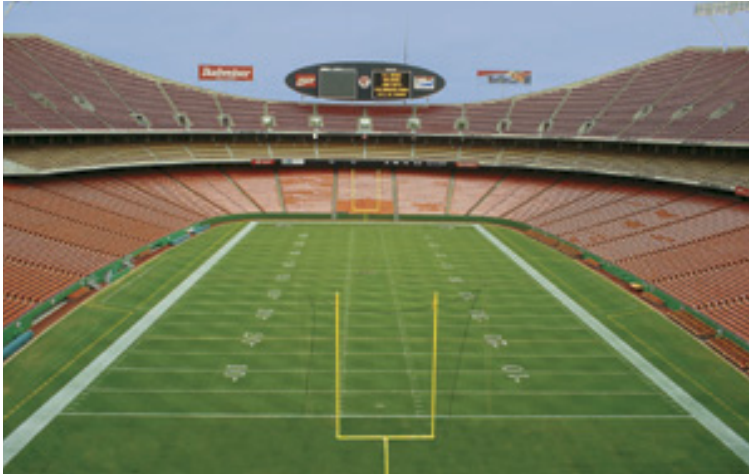


Turf-Type Tall Fescue Management



If you read all the advertisements that have recently appeared, you would think the turf-type tall fescues are miracle grasses. Indeed, for many situations they may perform miracles, being cool season turfgrasses that are very heat, drought and wear tolerant. Tall fescues are the most drought resistant cool season turfgrass species, primarily due to a very well developed root system that can reach depths greater than six feet. This root system allows the plant access to larger ground water reserves. In fact, studies have shown that turf-type tall fescues have better-developed root systems than the older forage types. Often tall fescues are the only cool season turfgrass species that will remain green the entire growing season on a limited water budget. In addition, tall fescues often perform well in shaded areas, where they actually develop a finer texture. Tall fescues can provide an excellent turf for home lawns, athletic fields, golf course roughs and other high traffic areas. However, as with all grasses, they have specific maintenance requirements to obtain the best possible turf.

Adaptation

Tall fescues are best adapted to areas of the transitional zones, between the cool humid and warm humid regions of the United States. Tall fescue will also perform well in the arid regions of the Western United States provided water is available. Increasingly, the turf-types are being utilized in additional area where their drought resistance is an advantage, alone or in combination with Kentucky bluegrass. Tall fescues are adapted to a wide variety of soil conditions, from droughty soils to wet. They even can tolerate periods of submersion. Although they will grow on infertile soils, tall fescue does respond to fertilization. Tall fescues can also tolerate pH ranges from 4.7 to 8.5, but does best in soils with a pH ranging from 5.5 to 6.5.

Seeding Rates

The seeding rate for turf-type tall fescues should range between 4 to 8 pounds per 1000 sq. ft. depending on environmental and site conditions at the time of planting. The lower end of the seeding range will result in slower establishment but will provide a dense, fine textured turf that is more vigorous due to an increase in tillering of individual plants. Higher seeding rates (12 lbs.) should be avoided with turf-type tall fescues because there will be less tillering due to excessive competition. The resulting plants will be weaker and thin out under adverse conditions. Since tall fescues are a bunch type grass, over-seeding may be required at rates of 2-3 pounds per 1000 sq. ft. annually. The idea is to keep the density of the stand high so the texture will remain fine; as sensitivity decreases, the leaf texture often becomes coarser. However, recent emphasis in breeding has been towards finer texture and increased tillering so over-seeding may be less necessary with the newest varieties.

Dwarf Types

Dwarf varieties of turf-type tall fescue have a slower rate of leaf growth. However, they will produce more tillers per unit area than do non-dwarf varieties, leading to a denser turf. The dwarf types may possess a finer leaf texture and a more prostrate growth habit than do non-dwarf varieties. The degree of dwarfness is related to the genetic inheritance of a variety. This factor will also influence the rate of establishment. The more dwarf the variety, the slower the establishment will be. The wear tolerance and recuperative potential may also be reduced in the more dwarfed varieties. Due to the higher density achieved with the dwarf varieties; there may be more incidence of disease such as brown patch, fusarium blight and pythium.

Mowing Heights

Turf-type tall fescues look the best when cut at 1.0 to 2.5 inches. Lower heights will result in thin turf. If persistent cutting occurs below the recommended height, there will be a gradual fading out of the tall fescue. This will leave areas open for the invasion of other weedy grasses and the tall fescue will develop into a coarse bladed turf with a weedy appearance. Initial trials suggest some of the newest varieties may tolerate a closer cut if other environmental factors are at optimum.

Specifications for Turf-Type Tall Fescues

Seeding rates:

Number of seeds per pound	200,000
New seeding	4-8 lbs./1000 ft. ²
Annual over-seeding	2-3 lbs./1000 ft. ²
Optimum temperature for germination	68-86° F

Fertility:

Early spring	3/4-1 lb. N/1000 ft. ²
Early summer	3/4-1 lb. N/1000 ft. ²

Mowing height:

Height maintenance	1.0 inches
Reduced maintenance	2.5 inches

Disease resistance:

Crown Rust, Brown Patch, Net Blotch, Stem Rust

Insect resistance:

(Endophyte-enhanced varieties) chinch bugs, armyworms, billbugs, sod webworms, aphids

Blends:

Use up to 3 improved varieties

Mixtures:

Can be mixed with up to 15% Kentucky bluegrass of a compatible growth habit and leaf texture