Kentucky bluegrasses tested for height of cut

By ERIC HOWARD

ORONO, Maine — Turf researchers are experimenting with the tolerance of Kentucky bluegrass cultivars to low mowing, at heights of cut frequently found on fairways of private or high-end daily-fee courses.

Finding the right cultivar for the local conditions can significantly affect short- and long-term grass survival and therefore course maintenance costs, according to Dr. Annamarie Pennucci, an independent turf consultant and faculty associate at the University of Maine. Pennucci has been involved in three such bluegrass studies in New England. Results have so far identified some 20 cultivars that, when maintained at low mowing, are quite strong against leaf spot diseases, pink snow mold, and other problems typical for Northern courses. She has placed them into three groups, based on turf quality and color as measured at her test sites. Three named cultivars — Aaron, Barcelona and Limousine — as well as several numbered cultivars scored best at her sites over the past several years.

Unfortunately, several other exceptional cultivars are still numbered and not yet commercially available. She did include three numbered cultivars from Group A (the best) in her results table [see table] because of their outstanding qualities. The other top contenders over the course of her studies include cultivars from a variety of commercial and non-commercial sources.

With Dr. Allen Langille, Pennucci is part of a National Turf Evaluation Program (NTEP) high-maintenance Kentucky bluegrass trial here at the University of Maine at Orono, with 104 cultivars. NTEP is helping golf course managers determine what cultivar is most suitable for a particular site. Evaluations are being conducted in 38 states, with Kentucky bluegrass trials running at about 30 northern sites.

At Orono, several new cultivars had an excellent first growing season in 1996, in particular cultivars supplied by Pure Seed Testing, Barenbrug, Jacklin Seed, O.M. Scott, Lofts and Rutgers University.

"These new grasses reveal greater depth of dark coloration, finer leaf blades, greater numbers of leaves and tighter density relative to their older cousins," said Pennucci. Each year, the NTEP office will release the ongoing results of this and other NTEP trials.

Pennucci has also been involved in longer-running trials, including one with the New Hampshire Golf Course Superintendents Association at Amherst (N.H.) Country Club. This high-maintenance, low-mowing trial was started in 1992 on the fairway at the 8th and 9th holes.

"Initially, many of the 135 Kentucky bluegrass cultivars used at the Amherst site responded well to the demands of frequent low mowing," said Pennucci, "and several standard cultivars performed far better than expected."

Over time, however, several of the older standards declined in quality and density, with leaf spot and brown patch diseases.
WACO, Texas — Students in golf course and turfgrass management (GTM) at Texas State Technical College (TSTC) here are building a three-hole golf course, working with course architect Jeff Brauer. The immediate past president of the American Society of Golf Course Architects, Brauer is one of several people donating services for the job after being contacted by the U.S. Golf Association Green Section Director Jim Moore, advisory committee chair for GTM. The GTM advisory committee is a group of professional representatives who keep TSTC updated on skills the industry needs in graduates.

“We were thrilled to hear Brauer wanted to work with us,” GTM Department Chair Tinker Clift said. “We really appreciate his involvement in this project. It means a lot to have someone of this caliber working with us at TSTC. This professional design enhances the realism of the project.”

Clift said the project gives students a new level of important hands-on experience. Developing a golf course allows students to see a project progress from concept to construction. They learn to operate different turfgrass equipment, install the irrigation system and maintain the course. GTM plans to build one hole each year. TSTC plans to continue expanding this project as long as land is available.

Once a hole is complete, students will continue to use the area as a laboratory to develop their skills in golf course care. One hole is complete and employees and students can use it free of charge. The TSTC Student Activities Department also plans to use the facilities for intramural golf activities in the future.

Other donors include: Ogel Bay-Norton Industrial Sands of Brady which donated 10 trucks of root-zone mix, valued at $2,000; Shamrock Irish Peat Products of Brady which donated four pallets of peat moss (imported from Ireland), valued at $1,200; Rain Bird of Dallas which donated irrigation heads for the golf green; and Coastal Turf, Inc., of Bay City, which donated 5,000 square feet of Champion grass sprigs; valued at $3,200 and 1,080 square yards of 419 Bermuda-grass, valued at $1,890. The TSTC Student Activities and Intramural departments also donated gravel for the course.

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as well as from increased pressure from weeds. After 2-1/2 years, eight had consistently performed well in terms of turf quality, vigor, density, color and tolerance to low mowing: IDW, 0514, Aaron, Barcelona, Limousine, Touchdown, 4 Acres and Unique.

Of the remaining 128 cultivars, eight had fairly good scores during this time and 40 were acceptable. Several cultivars that started out very poorly — perhaps because of the warm and humid summer in 1993 and the subsequent cool and dry fall and icy winter — slowly filled in and formed excellent grass canopies.

“At maturity, the top eight contenders still appear terrific and able to hold their own against the additional pressures of low mowing,” said Pennucci. Unfortunately, she also noted the long-term effects of low mowing seem to include a gradual to rapid loss in disease resistance when the mowing height is reduced from 1 inch to 5/8 or lower.

Superintendents will need to adjust the timing of pesticide applications to reflect a lower tolerance for such pests when the turf canopy has been challenged by low mowing. This does not mean, however, that total amount of pesticide used will go up.

Despite possible pest problems, superintendents will see concrete benefits from using some of these new or improved cultivars in places where low mowings are needed, especially in the Northern latitudes where survival can be challenged by harsh winters.