

The Potential of Tall Fescue in Minnesota

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When it was first introduced into this country, tall fescue was used as a forage grass for livestock. An early variety used for turf beginning in the 1940s and 1950s, was Kentucky-31, which was quite coarse-textured and light in green in color, so it did not produce an attractive turf. However, this variety did produce roots deep in the soil profile, a characteristic which makes tall fescue very useful as a lower-input turfgrass. The first improved varieties of tall fescue, 'Falcon' and 'Rebel', were released in the early 1980s and since that time, hundreds of varieties have been developed that have been improvements on the earliest types. Current varieties of the species are used in home lawns, athletic fields, golf courses and parks throughout much of the United States.

Tall fescue can perform better than most cool-season species during drought not because it doesn't need as much water, but because it can reach water deeper in the soil. For this reason, tall fescue lawns can be watered less frequently than lawns that contain other cool-season species. The species is also very tolerant of wear and there are very few diseases that are a major problem in Minnesota. Brown patch disease is a problem on tall fescue during periods of high temperatures and high humidity; in the warm-humid southeast U.S. and the transition zone, brown patch can be devastating to tall fescue. In Minnesota, conditions for brown patch typically only last for a few days before the disease becomes less active and the plants recover. The primary diseases of tall fescue when grown in Minnesota are the snow molds, and most cultivars are affected in most years. Fortunately, the tall fescue turf typically recovers fully from this disease.

Traditionally, tall fescue has been thought by most Minnesota turfgrass managers to lack sufficient winter hardiness. Research at the University of Minnesota has shown that the likely reason for tall fescue death during harsh winters is prolonged periods of ice cover. In areas that do not experience ice cover (well drained or sloped sites), winter hardiness does not seem to be a problem. Another possible issue with this species is that turf stands can be damaged by extremely low temperatures if they are not well-established prior to the onset of winter. We are currently attempting to more fully understand this situation through research trials in St. Paul and at the Minnesota Landscape Arboretum.

Tall fescue has a number of traits that make it useful for use as a turfgrass in Minnesota, and not surprisingly, we have seen an increase in tall fescue use in recent years. The availability of aesthetically-pleasing cultivars, high levels of disease resistance, excellent wear tolerance, and adaptation to low-irrigation environments, make tall fescue an excellent choice for turf areas in Minnesota.