

### **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.

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.

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.

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

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

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



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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#### 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 bages30-33.



## The right way is the cheapest way — Buchen

By MARK LESLIE

Terry Buchen

NARLESTON, 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.

· 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

· 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 Jersev 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.

### Handbook on IPM for turf released

Lewis publishers has released Handbook of Integrated Pest Management for Turf and Ornamentals.

With more than 40 recognized experts, the book details the rationale and benefits of employing an IPM plan, as well as providing technical information on each aspect of plan development.

This handbook integrates research work on pest problems with information on the practical implementation of the tools, and provides case studies of successful operations. Topics covered include the dynamics of the urban landscape, preparation for a healthy landscape, blemishes on the perfect landscape, integrated management of weeds, insects and disease, biological controls (current and those under development), and new generation chemical controls. Additional areas include special considerations for golf courses, and combining the pieces to develop an integrated pest management plan.

It is available for \$95 from Lewis Publishers, 2000 Corporate Blvd., NW, Boca Raton, Fla. 33431: 800-272-7737.

### Off the Record

## UGa data makes aerification decisions easier

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rates of up to 96 percent greater than the compacted control.

Precautions are advisable to avoid injury to existing roots from the vigorous action of the tines of these cultivation tools. From this information, it would appear timing of Verti-drain treatments on a cool-season turfgrass should be done in the early spring and mid-fall just prior to the times

of maximum root growth. Warm-season cultivation timing is less critical, but two weeks after spring green-up would be ideal for the most vigorous



Patrick O'Brien

treatment. Summer Verti-drain treatments did reduce root density in the upper 12 inches on Bermudagrass, although Bermudagrass can still continue new root development at this time.

Turfgrass managers now have data fro this University of Georgia study to help with aerification decisions on fine-textured soil sites with surface compaction.

A vigorous Verti-drain and core cultivation program can significantly improve turfgrass water use efficiency by enhancing water uptake from deeper soil zones.

Low-linting and

non-abrasive, our

new Gem Wipe™ is

the perfect

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## Tour of **Duty**

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### Tom Alex

MADE-FOR-TV PREPARATIONS: "This is our advertising," Alex said. "We want to make sure it's as pretty and playable as possible. We want it in some of the best conditions the LPGA will play on."

Since NBC will broadcast 3-1/2 hours of coverage, Alex expects "we'll have at least nine holes and cameras to worry about." In late January Alex had a walkthrough to discover where TV cameras would be set up. "We're going to be worried about TV angles whether it be outside the course, or flowers. If a striping pattern is going toward a camera, we'll make sure it hits it right on."

### Dick Anderson

Bermudagrass was overseeded with ryegrass on tees and fairways and poa trivialis on greens. Poa trivialis is a hardy and fine-bladed grass plant that putts well. Also, the course has 11 miles of cart paths crews have to keep edged and 6-1/ 2 acres of landscape beds that must be edged and re-mulched.

After the event it takes four to six weeks "to get back to normal" agronomically, Anderson said. "We aerify the trampled areas and add fertilizer to get the grass growing vigorously again.

"But, the biggest thing is the Monday morning after. You come out to the course and no one is here. It's a big let-down. It's like putting on a circus, I guess," he said.

MADE-FOR-TV PREPARATIONS: Starting the first of the year, crews every two weeks treat the overseeded areas with chelated iron and liquid fertilizer for consistent color throughout the course.

Also six weeks out, they start burning in the fairway striping and begin rolling the greens every third day. On tournament week they double cut and roll daily.

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to their unique fiber structure and high-performance, non-woven construction. Since they're compatible with all industrial cleaners, they're perfect for heavy-duty cleaning and general maintenance around the shop. And because they can be used several times before discarding, they're economical, too. Best of all, Gem Wipes are non-abrasive and low-linting, so they're as safe as they are strong! • If you're currently using laundry service towels or ordinary disposables, you owe it to your hydraulics to give Gem Wipes a try. For more information, contact your nearby Standard Golf

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