

Answers to turf questions

by Fred V. Grau



Need: Cool-season Turf for fairways

Agronomists are being asked to design cool-season fairway turf that will be as close to perfection for the players as possible. BUT, there will not be an abundance of water for consistent operation of the irrigation system. In regions of water shortage it is known that fairway and lawn watering will be the first to be banned. Water will be denied when the turf needs it most.

This situation demands clear thinking in the selection of fairway grasses which will be specified and planted. It should be obvious that all bent-grasses must be eliminated from the specifications. Nothing is more unsightly, or poorer to play from, than a lush dense carpet of bent that has been denied water when temperatures soar.

Inevitably we turn to Kentucky bluegrass as one which can tolerate long periods of drought and bounce back in the fall when rains fall and temperatures drop. But, which one or ones? And what sort of a mixture? Should red fescue (chewings or creeping red) be included? Do we need a "nurse" or companion grass? Should we consider a tall fescue, straight or in a mixture?

Among the several bluegrasses on the market (seed available) that can tolerate close fairway mowing, which have good performance records, and which can be expected to develop dense turf include:

Merion Kentucky bluegrass. Should be included for its color, its tolerance to leafspot and to close mowing. Weaknesses of Merion can be masked by other varieties; are not likely to be so severe during dry periods.

Fylking (0217) Kentucky bluegrass. Tolerates close mowing, provides good density and is less susceptible than Merion to strip smut and Fusarium.

Certified Common Kentucky bluegrass, Dakota or Kentucky grown. By including certified common one avoids getting Newport which is flooding the market as "common."

Supposing we blend these three varieties to form the working base of our fairway mixture. Each agronomist conceivably could devise a different blend

containing these three (or other) bluegrasses in varying proportions and still develop good turf. Without research data we must proceed with an educated approximation. My choice would be something like this:

	lbs. per acre
Merion	20
Fylking	15
Common	15
	<hr/> 50

Assuming that we would like to plant about 100 lbs. of seed to the acre for a thick initial stand, what do we add to this blend that will enhance the total result and not prove to be detrimental or objectionable? We are assuming that one pound (slightly more) of bluegrass seed (over 2,000,000 seeds) to the thousand square feet (2,000 seeds per square foot) is adequate. What we need to add is a quickstarting grass that will not be excessively competitive to the bluegrass. My vote goes to the new perennial ryegrasses that have texture similar to the bluegrass. One that has worked well is Pelo. By adding Pelo ryegrass at 50 lbs./A, we have over 100 pounds and, hopefully, have met all requirements. (Another is Manhattan).

But, you say, what did you do with the fescues? Frankly, I eliminated them. Red fescue is not really a good companion to these elite bluegrasses. It is not one of the best heat-tolerant grasses and it has vastly different fertility requirements. Tall fescue is out of a mixture like the one we are developing because it doesn't fit. Tall fescue, where it is to be used, must be used alone and must be seeded at very heavy rates to develop turf density and finer blades.

Some of you may take exception. You may design your own mixture. (When it is available we will include Pennstar.) This one that we have assembled here on paper will produce excellent turf if it receives generous seedbed fertilizer and adequate maintenance fertilization applied intelligently. Irrigation when water is available, spring and fall, will produce dense turf that can be cut closely (3/4 inch). When water is denied during summer shortage, the turf will carry through and still provide a good playing surface, ready to bounce back when water again is supplied. □