## BRIEFS

**BRAME BREAKFAST SPEAKER**

DALLAS — Robert A. Brame, a certified golf course superintendent working with the United States Golf Association Green Section's Mid-Atlantic Region, will speak at the annual prayer breakfast at the International Golf Course Conference and Show. Brame, ordained in 1984 by Carmel (Ind.) Baptist Church, has served as an interim pastor for several churches while working in course management. The event will be at 7 a.m. Sunday, Feb. 6, at Loew Anatole Hotel. The breakfast is open to all faiths.

**GCSANJ DONATES $20,000**

The Golf Course Superintenents Association of New Jersey raised $20,000 for Project FAITH (Fitness Actiovities in Therapy, an organization dedicated to providing physical fitness programs to children with cancer. The annual GCSANJ Championship, a raffle and a gift from Deal Golf & Country Club provided the money.

**ON THE MOVE**

**Andy Bowen** has left his assistant superintendent's position at Reynolds Plantation in Greensboro, Ga., for greener pastures. He has accepted the head superintendent's job at the Old North State Club in New London, N.C., about 50 miles outside of Charlotte. Old North State was voted the second best new private club for 1993 by Golf Digest.

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**Terry Vassey**, formerly assistant superintendent at The Standard Club in Duluth, Ga., and instructor at Horry Georgetown Technical College, has accepted the position of golf course superintendent at Berkeley Hills Country Club, also in Duluth. Vassey is also an instructor at Gwinnett Tech.

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Eagle Watch Golf Course in Stockbridge, Ga., has a new superintendent. **Rich Franke** has accepted the head superintendents job after manning the same position at the City Club of Marietta.

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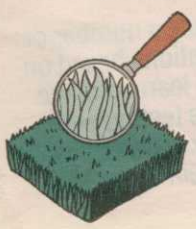
**Ron Schaffer** has accepted the head superintendent's position at Ponce de Leon Resort and Conference Center in St. Augustine, Fla. Schaffer had been assistant superintendent at the Golf Club of Georgia in Alpharetta.

**TURF EVALUATION PROGRAM MOVES**

National Turfgrass Federation, Inc. has moved its National Turfgrass Evaluation Program (NTEP) to BARC-West, Bldg. 002, Room 013, Beltsville, Md. 20705. The phone number remains the same: 301-504-5125.



# Dr. Carrow's cultivation research to improve compaction, water use

By PATRICK O'BRIEN

Dr. Bob Carrow, researcher at the University of Georgia Experiment Station, significantly reduced surface and subsurface compaction and improved water uptake of a common Bermudagrass turf grown on a compacted clay soil.

As part of the $5 million 1983-92 United States Golf Association (USGA) Turfgrass Research program, this discovery will help turf managers develop and justify cultivation programs for tees and fairways that will ultimately result in more efficient use of irrigation water.

Numerous studies to evaluate different cultivation techniques have been funded by the USGA Research Committee at the University of Georgia. This study was performed on a Cecil sandy clay loam with 55 percent sand, 18 percent silt, 27 percent clay and a 2 percent organic matter content. Each common Bermudagrass plot was compacted with a smooth power roller when the soil was near field saturation.

From previous cultivation studies, the Verti-drain was most effective in making physical soil improvements deeper in the profile, while hollow tine coring was best at improving soil surface conditions. The frequency of Verti-drain treatments, as well as the combination of Verti-drain and hollow-tine coring, were further explored in this new study.

Two annual Verti-drain and hollow-tine coring combination treatments consistently reduced soil compaction and improved root water extraction. Penetration resistance reductions of at least 25 percent occurred in all zones. Root water extraction was improved from 33 percent to 71 percent within the soil profile.

In very hard soils, loosening the surface initially with core cultivation will allow improved Verti-drain penetration. With the upper three inches of the profile less compacted, the Verti-drain will expend maximum energy at lower depths. After the first year, the research demonstrated core aeration could be omitted once the upper three inches are softer.

A dense root system is often thought to be the most efficient for water extraction. The Verti-drain actually decreased total root length density and total root length in this study! However, the roots left behind were more viable and extracted water from the soil more efficiently than roots in the compacted control. Root data may not always correlate well to water uptake in cultivation studies. The Verti-drain also enhanced overall water uptake as demonstrated by evapotranspiration (ET)

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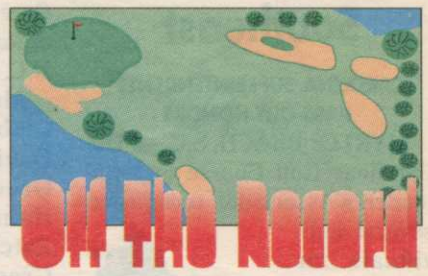
*Patrick O'Brien is director of the United States Golf Association Green Section, Southeastern Region.*

**SPRING START-UP**

*This is a healthy root system, thanks to the drill bit. Aeration has become a staple for spring start-up programs. For more on aerification and fertilizers, and innovative ways superintendents are tackling the challenges, see pages30-33.*




# The right way is the cheapest way — Buchen

By MARK LESLIE

CHARLESTON, S.C. — While growing and maintaining quality turfgrass are critical to a golf course \operation, groundskeeping costs can be cut in many ways, according to Terry Buchen, superintendent at Double Eagle Club in Galena, Ohio.

Speaking at Golf Course News' recent Public Golf Conference, Buchen said: "Do things the right way. That's the cheapest way."

He suggested a number of cost-cutting measures, including:

• Portable two-way radios for full-timers.

"They are the biggest efficiency tool I've seen in years. We save one hour per radio per day of wasted time just trying to find each other," said Buchen, adding that speaker microphones are installed on Double Eagle's equipment.

*Terry Buchen*

• Do away with the buddy system: I usually don't like it.

"On some projects — like running a chain saw — it works. But you get much better production without the buddy system.

• Draft a labor flow chart, including every job done in the entire year, from mowing greens to raking bunkers to aerifying. It helps you discover if the grounds crew has too many or too few people.

• Turn on the Weather Channel, and monitor it.

"It's saved a lot. We go out and fertilize when we see the storm coming. We save pumping, electricity costs and water," Buchen said

"I leave it on all the time. If a storm is coming we let everyone know. The local radar is shown every five minutes. It's for the preceding 90 minutes, so you can track the storm yourself, figure your cloud cover, precipitation..."

• Install several rain gauges on the course. ("I have one in my house.")

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**SUPER FOCUS**

*Joe Lightkep has gone from 18-year-old superintendent to owner at Fairway G&CC in Pennsylvania. See page 26.*

*Distinguished Service Award*

# New Jersey supers honor Kubik

The Golf Course Superintendents Association of New Jersey has presented its 1993 Distinguished Service Award to longtime supporter and Grass Roots turfgrass supply company owner Ken Kubik.

A member of GCSANJ since 1976, Kubik was involved in starting *The Greenerside* newsletter in 1980, then co-edited and wrote for it.

He is a past member of the New Jersey Turfgrass Association board of directors and serves on the board of the Alliance for Environmental Concerns.