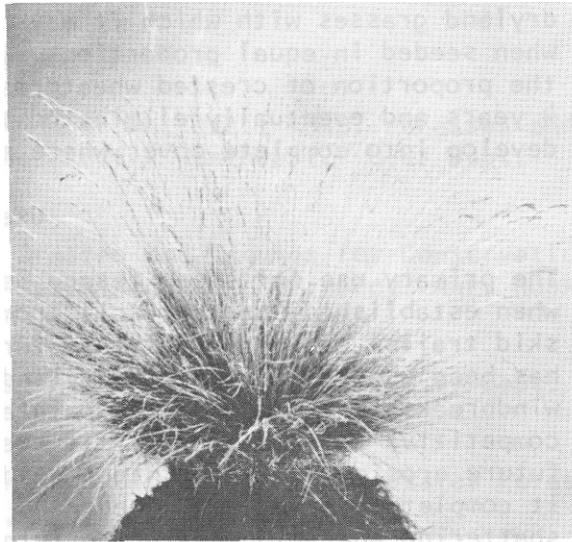


# Culture and uses of SHEEP FESCUE



SCS PHOTO 9-90021

In the State of Washington

Sheep fescue, *Festuca ovina* L., is an extremely variable species. It occurs in Europe, Asia, and North America. Over seventy varieties have been described. Some varieties still recognized are an awnless var. *capillata*, a tall native var. *rydbergii*, a small native alpine var. *brevifolia*, and a blue ornamental var. *glauca*. Ourar hard fescue is an improved strain of a large, long-leaved, European var. *duriuscula*.

In the west native sheep fescue grades into Arizona fescue in the southwest and into Idaho fescue in the northwest. It is a smaller, shorter plant with shorter leaves and seed heads but produces more fertile seed. The sheep fescue described here belongs to the var. *ovina*. It came from a dry, rocky, mountainous area of Turkey and was introduced as PI-109,497. It has been selected and tested as P-274. (Covar)

This sheep fescue is a densely tufted dwarf bunchgrass, leaves are narrow, involute, numerous, basal, stiff, semierect, and short, 10-20 cm. long, or less than half as long as the culms. Plants are short, less than 30 cm., with stiff, numerous, fine, erect to semierect stems. Panicles are narrow, dense, almost spike-like, and about 10 cm. long. Seeds are small, 680,000 per pound, but seed production is excellent. Over 700 pounds of clean seed have been produced per acre. Plants develop slowly but are very tenacious. Above ground production is low but plants are competitive and abundant fine fibrous roots are produced.

## Adaptation

Sheep fescue is widely adapted to well-drained, medium textured silt, silt loam, and loamy soils in the 10 to 18" rainfall zone of the Pacific Northwest. It is equal to Idaho fescue in drought resistance and

more drought hardy than hard or chewings fescue, **It** grows on shallow and low fertility sites. **It** has some shade tolerance. **It** is slow to become established but will crowd out crested wheatgrass or other dryland grasses with which **it** may be seeded. At Pullman, Washington, when seeded in equal proportions with crested wheatgrass, **it** reduced the proportion of crested wheatgrass from 80 percent to 10 percent in 4 years and eventually eliminated the larger grass. Poor stands often develop into **complete** cover where seed ripens and shatters.

### Uses

The primary use for sheep fescue is as a ground cover grass. **It** will, when established, protect soil from erosion on roadsides, ditchbanks, skid trails, campsites, dryland farmsteads, and recreation areas. **it** has been used as a cover in dryland tree plantings, shelterbelts, and windbreaks in areas over 18" rainfall where the grass will not be too competitive to tree growth. **It** eventually suppresses weeds and retards future erosion. Seeded in goatweed areas after treatment or burning, **it** completely suppressed weeds and prevented further seed set. By shattering and volunteering, originally seeded areas increased in sizes by 100 percent in a 5-year period. Seeded as an understory with alfalfa for hay, **it** provides ground cover and heavy root production. A six-year old stand of sheep fescue planted alone measured over 10 tons of air-dry roots and crowns per acre to an 8" plow depth. In woody wildlife plantings and around water guzzlers, **it** provides low-growing persistent ground cover. In range plantings **it** is a competitive understory grass and often crowds out taller growing components. This small fescue, although not a primary forage producer, is taken readily by sheep but seldom used by cattle or horses.

### Establishment

Sheep fescue is broadcast or seeded very shallow at 8 to 10 pounds per acre alone for cover. **It** is most often seeded at 5 pounds per acre with an equal amount of crested or Siberian wheatgrass. The larger grasses establish rapidly and provide ground cover until the smaller grasses take over. A well-packed, moist, weed-free seed bed is desirable. Seed at the optimum time of the year for the area involved. In low rainfall areas fall seeding shallow in clean stubble or firm stubble mulch fallow has been very successful. A light straw or fiber mulch helps hold moisture and gets a stand established. On weed and competition free sites 20-30 pounds N may be applied at the time of seeding. On other sites delay fertilization until plants are well established. Other fertilizers should be used as their need is shown by a soil test. On steep banks and erosive sites water disposal practices and mulching are essential.

### Management

Newly seeded areas require protection for a full year, often 2 years, before use. Clipping for weed control; should be practiced if necessary. Clip close to the ground at the time major weeds are in the early flowering stages. Weed control, using approved chemicals, may also be practiced. Correct timing is essential for effective control. In critical

areas maintenance applications of fertilizer, additional seed, mulch, and repair of damaged areas may be needed. On heavy-use areas such as campsites, rotation of use areas is recommended.

#### References

- Hefenrichter, A. L, Mullen, L.A., and Brown, R.L.; 1949. Grasses and Legumes for Soil Conservation in the Pacific Northwest. U.S. Dept. Agr. misc. pub. 678, 56 p.
- Hafenrichter, A. L, et al; 1968. Grasses and Legumes for Conservation in the Pacific Northwest and Great Basin States. U.S. Dept. Agr, Hdbk. 339, 69 p.
- Hanson, A.A. 1965. Grass Varieties in the United States. U.S. Dept. Agr. Hdbk. 170, 102 p.
- Weintraub, F.C. 1953. Grasses Introduced Into the United States Forest Service. U.S. Dept. Agr. Hdbk. 58, 78p.

\*