, they leave no harmful residue in soil or groundwater, and as such are exempt from EPA registration require-

ADM is an \$8-billion producer of food and feed ingredients.

### MAXI

### Continued from page 37

ET concept, database computing and entering, and advanced schedule writing and sensor functions. Level 3 covers flow management table structure. Detailed implementation of databases, such as acquisition and creation of flow zone and branch zone data, is included.

The Instructor Level program is based upon attaining a Level 3 certification and the submission of applicant's teaching materials, training aids and other documentation of MAXI certification teaching skills.

For more information, contact Cozz Regele at Rain Bird Golf Sales, Inc., 145 North Grand Ave., Glendora, Calif. 91740 or call 818-852-7353.

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### Greenscape adds pump and valve

COPPELL, Tex. — Greenscape PumpServices, Inc., has introduced the Float-N-Foot Valve and Float-N-

The valve is designed to solve the problem lift centrifugal pump stations frequently encounter. Silt and debris cause clogged intakes, pump destruction, irrigation equipment failure and turf damage.

The valve assembly positions the foot valve two to three feet under the surface of the water, rather than on the bottom of the water source where silt and debris collect.

The hose is attached to the existing suction piping via a built-in flange, which allows the foot valve to hang directly under the special fiberglass-encased float. The low profile black float adjusts with the water level and keeps the foot valve in the cleanest strata of water while maintaining suction prime.

The pump provides an unobtrusive, cost-effective method for water transfer, fountains, waterfalls and irrigation applications. It can be designed with either a submersible turbine or submersible trash-style pump, and comes with a U. L. listed control panel.

The combination of a specially designed SBR hose connected to a fiberglass-encased float structure allows the pump intake to take in water two to four feet below the surface of the water and adjust as the water level varies.

Call Greenscape Pump Surfaces, Inc. at 214-393-0346.

CIRCLE #303

# Shrub adapter offers variety

SANTEE, Calif. - The 6200 series Olson shrub adapter can be used to convert from standard sprinklers to micro-spray.

With 1/2-inch female pipe threads on the inlet, the adapter is available in two outlet sizes. The 6201 accepts all 10-32 thread nozzles, including the Olson O Jet and Mini-Sprinkler. The 6202 accepts 1/4-28 thread nozzles such as the Olson Hydro-jet.

The shrub adapter has varied applications on above-ground risers in ground covers, shrub areas, planters and flower beds.

Contact Olson Irrigation at 619-562-3100.

CIRCLE #304

### High capacity nozzle available

SAN MARCOS, Calif.—Hunter's gear-driven Model I-40 features a new high-capacity nozzle.

The #45 nozzle extends the radius out to 74 feet, and increases the discharge rate to 27.5 gallons per

The durable pop-up sprinkler has asafety-cushioned rubber cover and heavy-duty stainless steel riser.

Contact Hunter Industries at 619-591-7034

CIRCLE #305

## Buckner releases new Universal radio irrigation controller

FRESNO, Calif. - COPS Universal and the Model 20321 are new products from the water management specialists Buckner

COPS Universal (computer oriented programming system-universal radio irrigation control) permits operating and monitoring field controllers from a central computer using a radio interface. It is suited for retro-fitting existing parks, median strips, school grounds and golf

The radio interface uses standard 110-volt, AC power. It also can be powered by a DC source, such as a cigarette lighter, and used with a lap-top computer to operate field

The Model 20321, 1-inch, contamination-resistant, 2-way, electric, plastic valve is especially suited to systems that have fine particles that may clog valves with filters or screens

The valve has internal manual bleed, flow control and an innovative diaphragm design to minimize maintenance.

For more information on COPS Universal or any other Buckner



COPS Universal and Model 20321

product contact Buckner at 4381 Brawley Ave., Fresno, Calif. 93722 or telephone 209-275-0500. CIRCLE #301



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### New controller designed for reclaimed water

CULVER CITY, Calif. — The WaterSaver ReClaimer, manufactured by EMC/Hirsch, Inc., is an irrigation controller designed specifically for effluent water usage.

The ReClaimer has a purple colored faceplate and clear warning labels which indicate effluent water usage.

Wind, soil, rain and flow sensors are features.

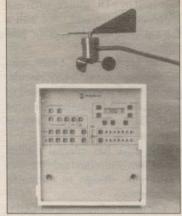
The wind sensor prevents unwanted and wasted wind-blown spray. Soil sensors measure the level of moisture in the soil, allowing ReClaimer to determine if irrigation is needed.

The rain sensor measures rainfall so that scheduling can be adjusted and water runoff avoided. The flow sensor provides automatic flow shutdown in case of line breaks or leaking sprinkler heads.

The ReClaimer retains all irrigation program memory, even during power failures, and contains built-in short circuit and surge protection.

EMC/Hirsch, Inc. is located at 11811 Major St., Culver City, Calif.

CIRCLE #302



WaterSaver ReClaimer

### Borer produces trenchless service

PELLA, Iowa—The Navigator, a new sophisticated, directional, wetboring system designed to produce clean, "trenchless" underground service installations and eliminate site damage and restoration costs, is available from Vermeer Manufacturing Co.

The Navigator can bore straight ahead or in any direction to within inches of its underground target destination. The drill head can be "directed" along winding streets or walkways, around buildings, under streams and rivers, laterally or vertically.

A locator digitally "reads" the location of the drilling action (down to 16 feet) by means of a long-life (150-hour), battery-powered directional probe which transmits from the drill head to the locator. An optional remote locator allows the operator to see and hear everything the locator sees and hears.

To lubricate and create the proper environment for control and speed at the point of attack, fluids are fed through the network of connecting rods to the drill head.

A strike-alert system signals, by sound alarm, "hot" conditions, and an easy-to-reach priority flow control knob regulates rotation and thrust speed.

Contact Jarrett Cowden, Vermeer Manufacturing Co., P.O. Box 200, Pella, Iowa 50219 or call 515-628-3141

CIRCLE #306

# Otterbine offers new gerators

EMMAUS, Pa. — Otterbine Barebo Inc., has introduced three self-contained aeration systems.

Triton, a subsurface aerator, helps keep waterways clear of foul odors, aquatic weeds and algae, while staying virtually unnoticed. It's designed to work in architectural and conservative settings where no enhanced water features are desired

The Triton features a long-lasting electric motor specifically designed for aeration.

The Sunburst floating surface spray area offers such new features as interchangeable spray patterns, increased pumping rates, computeraided design, stainless steel and high-tech engineering and thermoplastics construction.

The High Volume floating aerator also has interchangeable spray patterns and increased pumping rates, and like the Sunburst features a heavy-duty, low-speed Franklin motor with a solid stainless steel housing.

Contact Otterbine Barebo Inc., R. D. 2, P.O. Box 217, Emmaus, Pa. 18049 or call 215-965-6018.

CIRCLE #307

# Valve box allows for shallow burial

SHEBOYGAN, Wis. — A new 6" flared valve box, designed for shallow burying of remote irrigation control valves, is available from Ametek.

Advantages of the new flared box include rugged, proven Superflexon construction, 68 square inches more working room at 6 1/2" depth, no slots to cut and snug nesting for convenient shipping and storage. Standard valve box lids are accepted.

Contact Ametek, Plymouth Products Division, 502 Indiana Ave., Sheboygan, Wis. 53081 or call 414-457-9435.

CIRCLE #308



# Hunter Industries' publications deal with saving water

Water perhaps is Topic A among golf course superintendents. Two recent publications by Hunter Industries, San Marcos, Calif., treat that valued commodity in detail.

Hunter Industries has released a 48-page equipment catalog dealing with sprinklers designed for golf courses, sports fields, public areas, residential and commercial appli-

Performance charts with water distribution data are supplied for each Hunter sprinkler, along with information on installation and adjustment, replacement charts, bidding specifications and matched precipitation rates.

"The Case For Reclaimed Water" is an informative brochure which discusses the use of reclaimed water in landscape irrigation systems.

The brochure notes: "Few issues are as important and critical as the availability of water in many of the fastest-growing areas of the nation. Instates such as California, Arizona and Florida, use of reclaimed water increases daily.

"Reclaimed water treated to the highest degree, called 'tertiary treatment,' may be used for virtually any purpose except drinking. Reclaimed water frequently is used to irrigate golf courses, parks,

### New book traces irrigation's history

ARLINGTON, Va.— "History of Irrigation," reportedly the first fullyillustrated, historical analysis of irrigation in the United States, is being produced by Windsor Publications, Inc., in cooperation with the Irrigation Association (IA).

IA historian Bob Morgan's volumechronicles the role of irrigation and water use in America's agricultural and landscape development, and reveals interesting facts and photographs from this diverse industry.

Focus not only is on historical events, but on the growth and contribution made by the industry business and organizations.

The "History of Irrigation" is fascinating and popular reading of an age-old practice that touches many lives.

### Jacobsen releases equipment guide

RACINE, Wis. - Jacobsen has released its new equipment directory, containing descriptions and specifications on the full line of Jacobsen professional products.

The 64-page catalog includes information on the company's new utility trucks, and the Aero King line of aerators. In addition, there is information on Turfcat outfront riding mowers, the Greens King IV and LF-100 greens and fairway mowers.

The catalog may be obtained by writing the company at 1721 Packard Ave., Racine, Wis., 53403.

schoolyards, athletic fields, freeway landscaping, residential common areas and greenbelts, and all types

"In parts of Arizona, permits will not be issued to build golf courses unless project plans specify reclaimed water for irrigation. In Irvine, Calif., residents have no choice. The water district delivers either potable or reclaimed water based on use.

"In Cape Coral, Fla., where water is pumped from wells, and salt water has depleted groundwater basins, there now is a dual-piping system which will carry reclaimed water to residences for landscape

"Public acceptance of reclaimed water utilization has come a long

"In 1980, a public opinion poll suggested that few backed widespreaduse of reclaimed water. Now, with increasing concern over water shortages and greater confidence in wastewater treatment processes, 90 percent of those polled recently had no objections to use of this

product.

"Reclaimed water is helping to conserve our most precious natural resource.

Hunter Industries has also released a new illustrated poster depicting historical developments in irrigation.

The four-color poster documents milestones in irrigation history, including water delivery devices and systems for agriculture, landscaping and other public uses.

Primitive, singular efforts and massive engineering feats, such as ancient Roman aqueducts and Persian ganats (underground water tunnels) are illustrated. Many of the ingenious devices and methods still are used.

Illustrated by Texas artist Mark Weakley, the 25" x 38" poster is free to irrigation professionals, educational facilities and students. Call or write Hunter Industries, Communications Department, 1940 Diamond Street, San Marcos, Calif. 92069. (619) 744-5240.



Photo courtesy of Nat Binns, golf course superintendent, Lakewood Country Club, Rockville, Maryland. (unretouched photo)

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Best for wind protection . . . because it's a non-woven polyester blanket and not a film or sheet, TerraShield does a superior job protecting against dessication kill by keeping cold, dry, winter winds away from grass crowns.

Best for extra strength . . . because it's 100% polyester continuous filament needlepunched fabric, TerraShield resists ballooning and fights ripping and tearing that can destroy thin films, sheets, or lighterweight fabrics. (And, there is no need for crosswires to keep TerraShield in place in very high winds.)

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### **Book features Hawaii's best**

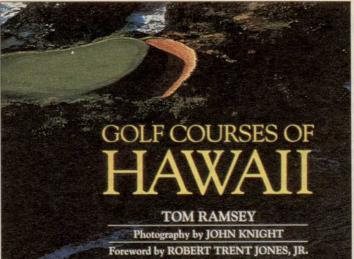
Courses of Hawaii," by Tom Ramsey explores virtually every great course on Hawaii's six major islands. Forty layouts are featured, with course maps, descriptions and full-color photography by John Knight.

The book, 208 pages with 300 fullcolor photographs, highlights the wonders and challenges of the fabulous 17th hole at Mauna Lani, surrounded by lava beds; the Jack Nickaus-designed Kiele course in Maui; Oahu's new Ko Olina with its gently rolling hills, valleys and waterfalls; the Waialea, home of the Haone of golfs best-kept secrets; and Mauna Kea, where golfers must carry 210 yards of windy Pacific space to set up par or birdie on the third hole.

The guide touches on the history, design features and visual splendors of each course, and includes a comprehensive course directory with the addresses of all Hawaii courses, their size and par ratings.

Robert Trent Jones Jr. wrote the foreword. Price is \$39.95.

Contact Collins Publishers, 50 Osgood Place, San Francisco, Calif. 94133 or call 415-788-4111.



Tom Ramsey's new book

### Convenient directory lists Calif. courses

MERCED, Calif. - Kirk's Directory of California Golf, easily stored in a briefcase or golf bag, lists more than 600 of California's finest golf courses

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On the accompanying page is a four-color highway map with locating borders. This provides the traveling golfer with a quick look at the golf courses located around his or her destination.

California is divided into 14 colorcoded sections, referencing back into a central index.

Recommended lodging facilities are listed under certain courses, along with rates.

Kirk M. Mills is the author, Mills and Associates the publisher. Price

Contact Mills & Associates, 221 E. 2nd St., Merced, Calif. 95340 or call 209-722-3306.

# NGF catalog lists 300 publications

JUPITER, Fla. — The National Golf Foundation's fall-winter catalog includes nearly 300 publications on virtually every aspect of the golf

New is a section devoted to golf and the environment. Other featured topics include facility development and operations, golf market research and rules and instruction.

For a free copy, write National Golf Foundation at 1150 South U.S. Hwy. One, Jupiter, Fla. 33477 or call

### Video documents golf's contribution

LAWRENCE, Kan. - "Links with Nature: Golf Courses and the Environment," a 14-minute video produced by the Golf Course Superintendents Association of America, documents the positive ecological impacts of golf courses.

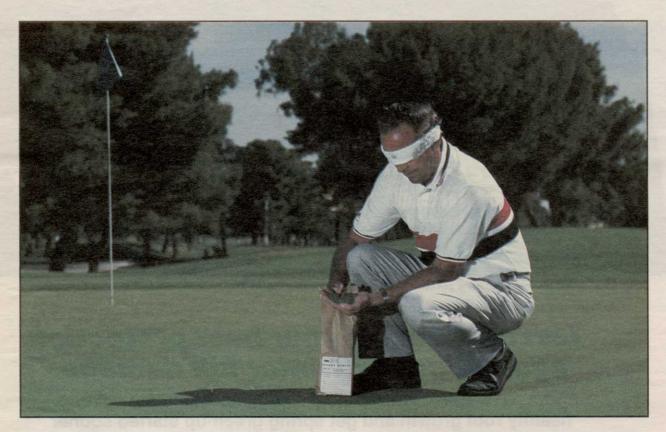
"It will help the golf industry respond to misconceptions about golf courses and how they're managed," according to John M. Schilling, GCSAA executive director.

"Links With Nature" highlights benefits often overlooked and cites independent research findings that allay public concerns. The video discusses how golf courses can provide direct benefits for soil, water, air and wildlife. Outlined is the role golf course superintendents play in managing property responsibly.

Copies of GCSAA's new Greentips fact sheet series also may be ordered with the tape

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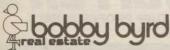
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### CALENDAR

### October

2-3 - 31st Annual Southern Calif. Turfgrass Expo in Costa Mesa. Contact Chuck Wilson at 714-951-8547.

3 — GCSA of New England Research Tournament at The Country Club in Brookline, Mass. Contact Paul Miller at 508-369-5704.

7 — Allied Association Meeting at St. Ives CC and Bend CC. Contact Georgia GCSA at 404-769-4076.

7-8 — National Golf Course Owners Association seminar on 'Building a successful and profitable golf operation' in Orlando, Fla. Contact Wendy at 800-933-4262.

7-9 — Golf Course Europe in Wiesbaden, Germany. Contact Ellen McGillavry at (03465) 73777.

8 — 5th Annual West Texas Turfgrass Conference Golf Tournament and Sponsors Bar-B-Que at Western Texas College. Contact George Fugitt at 806-792-7442.

8-10 — Kentucky Turfgrass Conference and Field Day in Louisville. Contact Dwight Barkley at 606-622-2228.

9-10 — GCSAA Seminar on Protection of Water Resources in Toronto.\*

12 — Pennsylvania Golf Course Owners statewide dinner meeting at State College.

13 — Keystone Public Golf Assn. annual meeting in State College, Pa. Contact 800-762-3577.

13-16-Fla. Turfgrass Annual Conference & Show in Jacksonville. Contact 407-898-6721.

14-16 — Cornell Greenhouse Conference, "Systems that minimize environmental impact" at Ithaca, N.Y. Contact 607-255-2166.

14-17 — American Seed Trade Assn. Management Academy in West Lafayette, Ind. Contact 317-494-4247.

19-24 — American Society of Landscape Architects in Kansas City. Contact Steven Bauer at 816-472-1201.

21-22 — GCSAA Seminar on Disease Identification & Control in Little Rock, Ark.\*

21-24 — Constructed Wetlands for Water Quality Improvement symposium in Pensacola, Fla. Contact 904-474-3722.

24-26 — Summit 91 Women in Golf in Daytona Beach, Fla. Contact LPGA at 9040254-8800.

28-29 — GCSAA Seminar on Golf Course Restoration, Renovation & Construction Projects in South Yarmouth, Mass.\*

31-Nov. 2 — GCSAA Seminar on Basic Turfgrass Botany & Physiology in Aurora, Colo.\*

### November

2-5 — American Seed Trade Assn. Lawn & Farm Seed Conference in Kansas City. Contact 202-223-4080.

3-5 — Georgia GCSA Annual Meeting at Jekyl Island Club Resort. Contact Georgia GCSA at 404-769-4076.

4-5 — GCSAA Seminar on Environmental Considerations in Golf Course Management in St. Louis.\*

4-5—National Golf Foundation Forum on Public/Private Joint Ventures in San Diego. Contact Roger Yaffe at 407-744-6006.

5 — GCSAA Seminar on Personnel Functions of the Golf Course Superintendent in Rochester, N.Y.\*

5-6—Indiana State Lawn Care Association Conference and Show in Indianapolis. Contact ISLCA at 317-575-9010.

5-8—New York State Turfgrass Association Turf and Grounds Exposition in Rochester, N.Y. Contact NYSTA at 800-873-TURF.

7 — GCSAA Seminar on Maximizing Job Satisfaction in East Lansing, Mich.

7-10- Golfworld 91 in Dusseldorf, Germany. Contact Monika Waraczynski at (0211) 45600-543.

### Continued from page 43

8 — GCSAA Seminar on Negotiating in Orlando, Fla.\*

10-12 - Canadian Seed Trade Assn. semiannual convention in Ottawa, Ontario.

10-13 — International Irrigation Exposition in San Antonio, Texas. Contact The Irrigation Association at 703-524-1200.

12-13 — GCSAA Seminar on Giolf Course Construction Techniques & Management in St. George, Utah.\*

14-15 - GCSAA Seminar on Golf Course Design Principles in Renton, Wash.\*

14-16 — Landscape Maintenance Association Meeting and Demo at a site to be announced. Contact LMA at 813-584-2312.

17-19 — Southern Turfgrass Assoc. annual conference in Memphis, Tenn. Contact Carl Case at 615-794-6689.

17-19 — Ohio Seed Dealers Assn. winter meeting in Columbus. Contact Richard Moore at 614-459-1018.

17-21 — Green Industry Expo in Tampa, Fla. Contact PLCAA at 404-977-5222.

18-20 — GCSAA Seminar on Developing & Maintaining Effective Management/Employee Relationships in Lawrence, Kan.\*

19-20 — 4th Annual Southern Grounds & Turf Maintenance Exhibition and Conference in Myrtle Beach, S.C. Contact S.C. State Board for Technical & Comprehensive Education at 803-737-9355.

19-21 - Inland Northwest Turf and Landscape Conference and Trade Show in Spokane, Wash. Contact show producers at 800-729-5904.

21 — Pennsylvania Golf Course Owners general membership meeting in Monroeville.

21-22 — GCSAA Seminar on Introduction to Integrated Pest Management in Walnut Creek, Calif.\*

25 — Water efficient landscape symposium in Palm Desert, Calif. Contact John Wuhlmuth at 619-346-0611

### December

2 - 6th Your Home Turf at Michigan State University in East Lansing. Contact Dr. Frank Rossi at 517-353-0860.

2-5 — Ohio Turfgrass Foundation Annual Show in Cincinnati. Contact 614-292-2601.

- New Hampshire GCSA Annual Meeting in Concord, N.H.

3-4 — Pacific Coast Turf & Landscape Chonference & Trade Show in Seattle, Contact Scott White at 800-275-9198.

3-4 — GCSAA Seminar on Golf Course Construction Techniques & Management in Omaha, Neb.\*

3-4 - Southern Grounds and Turf Maintenance Expoin Myrtle Beach, S.C. Contact show producers at 800-553-7702.

3-5 — Rocky Mountain Turf Conference in Denver. Contact 303-688-3440.

6-7 — GCSAA Seminar on Introduction to Integrated Pest Management in Fort Worth, Texas.

8-11 — CGSA's 43rd Annual Canadian Turfgrass Conference and Trade Show and 25th Annual Meeting in Toronto. Contact Canadian Golf Superintendents Association at 800-387-1056.

9-11 — 22nd Annual Georgia Turfgrass Conference & Trade Show in Atlanta. Contact Extension Conference Office at 912-681-5189.

\* — For more information or to register, contact Betsy Evans, education coordinator, Golf Course Superintendents Association of America, at 800-472-7878 or 913-841-2240. The seminars are dependent upon the availability of the instructors, and are therefore subject to change. One-day seminars cost \$100 for GCSAA members and \$120 for nonmembers; two-day seminars cost \$180 for members and \$210 for non-members.

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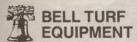
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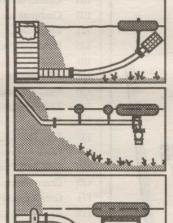
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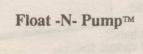
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### ON THE GREEN

### Continuedfrom page 46

"I'm no longer crowning tees because every time I crown a tee, from year to year I see half of it being used and half of it not being used. The part that would put the ball below the player's feet is not being used."

Connor said the laser is also effective because "I don't have to jockey dirt back and forth."

"In the old days, when a tee area was short of dirt, I'd have to shut the tractor down and bring in dirt if I wanted to hold the grade. What I do now is just hit a button, raise the mast another one-tenth of a foot and it drops the grade. So I can use what dirt I've got to achieve the perfect surface. And if the hole tee ends up being a couple tenths lower or higher, it is of little consequence.'

### DRAMATIC EFFECTS

Connor fondly recalls the day a year ago that he happened upon the laser device, which he said he "plagiarized" for use on golf courses.

He was renovating Palma Ceia golf course in Tampa, and was driving onto the site one day when he went by the 17th tee, which was at eve height.

"I did a double-take of this tee. It was the most beautiful thing I'd ever seen. I could look at it at eye height and it looked like it was sliced with a diamond cutter. It was perfect. I said, 'Wow! What did that?' I had been around golf course construction all my life and never seen a tee look that good.

He checked with the course builder, Sunbelt Services of South Florida, "found out where that machine was and a week later I owned one.

Connor said one reason the city of Nashville was persuaded to re-do the tees was "This was where they were going to spend only 20 percent of their money but they'd get 80 percent of the praise."

He told officials: "People see a tremendous improvement in the look of the course and that's what's going to make it politically palatable for you to spend the money and take the courses out of play for a season. When golfers come back they will dramatically see a difference, whereas if you are just doing greens, the greens only looked stressed here a couple of months a year and the improvement in turf environment is not obvious until several seasons have elapsed.'

He said: "The greens have always been the artist's tapestry. It's hard to look at a green and say there's a mistake unless it's really blatant. But you could always look at a tee and notice a flaw immediately.

Connor looks to a future of designing and renovating golf courses using the computer models, laser equipment, and whatever other marvels modern high-technology brings.

The thing I've had going for me and the reason I've managed to get jobs is that by combining these technologies, we have made significant inroads in preserving famous old golfcourses like Pebble Beach and Seminole. The combination is hard to beat," he said.

"It took me about six months to put the lasers and computer together. I thought it would be a lot more popular than it is, but maybe it's more difficult than I gave myself credit for. It's expensive and time-consuming. But in the long run I think it's really going to be a boon."

He said that until 1987 when he renovated Pinehurst No. 2 in North Carolina, a preservation-oriented philosophy was impractical. The technology was too expensive and too slow.

That is no longer the case. Computer models of course features become more valuable with each passing year, as subtle changes occur in greens and bunkering due to top dressing, wind, rain and settlement," he said.

The great success of the computer modeling concept is due to recognition by astute management of golffacilities like Pinehurst, Seminole and Pebble Beach as to the long-term benefits of accurate records and importance of preserving old golf courses' features.

# Laser technology makes tee grading job easier

### Computer model man Ed Connordoes it again

The man who brought you the computer terrain model to preserve historic golf courses has introduced another technology to the world of golf course construction. Move over, stakes and grade lines. Come on down, laser emitters, gyroscopes and radio-controlled drag scrapers.

"Golf course managers are coming out of the woodwork to look at it," said Edward Connor of the laser equipment he has now used to grade tee areas at Pebble Beach Golf Links in California and Seminole Golf Club in Florida.

Speaking of his current work at two Nashville, Tenn., municipal courses, Connor said: "We've got 120,000 square feet of tee space here. We lasered it and laid a two-inch layer of sand over the top and lasered it again in three days

"It used to take me at least a month for that kind of work."

Connor predicted the industry would see the laser gear used as a standard of construction in the future. "It's just too good for one guy to have as a secret for very long ... It's one of the best tools I've ever seen for new construction or renovation," he said.

As important as speed is to the equation of rebuilding tees, precision is even more crucial, according to Connor.

"The big advantage is that it allows you to do what the agricultural people have been doing for years when they flood-irrigate large fields. It allows you to put a very flat grade with uniformity on a surface like a tee," he said. "Once you get over a three-percent slope the people standing on the tee can feel it... But to grade less than three percent has always been a problem. You run into the danger of pockets. And when you get down to one to two percent, the threat of pockets becomes significant. Naturally, you don't want anything that holds water or presents an uneven surface.

For years architects have often opted to build a crown onto the tee and "live with some unevenness rather than risk getting a pocket



Ed Connor, above, sets readings to guide his box

or an uneven settlement spot," Connor said. We've now gone a long way in eliminating that problem. We can grade tees very confidently at one percent or even half a percent. And it's so fast that one man can do what used to take a crew of five people..

"If you don't have a laser you have to have a gun and a rod. That takes two people and it's tedious. It's moving a little bit of dirt and shooting with a gun and moving some dirt and shooting it again. With the laser you do everything from the seat of the tractor from adjusting the height of your target to adjusting the slope if you find out you entered in the wrong degree of slope into the laser."

Connor added: "All of my construction career I've been taught to avoid straight lines and formal features on a golf course to simulate nature's random look. Tees. however, demand precise construction methods.'

### **HOW IT WORKS**

Connor's equipment includes a tractor, scraper blade and laser apparatus. A laser

The Golf Course Professional's

TURFGRASS

SELECTION

Guide to



It used to take me at least a month for that kind of work (that took three days with laser technology).'

- Ed Connor

emitter - with a gyroscope to automatically level it — is mounted on a tripod and set up on a neighboring hillside or even on the tee. The laser receiver is mounted on a "mast" built onto the blade apparatus.

Connor sets perpendicular and parallel axis grades on the emitter's digital readout. He then sets the speed of his laser emitter at around 20 revolutions per second, "which gives me the quick enough response that my blade won't float out of position.'

The emitter rotates on the plane he established to within one-thousandth of a percent, and sends a signal to the receiver, which is attached to the scraper on the tractor. The scraper blade is hooked into a six-way hydraulic valve that is attached to the receiver.

'Its most frequent and common use is in agriculture where they have to pull a grade over a field for a couple of miles. It's no big deal for old farmhands, but we sophisticated golf course builders just caught onto it this year," he joked.

We try to grade tees in conformance with surrounding terrain so the tee doesn't look like it's artificially constructed. If the ground slopestoward the green that's the way you want your tee to slope, but not severely ... because everything over three percent is noticeable," Connor said

"I try to get a zero grade from side to side so right- and left-handers will have an equal footing on the tee. I'll try to go one to two percent from back to front or front to back, depending on the natural grade

Continued on page 45

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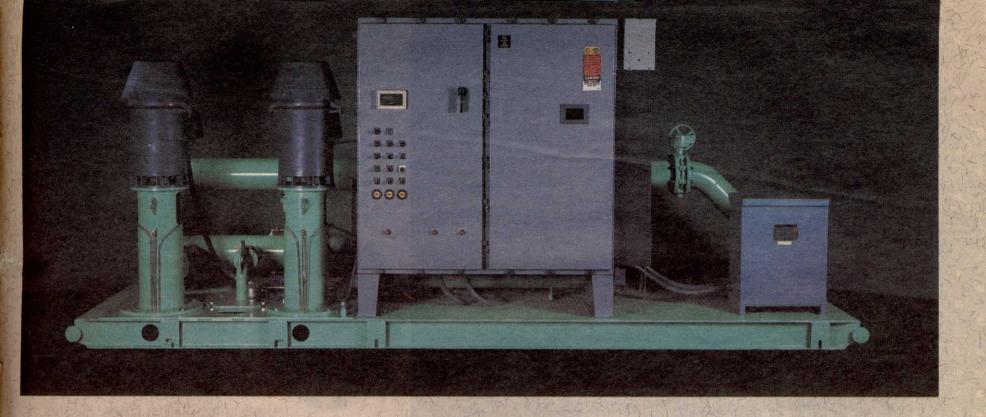
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