

GOLF COURSE NEWS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

A UNITED PUBLICATION
VOLUME 7, NUMBER 8
AUGUST 1995 • \$4.50

INSIDE

Dutch Treatment

After thousands of trees fell victim to its long-standing blight, Dutch elm disease may have a cure 13

Night Creatures

Under the cover of darkness, researchers have discovered how to cut down black cutworms 15

National Standard

The EPA has issued new guidelines calling for reduced small-engine emissions come 1997 39



SPECIAL REPORT: IRRIGATION & PUMP STATIONS, p. 24

COURSE MAINTENANCE

USGA/Audubon wildlife studies dovetail 13
How to make a side-dumping utility vehicle 16
Alonzi's testament to turf tissue analysis 19

COURSE DEVELOPMENT

Canadian pro Dick Zokol enters design field 4
Audubon chief explains Kiawah debacle 10
Q&A: The golden oldies with Ron Forse 29

COURSE MANAGEMENT

Brassie, Stanchina stage buy-back 33
UMass may add management program 34
Verdict: Injured golfer can sue course 36

SUPPLIER BUSINESS

NGF secures second firm for buying program 39
Ransomes patents E-Plex features 40
What's new in the marketplace? 42

Dedman, Family Dye to keynote Expo

Nation's only public-access conference and show returns to Orlando, Nov. 9-10

By HAL PHILLIPS

ORLANDO, Fla. — Ground-breaking design and innovative management practices will set the tone when The Family Dye and Robert Dedman headline this year's edition of Golf Course Expo, scheduled for Nov. 9 and 10 here at the Orange County Convention Center.

While Pete and Alice Dye have played a major role in rewriting the book on modern golf course architecture, Dedman — founder and chairman of Club Corporation International — has been no less a pioneer in the world of

course management.

The Dyes — Pete, Alice and sons Perry and P.B. — will share the dais at 9 a.m. on Nov. 9, keynoting Day I of the second annual Golf Course Expo, the only national trade show and conference targeting superintendents, managers and developers of public-access facilities. Dedman will keynote Day II, also at 9 a.m.

"We're thrilled to have them aboard," said Charles von Brecht, publisher of *Golf Course News*, which sponsors Golf Course Expo. "Robert Dedman has simply changed the way golf courses are operated,



ClubCorp. Chairman Robert Dedman will keynote Day II.

and the Dyes are one of the most famous families in the game, each of them meeting the very different, specific needs of public-access golf."

Dedman, who founded Franklin Federal Bancorp

Continued on page 46

GOLF COURSE EXPO

ORANGE COUNTY CONVENTION CENTER
ORLANDO, FLORIDA
NOVEMBER 9-10, 1995

A NATIONAL EXHIBITION AND CONFERENCE FOR OWNERS, SUPERINTENDENTS, MANAGERS, AND DEVELOPERS OF PUBLIC-ACCESS GOLF FACILITIES

New strains stand out at fescue trials

By MARK LESLIE

BELTSVILLE, Md. — Oh, how the mighty have fallen in the ever more popular world of fine fescues. With the release of the first-year findings in the U.S. Department of Agriculture's new National Turfgrass Evaluation Program (NTEP), only two of the previous four-year trial's top 10 fine fescues are in this top 10 and only three are even in the top 30 after the first year of this study.

And this with 35 fewer varieties being tested.

Turfgrass breeders have made major strides, improving color, heat and drought-tolerance and resistance to foliar diseases, particularly

Continued on page 20



SOMEWHERE IKE IS SMILING

Workers pour a new root-zone mix for the famed Eisenhower Green, located in America's most visible front yard. To celebrate the USGA centennial, President Clinton wanted the "First Putting Surface" refurbished and architect Robert Trent Jones II obliged. See page 3 for story.

Cities turn to non-profit management groups

By PETER BLAIS

Seattle recently turned over operation of its three public courses to a newly formed, non-profit corporation, a move being considered in a growing number of U.S. cities.

"It's gaining favor throughout the country because it works," said Lynnie Cooke, executive director of the Baltimore Municipal Golf Corp., which is frequently cited as a model operation by non-profit advocates.

Since assuming control in 1985, BMGC has made \$4.5 million in improvements to the city's five golf facilities and is planning a sixth course, all at no expense to

taxpayers. Annual rounds increased from 195,000 in 1984 to 358,000 in 1990. Green fees, reportedly the lowest among major municipal layouts in the Mid-Atlantic, have remained at \$10.50 since 1987. Two of its courses, Pine Ridge and Mt. Pleasant, are generally considered among the top 10 public layouts in Maryland, Pennsylvania, Delaware and Virginia.

In light of Baltimore's success, Indianapolis is set to hand over the reins to three of its public courses to a non-profit organization, Cooke said. Newark, N.J., officials visited Cooke in early July and are seriously considering establishing a

Continued on page 37

National Fineleaf Fescue Test Results

Name	GA1	GA2	IA1	IL1	IL2	IL3	KS1	KY1	LA1	MA1	MD1	MD2	MI1	MO1	NE1	NJ1	OH1	OK1	PA1	UB1	VA1	WA1	WA3	WA4	WA5	WI1	WI2	Mean
PST-44D (ch)	4.5	3.4	6.6	5.9	7.1	4.3	5.7	7.4	4.6	5.9	5.8	6.7	5.8	7.3	5.7	4.6	6.5	4.6	7.0	6.5	4.7	6.2	5.5	6.3	5.8	6.7	6.7	5.8
* Brittany (ch)	4.7	3.6	5.6	6.0	6.5	5.2	5.8	7.8	4.9	5.8	5.7	6.5	6.0	6.9	5.5	5.2	6.3	4.5	5.3	6.3	4.7	6.0	5.3	5.0	5.0	6.5	6.8	5.7
MB 64-93 (ch)	4.0	3.7	5.9	6.5	5.7	3.8	5.7	7.3	5.2	6.5	5.7	5.3	6.0	7.1	5.4	6.1	6.5	4.8	5.9	6.1	4.3	5.9	5.9	5.9	4.0	6.7	6.8	5.7
PST-4VB Endo (sc)	3.5	1.7	6.6	6.5	5.7	3.3	6.3	8.0	5.0	6.3	5.9	5.6	6.7	7.1	5.2	6.7	7.0	4.3	5.4	6.6	4.3	5.3	5.2	5.3	5.0	7.1	7.3	5.7
* Discovery (h)	3.9	2.6	5.6	5.8	5.3	5.3	5.3	7.6	4.1	5.6	5.9	4.9	5.0	7.2	7.0	5.9	7.2	5.5	6.0	7.0	4.9	4.9	4.7	5.6	6.1	6.7	6.8	5.6
NJ F-93 (ch)	4.1	3.5	6.2	6.3	5.7	5.6	5.5	7.2	4.7	5.8	5.8	5.6	5.4	7.2	5.0	7.0	6.2	4.1	5.9	5.7	4.5	5.9	5.2	5.4	4.7	6.9	6.8	5.6
MB 63-93 (ch)	4.5	3.7	5.9	6.1	5.8	3.8	5.7	7.2	5.0	6.5	5.8	4.2	6.1	6.6	6.3	4.9	6.5	4.4	5.8	6.0	4.4	5.8	5.3	5.6	5.2	7.1	7.3	5.6
MB 61-93 (ch)	4.2	3.6	6.3	6.4	6.3	4.5	5.7	7.3	4.5	6.0	5.4	5.6	5.7	6.9	5.6	4.8	6.2	4.6	5.7	6.3	4.5	5.6	5.3	5.8	5.0	6.6	6.9	5.6
Pick 4-91W (ch)	4.3	3.5	6.6	6.2	6.5	3.9	5.5	7.5	4.7	5.5	5.9	6.8	5.7	7.1	5.5	6.4	6.3	4.0	6.2	5.8	4.9	5.7	4.8	5.1	4.4	6.3	6.1	5.6
* Tiffany (ch)	4.2	3.1	5.3	6.7	6.3	4.6	5.0	7.4	4.4	6.0	5.6	5.4	5.7	7.0	5.8	6.2	5.7	4.0	5.3	6.1	4.8	6.1	5.9	5.7	5.0	6.6	6.4	5.6
* SR 5100 (ch)	4.3	4.2	6.5	6.2	6.2	5.1	5.2	7.3	5.1	5.7	6.0	6.7	5.3	7.1	4.8	3.1	6.0	4.6	5.6	6.0	4.5	5.6	5.6	4.4	5.5	6.6	6.4	5.5
* Bridgeport (ch)	4.6	4.5	5.2	6.6	5.7	3.6	5.6	7.3	5.2	5.7	5.4	6.5	5.7	7.2	5.3	4.6	6.3	4.6	6.1	5.5	4.4	5.7	5.3	5.4	4.4	6.6	6.3	5.5
Pro 92/24 (h)	4.0	2.9	5.5	6.4	6.3	3.2	5.3	7.5	4.0	5.7	5.7	5.8	4.3	7.2	6.8	4.1	6.2	3.8	6.3	6.6	4.9	5.3	5.1	5.1	5.4	6.9	6.9	5.5
* Treasure (ch)	4.3	3.6	5.9	6.7	6.3	1.7	5.6	7.3	4.6	5.7	5.4	6.3	6.0	7.0	5.6	6.3	6.0	4.1	6.1	5.8	4.6	6.1	5.1	5.1	5.2	6.2	6.0	5.5
* Shademaster II (sc)	3.1	1.6	6.3	6.0	6.2	4.3	5.9	7.5	4.8	6.0	5.6	5.3	6.8	7.4	5.6	5.9	6.5	3.8	5.5	6.5	3.9	6.3	4.6	4.6	5.1	6.8	6.8	5.5
* Seabreeze (slc)	3.9	2.3	6.0	6.6	5.9	3.5	5.7	6.8	4.5	5.9	5.6	3.6	6.7	7.6	5.9	6.7	6.7	3.3	6.1	5.7	4.3	5.7	4.8	5.1	5.4	6.4	7.1	5.5
* Reliant II (h)	3.3	3.1	5.5	5.9	6.0	2.5	5.3	7.7	4.0	5.8	5.2	5.7	4.8	7.0	6.3	5.3	7.2	5.0	5.8	6.6	4.4	4.6	5.4	5.0	5.9	6.7	6.8	5.4
MB 81-93 (h)	3.8	2.8	4.6	5.6	5.6	3.2	5.5	7.7	4.2	6.0	5.7	5.1	5.1	6.9	7.8	6.1	6.7	4.8	5.3	6.8	4.7	5.1	4.9	4.9	4.6	6.8	6.8	5.4
PRO 92/20 (ch)	4.4	3.8	6.1	6.7	6.3	3.2	5.3	7.0	5.2	5.5	5.4	6.6	5.4	7.6	5.4	5.5	5.5	3.9	5.8	5.1	4.6	5.3	5.3	4.6	4.0	6.5	6.1	5.4
PST-4DT (sc)	3.3	1.6	6.2	7.1	5.7	3.7	6.0	7.9	4.2	5.7	5.4	4.3	6.7	7.1	5.6	5.9	6.5	4.3	5.1	5.8	3.8	5.3	5.7	5.2	4.9	6.7	6.9	5.4
* Victory (ch)	4.4	3.7	5.4	6.7	6.2	4.4	5.6	7.0	4.7	5.0	5.6	6.2	5.6	6.9	5.8	6.3	5.2	4.1	6.1	5.5	4.7	5.5	5.1	3.7	4.2	6.4	6.3	5.4
MB 83-93 (h)	3.9	3.3	4.5	6.2	4.9	3.8	5.3	7.9	4.2	6.3	5.7	4.9	4.4	7.1	6.3	5.2	7.7	4.5	5.4	5.9	4.5	5.1	5.1	5.8	4.7	6.6	7.0	5.4
WX3-FF54 (ch)	4.5	3.6	6.2	6.5	6.3	2.5	5.5	7.4	4.5	6.0	5.6	5.5	5.1	6.8	5.1	5.8	6.0	4.3	5.1	5.6	4.4	6.2	4.9	4.6	4.7	6.7	6.3	5.4
PST-4ST (sc)	4.1	1.6	6.1	6.9	6.2	4.7	4.9	7.7	4.9	5.9	5.6	5.0	6.4	7.0	5.8	3.0	6.7	4.0	4.6	6.5	4.1	6.1	5.0	4.4	4.9	6.8	6.8	5.4
MB 65-93 (ch)	3.9	3.5	5.8	7.0	6.1	3.6	5.8	7.2	4.3	6.3	5.4	5.3	6.0	7.1	5.8	2.0	6.2	4.2	5.5	5.6	4.2	6.3	5.5	4.6	4.3	7.1	7.0	5.4
* Jasper (E) (sc)	4.3	2.0	6.4	5.5	5.5	2.7	5.8	7.5	4.1	5.8	5.4	5.3	6.0	7.3	6.3	7.0	6.5	4.2	4.7	6.0	4.1	5.1	5.4	4.9	4.8	6.4	6.4	5.4
WX3-FFG6 (sc)	4.2	3.4	6.3	5.7	5.0	4.5	5.3	7.2	4.7	5.2	5.7	5.8	5.6	6.9	5.7	4.6	6.0	4.4	5.6	5.1	4.4	5.4	5.8	4.7	5.0	6.3	6.3	5.4
* Nordic (h)	4.0	3.1	4.6	6.2	5.3	1.9	5.5	6.9	4.3	5.6	5.6	5.2	4.9	7.1	7.0	6.4	7.3	4.0	5.3	6.9	4.8	4.5	4.8	5.1	4.5	6.7	7.0	5.4
LSD Value	0.9	0.6	1.0	1.0	1.3	3.6	0.7	0.5	0.9	0.6	0.5	1.2	0.9	0.6	1.3	0.8	1.1	0.7	1.2	0.7	0.6	1.3	0.8	0.7	0.7	0.5	0.7	0.2

* — Commercially available in the U.S. in 1995.

(code) — ch = chewing fescue; sc = strong creeping fescue; slc = slender creeping fescue; h = hard fescue.

Here are the locations of the field tests, followed by soil texture, soil pH, pounds of nitrogen applied per 1,000 square feet, mowing height in inches and irrigation practiced.

GA1: Griffin (high pH), sandy clay loam, 5.6-6.0, 3.1-4.0, 1.1-1.5, no irrigation.

GA2: Griffin (low pH), sandy clay loam, 3.6-4.5, 3.1-4.0, 1.1-1.5, no irrigation.

IA1: Ames, Iowa, IA1: sandy clay loam, 7.1-7.5, 2.1-3.0, 2.6-3.0, to prevent stress.

IL1: Urbana, Ill., silt loam and silt, N/A, 0.0-1.0, 2.1-2.5, only during severe stress.

IL2: Carbondale, Ill. (low mowing), silty clay loam, 6.1-6.5, 3.1-4.0, 2.1-2.5, to prevent dormancy.

IL3: Carbondale, Ill. (high mowing), silty clay loam, 6.1-6.5, 1.1-2.0, 2.1-2.5, no irrigation.

KS1: Manhattan, Kan., silt loam and silt, 6.6-7.0, 3.1-4.0, 3.1-3.5, to prevent stress.

KY1: Lexington, Ky., silt loam and silt, 6.1-6.5, 2.1-3.0, 2.1-2.5, only during severe stress.

LA1: Baton Rouge, La., sandy loam, 5.6-6.0, 1.1-2.0, 2.1-2.5, only during severe stress.

MA1: Amherst, Mass., silt loam and silt, 5.6-6.0, 2.1-3.0, 1.6-2.0, to prevent stress.

MD1: Silver Spring, Md., silt loam and silt, 6.1-6.5, 1.1-2.0, 2.6-3.0, only during severe stress.

MD2: Sharpsburg, Md., silt loam and silt, 5.6-6.0, 0.0-1.0, 2.6-3.0, no irrigation.

MI1: East Lansing, Mich., sandy loam, 6.6-7.0, N/A, 1.6-2.0, to prevent stress.

MO1: Columbia, Mo., silt loam and silt, 6.1-6.5, 2.1-3.0, 2.1-2.5, to prevent stress.

NE1: Lincoln, Neb., silty clay loam, 6.6-7.0, 1.1-2.0, 2.6-3.0, to prevent stress.

NJ1: North Brunswick, N.J., sandy loam, 5.6-6.0, 5.1-6.0, 1.1-1.5, to prevent stress.

OH1: Columbus, Ohio, silty loam and silt, 7.6-8.5, 1.1-2.0, 2.1-2.5, to prevent stress.

OK1: Stillwater, Okla., silty clay loam, 6.6-7.0, 1.1-2.0, 2.1-2.5, to prevent stress.

PA1: University Park, Pa., silt loam and silt, 6.1-6.5, 1.1-2.0, 1.6-2.0, to prevent dormancy.

UB1: Beltsville, Md., silt loam and silt, 6.1-6.5, 1.1-2.0, 1.1-1.5, only during severe stress.

VA1: Blacksburg, Va., silt loam and silt, 6.1-6.5, 1.1-2.0, 2.1-2.5, only during severe stress.

WA1: Pullman, Wash., silt loam and silt, 5.6-6.0, 2.1-3.0, 1.6-2.0, to prevent stress.

WA3: Puyallup, Wash., (100% ET), sandy loam, 5.6-6.0, 2.1-3.0, 1.1-1.5, to prevent stress.

WA4: Puyallup, Wash., (30% ET), sandy loam, 5.6-6.0, 2.1-3.0, 1.1-1.5, only during severe stress.

WA5: Puyallup, Wash., (60% ET), sandy loam, 5.6-6.0, 2.1-3.0, 1.1-1.5, to prevent dormancy.

WI1: Madison, Wis., (high mowing), silt loam and silt, 6.6-7.0, 1.1-2.0, 2.6-3.0, to prevent stress.

WI2: Madison, Wis., (low mowing), sand, 4.6-5.5, 2.1-3.0, 0.6-1.0, to prevent stress.

Fine fescues: Natural but not too wild ... lower-maintained ... striking

Continued from page 1
leaf spot and rust.

"I think we will always have room to improve work on leaf spot and dollar spot," said Mike McCarthy, plant breeder and director of research for E.F. Burlingham & Sons. "We have made advancements in that area. That's why some from the previous trials rank as low as they do."

"One of the big factors [in the

improvement] is that we were spec'ing for a reduced plant height and also high endophyte levels," said Crystal Fricker, plant breeder at Pure Seed Testing, a sister company of Turf Seed, Inc.

Pure Seed and Turf Seed have four of the top 10 varieties in the test, while Burlingham has three, LESCO one Pickseed West one, and Rutgers University one.

"The interest [in fine fescues]

has increased quite a bit," said Kevin Morris, national director of NTEP. "People are looking at using them in low-maintenance areas and in mixes with bentgrasses... We need to start looking at mixtures — more and more blending them with Kentucky bluegrasses and fescues."

Fricker agreed much more work has been done on fine fescues the last 10 years. "The market isn't that great, but it's an interesting species to work with," she said. "And when you're collecting in old turf areas you always find new some fine fescues. So in our new collection we are coming up with a lot of new germplasm to evaluate and we are able to see a lot of differences and to select for a certain type of plant. That leads to a lot of improvement."

Fine fescues are becoming more popular among golf course superintendents as well, Fricker said. "You have the hard fescue look and letting it grow up edging bunkers. Fescues in some golf courses even in Southern California are just gorgeous. They are lower maintained but also something that's striking and different. It's a natural but not too wild a look."

"I think its use will grow as more people see and hear about them. Hard fescues are an under-used species at this time. The creeper is used by many because of its low price. But it's a gangly, tall grass. These fine fescues are beautiful, and give a Scottish links look."

McCarthy added: "We're getting a lot more discriminating buyers than we ever have had. It's a slow building process from research to ultimate user, the most informed being in the golf industry."

The future of fine fescues looks even brighter.

"We're looking for new sources of endophyte, and we're trying to incorporate new germplasm from new collections around the world," Fricker said. "The past varieties from our collection are mostly from around the United States. But we are collecting around the world on a wide scale, and are looking to incorporate some very different germplasm from high altitude to growing in rocky areas with no water, to actually surviving in wooded areas — some very extreme conditions. We want to find germplasm that naturally has characteristics we have to get into our varieties to make them the best."

McCarthy stressed improvement in density and taking advantage of fine fescues' ability to survive well in shade.

"Obviously, the strength of fine fescues is their shade component compared to ryegrasses and bluegrasses," he said. "They strengthen turf in those shady areas."

McCarthy added: "The leaf blade of the fine fescue is naturally fairly slender, so that isn't as big a factor as in tall fescue and ryegrasses. But the density you can maintain in the turf, without having a lot of disease prob-

The Top 10

A brief look at the top 10 varieties of fine fescue in the 1993 national test shows only two holdovers from the 1990-93 test. Turf Seed, Inc.'s Discovery and Tiffany cultivars finished 3rd and 6th, respectively, in the old test and 5th and 10th this time around.

Turf Seed's sister company, Pure Seed Testing, also boasts the number-one variety — PST-44D, developed from material from Rutgers University Prof. Reed Funk — and No. 4 PST-4VD Endo.

The rest of the top 10:
2) LESCO's Brittany.
3) Burlingham's MB 64-93.
6) Rutgers' NJ F-93.
7) E.F. Burlingham's MB 63-93.
8) Burlingham's MB 61-93.
9) Pickseed West's PICK 4-91W.

lems that go along with it, is a very important factor for us to maintain."

Many of the top new varieties are not expected to be in the marketplace this year. But superintendents can expect them to be available in 1996.

Burlingham's MB series, for instance, is "just going into production right now," McCarthy said. "I would imagine it would be a year from this harvest before an appreciable amount would come out. After that, it will be readily available."

Hot Spots?

Stop wasting labor
handwatering!
Wet Hot Spots FAST
with the
**WETTING
FORK**TM

(U.S. Patent #5,398,445)

The Wetting Fork...

- Wets hydrophobic spots in 10 seconds