

Fine Fescue Management



Environmental concerns are becoming increasingly important in the choice of grass species for many turf areas. As a group the fine leafed fescues have many characteristics that make them environmental grasses. The fine fescues are excellent choices for low maintenance sites, even as a part of showcase turf areas, due to their reduced water requirements, low nitrogen and reduced growth rates. They typically persist in soils that are droughty, acid and infertile, if the soils are properly drained. Fine fescues also perform well in the shade and with tree root competition, so they can be utilized in areas where many other turfgrasses will not persist. The general term fine fescue refers to a group of species and sub-species that are all leafy and low-growing with fine, bristle-like leaves. The five primary types used for turf, Chewings, strong creeping red, slender creeping red, hard and sheeps or blue fescue, all have unique strengths, weaknesses and preferred uses. Areas such as golf course roughs, slopes, and bunker edges, parks, home lawns, roadsides and reclamation areas can all benefit from the use of improved fine fescues for high quality, low maintenance turf.

Fertility

The fine fescues perform best with minimal fertilizations. In fact, utilization of high nitrogen levels during hot weather can significantly damage a fine fescue stand. The creeping red and Chewings fescues perform best at slightly higher fertility levels than the hard or sheeps fescues. The former should receive between 1.5 to 2 pounds per 1000 sq. ft. annually split between fall and early spring applications. Sheeps fescue can be grown with no or minimal levels of fertilization. The hard fescues perform best with lower levels than the Chewings fescues, 1–1.5 lbs/1000 sq ft per year, and can persist with no fertilization. In most locations fall fertilization of hard and sheeps fescues is preferred.

Adaptation

The fine fescues have traditionally been utilized for turf in areas with cooler summers. Breeding has centered around improving the heat tolerance and disease and insect resistance of the newest varieties, so they can now be used in many additional sites. The hard and sheeps fescues both have higher wear and drought tolerance than the Chewings or red fescues and will perform better under very low maintenance. The hard and sheeps or blue fescues also have better resistance to some diseases including red thread, net blotch and anthracnose than Chewings or red fescues. Mixtures of hard and sheeps or blue fescue create a turf able to persist under very adverse conditions with little inputs. Chewings fescues tolerate closer mowing and form a very fine, dense turf, so they are better adapted for use in fairways or greens. The improved strong creeping red fescues have spreading rhizomes and good shade tolerance so they work well in blends with compatible Kentucky bluegrasses. Generally the hard and sheeps or blue fescues have good wear tolerance but if damaged their recuperative potential is low.

Adaptation

The seeding rate for the fine fescues should range between 4–5 lbs/1000 sq ft. Establishment is rapid and seedling vigor is high for the creeping red and Chewings fescues but slower for the hard and sheeps or blue fescues, perhaps due to their reduced rate of vertical growth. The creeping red fescues can fill in a thin stand by rhizome formation but the other species are bunchtype grasses and may require overseeding if injury occurs.

Mowing Heights

Creeping Red fescues prefer to be cut at 2.5 inches but maintain high quality down to 0.5 inches when used on fairways. On putting greens in blends, Chewings fescues will perform well at even lower heights. Due to higher crown, the hard and sheeps fescues should not be cut below 1 inch. Hard and sheeps fescues have a reduced rate of growth so require infrequent mowing. The Chewings and red fescues may require slightly more frequent mowing, but still significantly less than other turf species. Dwarf-types are being developed in many of these species that will require even less mowing. On low maintenance sites, one mowing a year in late spring or early summer to remove seedheads may be all that is required.

Watering

Fine fescues can survive in more northern areas with limited or no watering, although they may go dormant. Their water use rate is much lower than many other species and they can maintain acceptable turf quality and leaf growth at much lower soil water potentials than other cool season grasses. Depending on the location and rainfall pattern, occasional watering may be necessary to keep the grass growing. Over-watering fine fescues can damage the turf by making it more susceptible to diseases and less drought tolerant.

Endophytes for Insect Resistance

Beneficial endophytes that provide resistance to many insects and increase the stress tolerance have now been identified in fine fescues. High endophyte levels can be found in SR 3000 hard fescue, SR 5000 and Longfellow Chewings fescues and SR 3200 blue fescue. They are currently being incorporated into improved breeding lines of strong creeping red fescues. Utilizing varieties high in endophyte reduces the maintenance requirements of fine fescues even more.