CHALKBOARD

TIPS FROM THE PROS

REDUCE DISEASE PROBLEMS WITH THE RIGHT SEED

Heavily-used athletic fields and golf course fairways need regular touch-up seeding throughout the year to repair divots and traffic damage. It's a good opportunity to increase the disease resistance of the turf and reduce maintenance levels says Dr. Richard Hurley, vice president of Lofts Seed Inc.

The worst way to select turf seed is by its price, says Hurley, especially when you consider seed is one of the lowest cost items in a turf maintenance budget. Improved resistance to diseases and insects can quickly return the extra cost of the seed to the buyer.

For more than 50 years, breeders have been continuously improving the disease resistance of seeded turf varieties. Each year advances are made. To continue to buy and use the older common varieties forces the turf manager to cure disease and insect problems when he could prevent them.

The first question to ask yourself when selecting seed is how much is the field or site used? A field with daily use should be a blend of improved perennial ryegrasses, says Hurley. With regular touch-up seeding the resilient, fast-germinating ryegrass will provide a dense turf cover. By using the most recent generation of perennial ryegrasses, most problems with brown patch and leaf spot will be avoided. Some of these ryegrasses are Palmer, Prelude, Gator, Citation II, Omega II Manhattan II and Tara. Hurley cautions that the names of some perennial ryegrasses may be more familiar to you, but they do not have the qualities of the newer ryegrasses. The newer ryegrasses grow slower, mow cleaner and have more disease resistance.

For fields with three to five events per week, Hurley recommends a mixture of turf-type tall fescue (90%) and Kentucky bluegrass (10%) or turf-type tall fescue (80%), Kentucky bluegrass (10%) and perennial ryegrass (10%). Improved varieties of each type of turfgrass should be used to obtain the greatest disease resistance.

Improved turf-type tall fescues are vastly superior to the common K-31 tall fescue used for pastures and roadsides. Turf breeders have developed varieties with improved resistance to leaf spot (net blotch). Examples are Arid, Apache, Bonanza, Rebel II and Tribute. Overseeding two to five times per year is recommended to help the turf recover from damage.

For the stadium field, used once a week for home games, the recommendation is Kentucky bluegrass. In the cooler regions of the country, Kentucky bluegrass will spread to fill in damaged patches of turf without frequent overseeding. The latest varieties of Kentucky bluegrass have improved resistance to stripe smut, dollar spot, leaf spot and powdery mildew. Some of these varieties are Adelphi, Baron, Classic, Eclipse, Enmundi, Georgetown, Glade, Merit, Nassau, Princeton 104, Ram I and Victa.

Lists of recommended turf seed varieties are available from your local extension agent and they change every year. Make a practice of obtaining a new list each year before ordering seed.

Try as they might, turfgrass breeders have had only limited success developing Kentucky bluegrasses that resist the fusarium complex and perennial ryegrasses and turf-type tall fescues that resist brown patch, red thread and *Pythium*. The problem is these diseases are difficult to reproduce consistently on turfgrassses during selective breeding trials. A variety that seems to possess resistance in one trial gets wiped out in another trial.

The search for turfgrasses resistant to all major diseases continues at research stations across the country. Nevertheless, great progress has been made and sports turf managers should apply these advances to improve the efficiency of their maintenance programs.

SLOW-RELEASE NITROGEN REDUCES THATCH IN FLORIDA

Year-round play is the rule rather than the exception for most Florida golf courses. Except for a few weeks in the fall for overseeding with ryegrass and a few weeks in the spring for the bermudagrass to come back to life, superintendents keep their courses impressively groomed to meet the ever-rising standards of the tourist golfer.

A major concern of superintendents during the summer season is thatch and its impact on irrigation, disease, insects and playability. High temperatures and humidity encourage bermudagrass to build up thatch. Some superintendents verticut every week or two to control thatch levels on their courses.

Dr. Jerry Sartain, a University of Florida researcher, has discovered that the type of nitrogen applied to bermudagrass can affect the rate of thatch build-up. Since Florida superintendents often apply 15 to 20 pounds of nitrogen per 1,000 square feet each season, Sartain decided to test three fertilizers for their effect on thatch—ammonium sulfate, sewage sludge and isobutylidene diurea (IBDU). He found the IBDU produced the lowest level of thatch accumulation among the three. Responding to Sartain's results, a number of Florida superintendents have increased their use of the synthetic organic IBDU.

Stanley Carr at Gulf Stream Country Club, Gulf Stream, FL, likes to restrict thatch to one-fourth inch on greens and no more than one-half inch on fairways. Carr first tried IBDU to eliminate the fluffiness of his bermudagrass fairways. He replaced a complete 16-4-8 fertilizer with a 15-0-15 fertilizer containing ten units of IBDU. "When a member takes a divot now," says Carr, "the roots are right there and the recovery rate is very rapid."

He also finds the long residual and low burn potential of his new fertilizer program to be helpful. "I have more flexibility in scheduling applications," Carr states. Fertilizer can be applied in the morning and not followed by irrigation until the evening without burning the turf or losing much of the nitrogen to volatilization. He also uses the same formulation for shurbbery and trees—including lots of palms.

Fred Klauk, Jr., who is responsible for maintenance of all four Florida TPC courses—Sawgrass, Monte Carlo, Eagle Trace and Prestancia, needs the application flexiblity of a slow-release fertilizer. "A tournament requires 28 days of special work, two weeks before play and two weeks afterward for cleanup," says Klauk. "The Pro-Am days are the toughest. On Wednesdays, Thursdays and Fridays, we barely have time to mow the greens before the golfers tee off. Then we can't get back on the courses for maintenance until late in the day. Our crews begin at 4:30 a.m. and don't finish until 10:00 p.m."

Each year the PGA courses use 15 to 20 pounds of nitrogen per 1,000 square feet of nitrogen, largely slow-release, on the greens. The fairways receive a 15-1-15 fertilizer with five units of IBDU seven times yearly and during months of heavy winter play.

One of Klauk's former staffmembers, Scott Bell, who is now superintendent at Bent Pine Golf Club in Vero Beach, likes the slow-release fertilizer for playability. "I can mow at low heights and maintain smooth greens," states Bell. "We never get a flush of growth which affects the roll of the ball."