Past presidents speak up
Former GCSAA presidents offer insights, advice on eve of International Conference and Show

Development abroad
GCN’s monthly international report focuses on Asian and European soil

Engelke breaks bentgrass care mold

GO LI COURSE NEWS’ BUILDERS OF THE YEAR
ORLANDO ’99: SUN, NO SOCKS, AND SEMINARS
The GCSAA International Conference and Show rolls into Orlando from February 8-14. Bring comfortable shoes, socks optional. Special preview section found on pages 39-45.

Meditrust to sell off Cobblestone Golf Group

Meditrust, a Massachusetts-based real estate investment trust, plans to sell Cobblestone Golf Group of Del Mar. Cobblestone's management, headed by Chief Executive Officer Bob Husband, is among the half-dozen finalists in the bidding to acquire Cobblestone. Meditrust, which bought Cobblestone in late 1997 for $241 million, said the reorganization, financially troubled

ABT: Changing the paradigm one phase at a time

HENDERSON, Nev. — Adhering to its coolly-calculated, three-phase business plan — acquisitions, integration and transformation — AgriBioTech Inc. (ABT) has single-handedly changed the seed business over the past three years.

As 1999 shifts into gear, the company is ready to jump into its integration phase, the second step in its ultimate goal of “consolidating and transforming the turfgrass and forage seed sector in the

Continued on page 89
New regimen takes bentgrass into Deep South

Continued from page 1

- Top dressing every three weeks.
- Light grooming and brushing every third week.
- Core aerifying twice a year, in early May and late September, removing the cores and top dressing with pure sand.
- Aerifying with solid tines every two to three weeks during the summer.
- Recognizing whatever you do impacts the environment the plant is growing in.

But the primary key is water, said Engelke, well-known for his bentgrass and zoysia breeding programs and as the developer of Crenshaw and Cato bentgrasses.

"There is a misconception that bentgrass needs to be watered continuously," he said. "Water actually develops the environment the plant is growing in.

"If we can manage the water, we can manage the root zone so that the grass will take care of itself," Engelke added. "With good root development, the plant will air-condition itself... Water moving through the plant will dissipate heat. Internally, the plant does this through evapotranspiration."

Indeed, in late December, three months after planting G-2 bentgrass over an existing sod layer, Ehrbar reported roots 6 to 7 inches deep. And, he said, he made only one fungicide application during the summer that he tested G-2, L-93 and Crenshaw bentgrasses before his final decision to plant.

"We found out that a drier soil profile," Ehrbar said, "is much less prone to disease than a water-soaked profile," Ehrbar said.

The four-day watering cycle was proven effective during research at College Station, Texas, where Iowa State graduate student John Jordan worked under Texas A&M Associate Professor Dr. Richard White.

During 1997 and 1998 (the hottest years on record, and 1997 was even more difficult because of high humidity), Jordan tested with nine varieties of bentgrass, watering one set of plots daily, another set every other day, and a third set every fourth day. He discovered that the best overall quality of the bentgrass always occurred when irrigating every fourth day.

White said that 1998 was one of the hottest years on record, and 1997 was even more difficult because of high humidity.

"The real killer in much of the South is high humidity as well as high temperatures," he said. "I'd rather grow bent at 100 to 105 degrees air temperature at 30- to 40-percent humidity (like it was in 1998) than at 90 to 95 degrees and 70- to 80-percent humidity (as it was in 1997)."

White said that while the greens watered every fourth day became dramatically harder over the four-day span, the turf was healthier. Less water and moisture means less disease and fewer pests.

One major difference Jordan noted in 1997 was the amount of algae.

"Where we watered daily or every two days we had a lot of algae," White reported. "In the four-day irrigation we only had a smattering of algae. Even with the greens very old and algae-susceptible variety, we only had 10 percent covered by algae."

Asked about the decision to use a four-day cycle, White said it was simply guesswork. But, he added, grass can remain healthy over a much longer period without water.

"Within a USGA [U.S. Golf Association] green, there could be 2-1/2 to 3 inches of available water in the 12-inch soil profile. If grass is using 1/4 inch a day, you're looking at a 12-day supply of water."

"We teach — and I anticipated — that watered green, he added.

Indeed, Jordan found that from the first of June through August, the root systems in frequently watered plots decreased slightly, while those in the four-day treatment tripled and, in fact, had five times more roots. Perhaps the most startling discovery came from a study in 1998 measuring the soil oxygen and CO2 levels.

"We teach — and I anticipated — that watered green, he added.

Continued on page 32

Sand Shaker™
by TRUE-SURFACE®
AN ATTACHMENT SYSTEM FOR TOPDRESSING DISPERSION AND GRAIN CORRECTION Fits most triples greens mowers

Horizontal VIBRATION

V- Brush Design

Variable Brush Height Adjustment

System Includes Three Types of Brush Sets

From the same people that brought you the Vibratory Roller
True-Surface®............ A name you can count on for service!
1-800-443-8506
www.true-surface.com
Patent pending

GOLF COURSE NEWS