

MANAGEMENT OF TALL FESCUE LAWNS IN TEXAS

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Tall fescue *Festuca arundinacea* is a cool season, perennial, bunch-type grass which produces vigorous growth during the fall and spring. Tall fescue has a very extensive, fibrous root system which helps withstand drought conditions. While tall fescue has short rhizomes, it functions as a bunch-type grass with weak sod-forming characteristics. Tall fescue remains green year around with adequate water but produces very little growth during periods of extreme cold or heat. Wear and shade tolerance of tall fescue are good. Under Texas conditions tall fescue performs better in moderate shade than in direct sunlight. Tall fescue does particularly well when grown under deciduous trees. The shade protects the grass in the hot summer months while the grass receives ample sunlight for growth in late fall and early spring. Tall fescue produces most of its growth in the spring and fall when temperatures are moderate and moisture is adequate.

Tall fescue is best adapted to the "transitional zone" of the U. S. where summers are often too hot for good growth of other cool season grasses and the winters too cold for warm season grass survival. The North Texas area lies on the very southern edge of this zone. Limit tall fescue to the northern and extreme western areas of the state.

Traditionally, tall fescue has been suggested for use on athletic fields, airports, roadsides and limited use areas where erosion control and low maintenance were primary concerns.

Several tall fescue varieties are available for use on lawns. Most were originally developed and promoted for pasture use. Two of the more popular varieties now being used in North Texas are Kentucky 31 and Kenwell. Kentucky 31 has shown superiority for heat and drought tolerance. Do not confuse Kentucky 31 tall fescue with Kentucky bluegrass.

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ESTABLISHMENT OF TALL FESCUE

Seedbed Preparation. A key factor in successful establishment of a lawn is proper site and soil preparation. First, remove all debris from the area such as rocks, bottles, large roots and especially tree stumps which eventually decay and leave depressions in the lawn.

Using soil test recommendations, apply starter fertilizer to the seedbed before planting. Apply enough fertilizer to supply 1.0 to 1.5 pounds actual nitrogen per 1,000 square feet of lawn area.

Then, rototill the soil thoroughly to a depth of 4 to 6 inches. If any amendments are to be added for soil improvement, mix them with the existing soil at this time. Following rototilling, drag the lawn to insure a level surface which slopes away from the house.

Seeding. For North Texas, an early fall seeding (September 1 to October 15) is recommended. Tall fescue can be planted in early spring (March to April), but there is a risk of losing some of the young seedlings during the hot summer months. Do not seed a moderately shaded area in the spring. A spring planting does not allow the fescue plant enough time to develop the deep, fibrous root system needed to survive the hot summer months. Also, tall fescue planted in the spring is highly susceptible to *Fusarium* blight.

Seed the lawn at 8 to 10 pounds per 1,000 square feet using a mechanical spreader. For best results, divide the seed lot in half and apply in two directions. After the seeds are applied, rake them into the soil to a shallow depth of 0.5 inch, and then roll to firm the seedbed. Application of a straw mulch is beneficial especially on slopes. Mulching helps hold the soil in place and retain moisture around the seed.

Seedling Care. Water the lawn lightly each day for the first 3 weeks after planting to prevent drying of seeds and seedlings. Decrease the irrigation frequency and increase the amount of water per application as young

seedlings become established. Begin mowing at a height of 2 inches when young seedlings reach a height of 3 inches. Mow often enough so that the height of the grass does not exceed 3 inches.

Approximately 4 weeks after seeding apply nitrogen in the form of ammonium sulfate, ammonium nitrate or urea at a rate of 1 pound per 1,000 square feet.

MAINTENANCE OF TALL FESCUE

Fertilization. Although tall fescue tolerates low fertility, it responds to adequate fertilization, particularly nitrogen. Three to 5 pounds of actual nitrogen per 1,000 square feet per year is ample nitrogen for tall fescue. Apply a complete fertilizer according to soil test recommendations in the fall (September) and late spring (May) at a rate which supplies 1 to 1.5 pounds of actual nitrogen per 1,000 square feet. Apply nitrogen at a rate of 1 pound actual nitrogen per 1,000 square feet in November and late February to early March when grass is actively growing. A summer application of 0.5 pounds of actual nitrogen per 1,000 square feet improves the color of the lawn. However, avoid over stimulation of the turf in summer months from excessive fertilization as this only adds to heat and drought stress problems. In shaded areas avoid summer applications of nitrogen.

Mowing. Mow tall fescue at 2 inches during the fall and spring. Raise to 3 inches in heavy shade and during the heat of the summer months. Use a sharp rotary mower and never remove more than one third of the leaf material per mowing. During peak spring and fall growth periods this requires mowing at 3- to 5-day intervals. If the lawn is mowed at the proper *height* and *frequency*, it is not necessary to remove grass clippings.

Irrigation. Proper watering is very important to the survival of tall fescue in North Texas. Do not apply supplemental irrigation until the grass shows signs of needing water (wilting or rolling leaves). Then, apply enough water to wet the soil to a depth of 4 to 6 inches. If water run-off occurs before the soil is moistened to a sufficient depth, turn the sprinkler off and allow the water to percolate down into the soil.

Then turn sprinkler back on at a later time. Repeat this cycle until the soil is sufficiently moistened. Tall fescue requires frequent watering during most summer months. This is one of the major disadvantages to growing tall fescue in this region.

Diseases. Tall fescue is fairly tolerant to most turfgrass diseases. However, *Fusarium* blight can cause extensive damage to young fescue lawns, particularly those planted in the spring. As the lawn matures, it appears less susceptible to attack by *Fusarium* blight. Leaf spot (*Helminthosporium*) and brown patch (*Rhizoctonia*) can cause problems on older fescue lawns. Once the disease is properly identified, treat the lawn with recommended fungicides (see L-732, *Control of Diseases in the Home Lawn*).

Insects. Major insect problems include armyworms, cutworms and white grubs. White grubs have been particularly damaging to lawns in North Texas. If grubs are found, treat with diazinon at recommended rates (see L-1131, *White Grubs in Texas*). Armyworms and cutworms can be controlled with carbaryl, diazinon or Dursban.

Renovation. Most tall fescue lawns eventually become thin or bare in spots. This condition may be caused by diseases, insects or hot, dry summer conditions. A thinned tall fescue lawn forms clumps and becomes unsightly. To prevent this from occurring, it's usually necessary to overseed fescue lawns in the fall. This must be done every 1 to 3 years, depending on the condition of the lawn.

Mow the lawn at a 1- to 1½-inch height before applying seeds. Rake the lawn to remove grass clippings and plant debris. Apply starter fertilizer before seeding. Usually 2 to 3 pounds of seeds per 1,000 square feet are ample to rejuvenate the lawn. After the seeds are planted keep the soil moist the first 2 to 3 weeks.

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