WASHINGTON STATE UNIVERSITY EXTENSION

FINE FESCUE FOR HOME LAWNS

Home Garden Series

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Fine Fescue for Home Lawns

General Description

Fine fescues (*Festuca* spp.) are species of flowering plants belonging to the grass family. They are cross-pollinated and propagated from seed. Fescues are some of the most drought and shade tolerant of the cool-season grasses grown in temperate regions.

Turfgrass breeders have divided fine fescues into different types or classifications, each with different attributes, such as creeping habit, quicker germination, or moderate green color. Chewing's fescue (*Festuca rubra* ssp. *commutata*), hard fescue (*Festuca trachyphylla*), sheep fescue (*Festuca ovina*), slender-creeping red fescue (*Festuca rubra* ssp. *littoralis*), and strong-creeping red fescue (*Festuca rubra*. ssp. *rubra*) are the fine-leaf *Festuca* species currently used for turfgrass in the United States.

Most turf-type fine-leaf fescue species are native to North America, including red, hard, and sheep fescues. Fine fescues are moderately wear tolerant and can be used in a mixture with Kentucky bluegrass (*Poa pratensis* L.) or perennial ryegrasses (*Lolium perenne* L.) in moderate traffic areas in Washington.

Fine fescues spread mainly by tillers or primary lateral shoots that begin within the crown. The lateral shoots have very limited internode length. However, the creeping forms do spread by underground rhizomes or lateral stems. This gives them better sod strength and recovery potential over non-creeping species. If fine fescue goes dormant because of drought, it can recover within a week following irrigation, depending upon the cultivated variety.

Adaptation

Fine fescue grows in temperate regions from alpine to polar areas in both hemispheres. The fine fescues are well-adapted to eastern Washington's climate and soils and some to areas of western Washington. When grown in these regions, fine fescues will withstand moderate use, exhibit a medium to dark green color, and will quickly fill in bare spots from seed (Figure 1). It is a grass that can be grown in full sun areas. It can also withstand a medium level of shade where it receives at least five hours of direct sunlight (Figure 2).

Fine fescue cultivars (or cultivated varieties) that are adapted to Washington and have been tested in the National Turfgrass Evaluation Program (NTEP) at the WSU Turfgrass Research Center in Pullman, Washington, can be found at www.ntep.org.

Figure 1. Fine fescue close up for grass identification.


Figure 2. Fine fescue used in a home lawn situation

Fine fescues are well adapted to eastern Washington and some areas of western Washington where the soil is well drained. However, do not plant pure stands of fine fescue for home lawns that will receive heavy foot traffic or play most of the year. This is because many of the fine fescue cultivars are very slow growing at lower soil temperatures, making them slow to recover from wear during the cooler parts of the year. They also have a tendency in wet winter weather to show symptoms of red thread disease and will become thinner until the soil and air temperatures rise above 50°F.

Seeding

Fine fescue is usually planted at 3 lb/1000 sq ft for a home lawn situation whether in eastern or western Washington. Two of the most common mixtures of fine fescue, perennial ryegrass, and Kentucky bluegrass planted for home lawns in eastern Washington are: 40% fine fescues + 20% perennial ryegrass + 40% Kentucky bluegrass, and 60% Kentucky bluegrass + 40% fine fescues.

For western Washington, two common mixtures would be: 60% fine fescue + 20% perennial ryegrass + 20% Kentucky bluegrass, and 90% fine fescues +10% colonial bentgrass.

Turfgrass breeders have divided fine fescues into different types or classifications, which is important since each classification has different attributes, such as creeping habit, quicker germination, or moderate green color. Select at least two different types when making a seed mix to get the best establishment and performance. When fine fescues are selected for a blend, be sure to select cultivars that are well adapted for your specific use and location.

Fertility

A home lawn of fine fescues should receive between 1 and 4 lb of nitrogen (N)/1000 sq ft per year. A 2 lb N per-year rate is for an established lawn where the clippings are left on the lawn when mowing. The 4 lb N per-year rate is for newly established lawns less than one year old, lawns where the clippings are being removed, or lawns growing on sandy soils.

Do not over fertilize fine fescues because they are normally high in lignin (a substance that makes stems tough and woody) and will develop a thick thatch layer within a year. A soil test should be done at least once every 3 years to determine the soil's fertility level and fertilizer needs.

As of January 2013, by law homeowners in Washington must have a soil test performed that shows a phosphorus deficiency to be able to purchase or apply a lawn fertilizer containing phosphorus (see *Phosphorus and Home Lawns: Quick Facts and Recommendations*).

Irrigation

Both plants and soil lose water by evaporation and/or transpiration, also called evapotranspiration (ET). The amount of water that needs to be replaced because of this loss, in order for the fescue to do well, is expressed as a percentage of the ET.

For example, if a turfgrass needs 100% of the water replaced, it would be expressed as 1 ET; 50% replacement needed would be expressed as 0.5 ET.

Fine fescues, in general, can be watered at 0.6 ET and still remain green, even during summer in eastern Washington. To find out ET information for your area, go to WSU's AgWeatherNet.

Although fine fescues can be low to moderate in their water usage, it all depends upon the cultivar, location, and soil type and depth. An example of how to calculate the actual water amount needed is:

- AgWeatherNet shows a weekly ET of 1.5 inches in eastern Washington
- fine fescue can be watered at 0.6 ET
- 0.9 inch of water is needed that week (that is, 1.5 inches × 0.6 = 0.9 inches)

It is best to split the irrigation amount into 2 or 3 application times during the week to reduce the possibility of runoff from the soil.

Fine fescue can also be allowed to go dormant, but it should not have heavy traffic on the area during this time or it will result in damage, loss of cover, or death of the grass.

Mowing Height

Fine fescue home lawns should be mowed at a height between 1.5 to 2.5 inches in eastern Washington and 0.75 to 2 inches in western Washington.

Aeration

Aeration of lawns is the removal of soil cores to relieve soil compaction. For the average home lawn, aeration should be done in either April or May or early September. Removing soil cores allows more oxygen to enter into the root zone, thereby encouraging a healthier root system and a greater capacity to take up water and nutrients.

The lawn should not be under stress at the time of aeration. If a homeowner needs to reseed, they should seed and then allow time for the seed to germinate and fill in bare areas before aerating.

Thatch

Thatch is a layer of decomposing living and dead stems (organic matter) at the soil surface (Figure 3). This layer should be about ½ inch thick. If the layer becomes ¾ to 1 inch thick, it is time to remove some of that organic material from the lawn.

Thatch can also build up if a lawn is fertilized too heavily and/or watered too much or too frequently. Dethatching, or the removal of excess thatch, should be done at the same times as recommended for aeration. If a lawn has both thatch and compacted soil, it would be best to dethatch first and then aerate after the thatch has been removed.

Figure 3. Thatch buildup on fine fescue.

Weeds

Fine fescues can be more sensitive to herbicides than other cool-season grasses, so make sure to READ THE LABEL for specific instructions for rates for use on fine fescue lawns. Refer to the Hortsense website, under Lawn and Turf, for information on products homeowners can use for weed control in lawns.

Weeds, or unwanted plants within the lawn, cause the greatest problems at the time of establishment. This is because if the soil was not free of weed seeds, there will be many weeds sprouting along with the newly planted grass seed and the young grass is not strong enough compete against the weeds.

There are not many weed control products that can be applied to young grass plants that will not cause injury. Most products used for weed control state on the label: “Do Not Apply Until Grass is Well Established.” This is usually a minimum of 6 weeks.

If there is an open soil area, a competitive plant is going to fill that space if there is not a grass plant already present. Overseeding, or spreading seed over the turfgrass area, is one of the best options for filling in bare or thin areas and keeping weeds out of the lawn.

Before applying the seed, make sure the area has been aerated or roughed up with a rake. When overseeding, use ½ the recommended seeding rate for a new lawn. This newly seeded area should be treated just as if it were originally bare ground that has been seeded.

Diseases

The principal diseases that affect many fine fescue turf cultivars include red thread, powdery mildew, dollar spot, leaf spot, summer patch, and yellow tuft (downy mildew). These diseases are described on the Hortsense website, under Lawn and Turf. For more information about each disease, see the Further Reading section at the end of this fact sheet.

Insects

The main insect problems in fine fescue lawns in Washington are European Crane Fly, common Crane fly, sod webworm, Kentucky bluegrass billbug, and hunting billbug. Management strategies for these can be found on the Hortsense website.

Further Reading

This fact sheet provides specific information about growing and maintaining fine fescue grasses for Washington lawns. If you want more in-depth management strategies for home lawns, please refer to the references below.

Beard, J. B. 2012. Origin, biogeographical migrations and diversifications of turfgrasses. Res. Rep. SR132 in *Turfgrass history and literature*. East Lansing: Michigan State University Press.

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Use pesticides with care. Apply them only to plants, animals, or sites as listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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