

# ESTABLISHING AND MAINTAINING FESCUES FOR LOW MAINTENANCE SITES



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Traditional sites for growing low-maintenance grasses have included roadsides and highway medians, cemeteries, and large grassy areas in parks and military installations. Low maintenance grasses that retain density and some aesthetic qualities also would be suitable for golf course roughs and some lawn situations.

While zoysiagrass is potentially the best suited grass for most low maintenance situations in Maryland, this species is slow and expensive to establish. Among cool-season grasses, fescue species are the most promising grasses for use as low maintenance turfs.

There are two groups of fescue considered here: (1) tall fescue; and (2) fine leaf fescues which include creeping red, Chewings, hard and sheep fescues. Tall fescue leaves are more coarse-textured than Kentucky bluegrass or fine leaf fescues, but this grass is highly recommended for lawns and athletic fields in Maryland.

The use of fine leaf fescues as described in this publication, however, should not be considered for athletic fields, intermediate roughs or other sites that will receive large amounts of traffic from people or vehicles. Fine leaf fescues are best suited to shady lawns or for large grassy areas which do not receive heavy traffic and where a lower level of management is desired.

Tall fescue is among the more desirable grasses for Maryland lawns. Improved turf-type tall fescue cultivars are darker green, finer textured and exhibit improved persistence under low mowing. Compared to Kentucky bluegrass, tall fescue requires less water, fertilizer, and pesticide inputs to maintain a good quality groundcover.

Tall fescue will persist under relatively low maintenance, but it is a fast growing species that may require frequent mowing. Without routine fertility inputs, tall fescue will lose density, lose its fine texture, and becomes prone to weed invasion.

Fine leaf fescues, such as hard, creeping red, Chewings and sheep fescue, require less mowing than tall fescue, are less prone to dormancy during severe droughts, maintain density under low fertility, and have a better combination of tolerance to shade and acid soils than most tall fescue cultivars.



Sites that are difficult to mow, or which tend to receive little fertilizer or other maintenance are ideal for fescues.

## KEY POINTS

Low-maintenance fescues are appropriate for use in sites that receive infrequent mowing and light foot traffic.

Refer to TT-77 for information about recommended turfgrass cultivars and seed mixtures in Maryland

Fescue establishment is best when seed is planted between August and September.

Low maintenance fescues should be mowed at a height between 3 to 5 inches

Fine leaf fescues may be severely damaged if mowed when under heat or drought stress

Fine leaf fescues may be allowed to develop seedheads without loss of turf quality if the brown seedheads are mowed off promptly

Established tall fescue requires 1-2 lbs. of nitrogen fertilizer per year, but fine fescue turf requires 1-2 lbs every 2-3 years

Fine leaf fescues, however, do not tolerate low mowing in sunny sites and they are prone to mechanical injury mowed during hot and dry periods of summer. Chewings fescue normally outperforms creeping red fescue in full sun, but creeping red fescue has better recuperative potential due to its rhizomatous growth habit.

Both Chewings and creeping red fescues generally provide inferior quality under low maintenance in full sun when compared to recommended cultivars of tall fescue, hard fescue and sheep fescue. Regardless, creeping red fescue is highly regarded for its recuperative potential and should be considered in seed mixtures and blends.

The appropriate description of low maintenance turf for this publication would include the following cultural factors: no supplemental irrigation; minimal fertilizer inputs; a mowing height above 2.5 inches; mowing frequency of 10 to 14 times annually without clipping removal; and the use of broadleaf herbicides on an as-needed basis.

**Seed Mixtures:** While tall fescue, hard and sheep fescue monostands have been shown to provide acceptable density and quality under low maintenance in Maryland, a mixture of species is recommended to provide additional genetic diversity to the stand.

Noted below are some mixtures that have performed well under low maintenance in Maryland. Use only cultivars recommended in TT-77 'Turfgrass Cultivar Recommendations For Certified Sod and Professional Seed Mixtures In Maryland'.

1. Tall fescue (a blend of 2 or more cultivars) @ 90% by weight + 10% of either hard fescue, creeping red fescue or Kentucky bluegrass
2. Hard fescue (1 or a blend of 2 cultivars) @ 90% by weight + 10% of either sheep fescue or creeping red fescue
3. Sheep fescue @ 90% by weight + 10% of either hard fescue or creeping red fescue

The seeding rate for all fescue species is 4 to 6 pounds of seed per 1000ft<sup>2</sup> of area, with the higher rate suggested for quicker establishment. The germination of fine leaf fescue seed declines rapidly with age, and germination may be nearly 0% for seed that is two or more years in age.

For the fine leaf fescues it is particularly important to use seed that is 18 months or less in age. Because the seed label may not provide the harvest date of seed, it is prudent to use Maryland Certified Seed that has been tested recently for germination when seeding large areas.

**Establishment:** For best results, seed fescues between late August and late September. Do not seed after 15 October. Spring seeding (i.e., March 15 to May 15) is likely to produce an inferior turf; whereas, summer seeding should be avoided altogether. The soil should be graded, tilled, firmed and a starter fertilizer (nitrogen + phosphorus + potassium) raked-in prior to seeding. It is very important to lightly roll the site after the seed has been raked into the soil. Firming the seedbed by rolling enhances germination rate and improves uniformity of coverage.

All fescue species will germinate in 7 to 10 days in September if there is sufficient rain or water applied from irrigation. Tall fescue initially is much more vigorous. Conversely, the fine leaf fescues seldom tiller or become dense before spring.

Tall fescue seeded in September will require several mowings before winter, but the fine leaf fescues may not require mowing until the following May. It is imperative that broadleaf weeds be removed either by hand pulling or by herbicides between May and early June following a fall seeding.

Broadleaf weeds will compete effectively with fall seeded stands and reduce turf density, while at the same time their rapid growth will increase mowing frequency. All broadleaf herbicides will cause temporary yellowing of the fine leaf fescues.

See TT-79 'Broadleaf Weed Control in Established Lawns' for more specific information regarding herbicide selection and use.

**Mowing:** To retain turf density and to retard weed invasion, the fescues should be mowed no lower than 2.5 inches in height. For best quality, fine leaf fescues should be mowed two to three times monthly during spring and fall of the first year, and less frequently during the summer. In subsequent years, mowing frequency will decline, assuming weeds do not become excessive.

Tall fescue generally requires more frequent mowing, particularly during periods of wet weather. For lawns and athletic fields, tall fescue likely will require weekly mowing, except during periods of heat and drought stress.

Never mow fine leaf fescues (i.e., hard, sheep, creeping red or Chewings) in summer during conditions of heat or drought stress. For stands dominated by the fine leaf fescues, a minimum height of cut of 2.5 inches is recommended, but a 3.5 inch or higher height of cut is preferred. Mowing may be as infrequent as once or twice per month spring and fall, and once monthly in summer.

Fine leaf fescues may be allowed to produce their aesthetic seedheads in the spring. Once seed-heads turn brown they should be removed by setting the mower deck 4 to 5 inches above the soil surface. Regardless of cutting height, always wait until it rains before mowing fine leaf fescues in the summertime.

Mowing fine leaf fescues when it is hot or when soils are dry will cause extensive injury or death of plants, and therefore a marked reduction in turf density. This injury will occur when soils are dry, despite no visual signs of wilt or drought stress in the fine leaf fescues.

Tall fescue is not severely injured by mowing under these summer conditions, but even tall fescue should not be mowed when stressed by heat and/or drought. Mowing high and infrequently in summer is the key cultural consideration for maintaining good quality fine leaf fescue stands under low maintenance. Furthermore, mowing in a 3.5 to 5.0 height of cut range will retard annual grass weed (i.e., crabgrass, foxtail, goosegrass) encroachment for many years.

**Fertility and Soil pH:** A starter fertilizer that contains nitrogen (N), phosphorus (P), and potassium (K) should be applied at the time of seeding or shortly after seedling emergence. A second application of a starter fertilizer may be needed prior to winter if seedlings appear stunted, yellow or purple. Thereafter, fertilizer applications to fine leaf fescues can be skipped for two or more years. In general, 1 to 2 lb of nitrogen per 1000ft<sup>2</sup> would be sufficient for fine leaf fescues every two to three years in most soils.

In sandy soils, however, an annual application of a complete fertilizer (i.e., N + P + K) may be required for fine leaf fescues. For tall fescue lawns and athletic fields, 2 to 3 lb nitrogen per 1000ft<sup>2</sup> per year will be needed to maintain density and aesthetic quality.

The fine leaf fescues will develop thatch and acquire a puffy quality over time, making them unsuitable turfs for athletic fields or intermediate golf course roughs. Conversely, tall fescue does not develop a significant thatch layer.

Frequent nitrogen applications will promote thatch development in fine leaf fescue. Hence, it is important to restrict nitrogen applications as long as fine leaf fescues display good density. All fescues will tolerate and maintain good cover at soil pH=s as low as 5.5. Liming soils when pH=s 5.5, however, is recommended annually until a pH of about 6.0 is achieved.

**Herbicides:** Broadleaf weeds, if present, must be eliminated in the spring following a fall seeding. Thereafter, broadleaf weed control only may be needed once a year or once every other year. Spot applications

of broadleaf herbicides can delay the need for a blanket application for many years. Annual grass weeds should not be a problem, unless turf density is poor due to low mowing, or damage from disease or insect pests.

Several preemergence herbicides can be injurious to fine leaf fescues including oxadiazon (Ronstar™) and benefin + trifluralin (Team™). Dithiopyr (Dimension™), pendimethalin (Pre-M™, Pendulum™, others) and prodiamine (Barricade™) are safe to apply to fine leaf fescues mowed above 2.5 inches. Tall fescue will tolerate all commercial preemergence herbicides labelled for cool-season grasses.

See TT-43 'Herbicides for Crabgrass and Goosegrass Control In Turf' for more information regarding annual grass weed control.

**Diseases:** Red thread, Drechslera leaf spot or net-blotch, dollar spot and summer patch are the major diseases of fine leaf fescues. Creeping red fescue is more prone to disease than hard, sheep or Chewings fescues. Summer patch is the most destructive disease of the fine leaf fescues (see TT-18 "Summer Patch Disease of Lawn Grasses").

Summer patch appears as tan colored, circular areas of dead turf developing from July to September. Severely blighted areas may require overseeding in September. Brown patch is the most common disease of tall fescue. While brown patch seldom kills tall fescue, it severely reduces stand density. Brown patch is a major reason for mixing of fine leaf fescue with a tall fescue for low maintenance sites.

Under low maintenance and high mowing, fungicides generally are not required for disease management in the fescues. It is important to note, however, that the fungicide chlorothalonil (Daconil™, Concode™, Echo™, Manicure™, Thalonil™) is phytotoxic to some cultivars of fine leaf fescues, and therefore its use must be avoided where these grasses are grown.

See TT-32 'Diagnosing Common Lawn And Athletic Field Diseases' and TT-38 'Maryland Turfgrass Disease Control Recommendations'.

**Insect Pests:** White grubs are potentially the most destructive pest problem for the fescues. In most years, the fine leaf fescues and tall fescue will tolerate root feeding by moderate grub populations. Large areas, however, may be devastated in August and September by white grubs in some years and therefore periodic overseeding or the application of an insecticide may become necessary. Sod webworm also can be damaging to fine leaf fescues.

**Summary of important points in establishing and maintaining fescues for low maintenance sites.**

1. Plant seed between late August and late September.
2. Be sure to use seed recently tested for percent germination.
3. Use a starter fertilizer and bring seed into firm contact with soil by rolling.
4. Control broadleaf weeds in the spring following a fall seeding.
5. Spot-treat pockets of developing broadleaf weeds in spring or fall in subsequent years.
6. Mow the turf above 2.5 inches in height; preferably mow to a height of 3 to 5 inches.
7. Mow-off the brown, mature fine leaf fescue seedheads before summer.
8. Never mow fine leaf fescue in summer when soil is dry or when fescues are showing signs of heat and/or drought stress.
9. Avoid nitrogen fertility as long as fine leaf fescue stands exhibit good density. When nutrients are needed, apply a complete fertilizer in the fall. Avoid using more than 2.0 lb of nitrogen per 1000ft<sup>2</sup> in any year on fine leaf fescues.
10. Tall fescue requires an annual application of nitrogen (2-3 lb nitrogen per 1000ft<sup>2</sup>) to maintain a dense, aesthetic cover.
11. Monitor soil pH every 2 to 3 years and apply limestone if pH falls below 5.5.

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