

HORTICULTURAL

MU Guide

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Cool-Season Grass Cultivars For Athletic Fields

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There is no substitute for adequate irrigation of athletic fields. Irrigation should be the number one priority when upgrading playing surfaces. Benefits from turfgrass selection and management will only be realized when irrigation is available.

The next line of defense against compacted fields is a healthy mat of actively growing turf that will prevent hard and unsafe conditions. Select traffic-tolerant cultivars when you are establishing or renovating the playing field. Cultivars that wear down slower and recover faster will make turf maintenance practices such as coring and fertilizing more successful. Choosing the right grass will protect the field from the players and also will safeguard the players

from a slick, muddy and often rock-hard playing surface.

The cultivars listed in Table 1 were ranked according to either quality or wear tolerance, or both, as determined in the National Turfgrass Evaluation Program.

Many of the athletic fields in Missouri are unirrigated and a misconception has developed that a drought-tolerant species like tall fescue can provide an acceptable playing surface without irrigation. Tall fescue is a bunch grass that will result in a clumpy, uneven surface when it is left unirrigated and mowed at heights necessary for sports activities. Turf-type tall fescues can be mixed with 5 to 10 percent Kentucky

Table 1. Turf cultivars selected for athletic fields.

Kentucky bluegrass	
Excellent:	Abbey, Asset, A-34, Blackstone, BlueStar, Challenger, Chateau, Coventry, Fairfax, Glade, Julia, Livingston, Marquis, Midnight, Moonlight, Nuglade, Preakness, Quantum Leap, Unique
Good:	America, Argyle, Bartitia, Blacksburg, Boutique, Brilliant, Bristol, Brooklawn, Classic, Denim, Freedom, Huntsville, Langara, Limousine, Nassau, North Star, Nublue, Nustar, Rugby II
Fair:	Able I, Baron, Barzan, Georgetown, Gnome, Haga, Kelly, Liberty, Merit, Princeton, Ram-1, Victa
Tall fescue	
Excellent:	Apache II, Austin, Barlexas II, Bonanza, Chieftan II, Crossfire II, Finelawn 88, Finelawn Petite, Guardian, Jaguar II, Jaguar III, Masterpiece, Millenium, Pixie, Plantation, Rebel Jr., Rebel III, Rembrandt, Shenandoah, SR 8200, Tomahawk, Trailblazer II, Vegas
Good:	Bonanza II, Bonsai 2000, Cochise, Coronado Gold, Endeavor, Falcon III, Grande, Hounddog V, Legend, Olympic Gold, Phoenix, SR 8300, Tarheel, Titan 2, Watchdog, Wolfpack
Fair:	Adventure II, Avanti, Ky-31, Monarch, Rebel 3D, Safari, Southern Choice
Perennial ryegrass	
Excellent:	APM, Brightstar II, Calypso II, Catalina, Citation III, Imagine, Omni, Pennant II, Prelude III, Riviera II, Saturn II, Secretariat, SR 4100, SR 4200
Good:	Allaire II, Blackhawk, Charger II, Cowboy II, Derby Supreme, Manhattan 3, Morning Star, Omega 2, Palmer III, Paragon, Pizzaz, Precision, Repell II, Rodeo II, Yorktown III
Fair:	Advantage, Cutter, Quickstart, Saturn

bluegrass to produce a smoother playing surface.

Seeding rates can vary according to field conditions. Normal seeding rates are used under ideal conditions, such as a proper seedbed, adequate watering and a one-year growing period without traffic. Higher seeding rates typically are used when quick cover is needed and the fields will be put in use while the turf is still immature (see Table 2).

Table 2. Normal and high seeding rates for various turfgrasses and turfgrass mixes used in athletic fields.

	Normal seeding rate "ideal conditions" (lb/1,000 sq ft)	High seeding rate "quick cover" (lb/1,000 sq ft)
Kentucky bluegrass	1.5 to 2.0	2.5 to 3.5
Perennial ryegrass	6 to 9	10 to 15
Tall fescue	6 to 9	10 to 15
80% Kentucky bluegrass 20% Perennial ryegrass	2.0 to 2.5	3.0 to 4.0
90% Tall fescue, 10% Kentucky bluegrass	6 to 9	10 to 15

Slit or drill seeding is preferred for renovating sports fields, because germination is improved and the crowns of seedlings are somewhat protected from traffic. Broadcast seeding in combination with coring, slicing and topdressing is also an acceptable practice for renovating worn fields. Seed that is broadcast and not firmly planted below the surface may be able to establish, but the seedlings are easily dislodged and will quickly decline when they are exposed to athletic traffic.

Mature stands of the top-performing grasses, combined with irrigation, proper turf maintenance and traffic control, result in safer and more attractive playing surfaces.

The list of cultivars in this publication is not meant to be all-inclusive. Cultivars other than those listed may also be suitable for use in Missouri.

