
Turfgrass Portraits II:

Fine Fescues

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This is the second in a series of nine articles on basic traits and maintenance procedures for common turfgrasses. Next month author Schery discusses bentgrasses.

FINE fescues, the red fescue group, constitute an "all-northern" assemblage of forms and varieties. Most botanical varieties were named in Europe, including the important commercial "Chewings," *F. rubra commutata*. Hitchcock (*Manual of the Grasses of the United States*) shows fine fescues in all except a few prairie and gulf states. But they are most at home in the more northerly regions, volunteering widely in western Canada. "Meadows, hills, bogs and marshes in the cooler parts of the Northern Hemisphere, extending south—to the San Bernardino Mountains—New Mexico—the Allegheny Mountains and Atlantic coastal marshes to Georgia."

Chewings fescue was for many years cultivated in New Zealand, and imported into the United States. Poor production or shipping conditions during the long boat haul often resulted in inferior seed, and today main source of Chewings is from Oregon, of top quality.

The fine fescues have many remarkable attributes that make them first-rate lawngrasses, es-

pecially useful when combined in seed mixtures with Kentucky bluegrass. In the lawn, fine fescues are of delicate texture, dense, dark green. The tightly clustered culms (tillers) bear thin, somewhat wiry basal leaves, which tend to curl (the margins roll in) during dry weather. The loosely fibrous, reddish sheaths are persistent near the crown, a good distinguishing feature.

To a greater or lesser extent these fescues spread by rhizomes, although not so notably as does Kentucky bluegrass, the extent depending partly upon variety and partly upon cultural conditions. Seedheads are never much of a problem on densely seeded lawns regularly mowed.

Except that their lasting qualities are poor in hot climates, fine fescues are exceedingly well adapted. They thrive on everything from peaty, boggy soils to dry, sandy, or rocky environments. As to fertility, they can take it or leave it. While fine fescues have better appearance when fertilized, seldom is it necessary to use more than 2- or 3-lbs. elemental nitrogen/M/year with them,—considerably less than voracious species demand. In a seed mixture they are good insurance for the less intensively tended lawns. This exceptional hardihood equips fine fescues to survive in difficult locations—sandy, wind-swept spots, for example; or dry, sterile parts of the lawn; and in the shade, in competition with tree roots, where the going is too tough for other grasses.

Obviously, fine fescues are excellent low-maintenance grasses, self-sufficient, recuperative.

Fine fescue seed is of medium size, small enough to be a bargain by the pound (over a half-million seeds to the pound), yet large enough to pack sufficient food for seedling vigor.

In seed mixtures fine fescues make green cover relatively quickly; the need for quick-sprouting impermanent nursegrasses is accordingly diminished.

Fine fescues are similar in appearance to Kentucky bluegrass,

these two important species blending well together, profiting from the same general care. Fescue loss, when it occurs, is usually in hot weather, especially if the turf is succulent from generous nitrogen fertilization. But spring leaf spot that so besets bluegrass is not so serious on fescue, a good argument for fine fescue in a bluegrass blend. Nor are the fine fescues touchy about pesticide treatment at recommended rates, lending themselves to selective elimination of pests. Occasionally there may be temporary browning or thinning, with some of the less usual chemicals such as Zytron.

Growth Pattern

Fescues follow essentially the same growth cycle outlined for Kentucky bluegrass in Portrait No. 1 (*W&T*, July, p. 12). Autumn is most favorable for new plantings, and for improving old turfs. The grass builds its resources during cooler weather, thickens by proliferation of new tillers, and to some extent by rhizome spread. In spring this husbanding of resources pays off in a resplendent, tightly packed sward of new shoots.

Fine fescues mow a little more difficultly as summer comes, the leaf tips tending to fray and develop "gray hair" as they turn more siliceous. Hot weather decimation may also occur, giving an irregular turf with thriving patches alternating with slumping grass. To lessen disease avoid heavy nitrogen fertility in hot weather, and mow considerably high—1½ inches would be the minimum.

Adaptation and Preferences

Fine fescues can be recommended in just about any area where Kentucky bluegrass survives. They might not be quite so tolerant of the wind-swept plains as is bluegrass, although even in eastern Kansas and Nebraska certain selections behave satisfactorily. Unexpectedly, they have been reported to do reasonably well in difficult coastal plain sites as far south as the Carolinas! But fine fescues are at their best in cooler regions, or at higher elevations. They do

make very attractive temporary winter cover in the South, handled then as an annual.

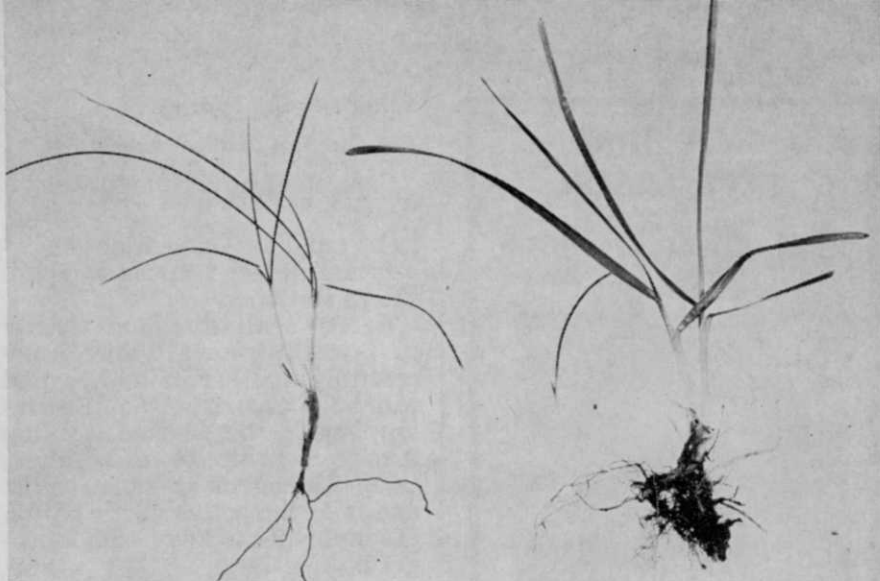
Maintenance requirements with fine fescues are certainly not onerous. Casual fertilization suffices, and fescues may even resent heavy feeding. A pound or so of elemental nitrogen per M is suggested for autumn, an equivalent amount through spring and summer depending upon soil and climate (avoid hot weather feeding). Irrigation is not vital, except on sand or insofar as is needed to maintain the turf attractively green; fescues sit out drought well, revive when conditions turn favorable. Weeds can be removed safely with the 2,4-D family of chemicals, and fine fescues are reasonably tolerant of crabgrass preventers and crabgrass killers.

Propagation

Fescues are propagated by seed. Total disappearance of fine fescue seed in this country nearly matches that of bluegrass, between 20- and 30-million pounds annually. In the last few years about half of this has been imported, chiefly from Canada. Most imported seed is without varietal distinction, marketed as "Creeping Red fescue."

Domestically, a well-managed fine fescue industry has sprung up in the Pacific-Northwest, principally in Oregon. Some Creeping Red fescue is grown, but improved varieties such as Chewings, Illahee, Pennlawn, Rainier and others have been developed. Fields are carefully tended, with weed control, fertilization, hygienic burning, and solicitous harvesting. Seed can usually boast at least 95% purity and 90% germination. Not uncommonly it will be entirely weed-free and over 99% "pure."

Fescue is usually sowed 3 or 4 lbs./M or in seed mixtures (usually with bluegrass) 2-3 lbs./M. The seed handles nicely in modern spreaders, and if the seeding is watered and mulched, fescue plants will be visible in about a week of warm weather. Fine fescue seed may lose germination if not kept dry, especially if it gets hot. For safekeeping



A fine fescue plant (left) and a Kentucky bluegrass plant (right) as they appear in typical mowed turf. Note most of the distinguishing features and similarities discussed in the text here and last month, when Dr. Schery examined the bluegrasses.

storage should not exceed room temperature for a prolonged period.

What to Watch Out For

The usual lawn afflictions bother fine fescue, too. Fortunately, under the "modest living standards" fine fescues generally fall heir to, pests are not apt to be so troublesome as with pampered swards.

Couch lists over 25 diseases that can be found on fine fescues. Of these only summer loss is serious (presumed due chiefly to *Helminthosporium*). *Helminthosporium* ("leaf spot") can be at least partially prevented with conventional fungicides such as Actidione-thiram, Captan, Dyrene, Maneb, Tersan OM, Thimer, etc. Biweekly treatments during summer may help hold turf through its most difficult time of the year. But seldom is the disease so serious on moderately fertilized grass as to cause complete loss. Brown patch, *Pythium*, and snow mold in winter may occasionally cause trouble. Rust is not a problem.

Sod webworms, grubs, and occasionally chinchbugs attack fine fescues. Treatment is conventional,—thorough coverage with an insecticide to which the pest has not developed resistance. Chlorinated hydrocarbons such as chlordane and dieldrin can be soaked into the soil for grub control; in most areas these are still effective against sod webworms, but where not, phospho-

tics such as Diazinon, or newer insecticides such as Sevin, may have to be used. A switching-around with insecticides is especially necessary with chinchbugs, creatures of well-recognized ability to develop resistance.

Varieties

Varietal distinctions between fine fescues are not easily evident. Now one variety, now another, seems to have slightly better quality. Differences are chiefly physiological, for almost all varieties look quite alike in the lawn. Pennlawn was developed at Pennsylvania State University, from the natural crossing of three disease-resistant selections. It is well thought of in the eastern United States. A Minnesota seedhouse has had especially good luck with Rainier. Chewings and Illahee (an Oregon selection) have been long regarded with favor. Olds and Trinity are other names less frequently encountered. At the Lawn Institute we have been hard put to see much difference between varieties, all domestic ones performing ably when properly tended.

In summary, the fine fescues are a basic component of North American fine turf, especially in seed mixtures for home lawns. For difficult and uncertain conditions they have few peers. Summer thinning, and resentment of low cutting, are the only weaknesses of much concern.