

## ARIZONA FESCUE

### *Festuca arizonica* Vasey

Plant Symbol = FEAR2

Contributed by: Upper Colorado Environmental Plant Center, Meeker, Colorado



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#### Alternate Names

Arizona fescue has also been referred to as mountain bunch grass and pine grass (USDA, ARS, NGRP, 2008).

#### Uses

**Grazing/Rangeland:** Arizona fescue is moderately palatable to cattle and horses, and to a lesser extent, domestic sheep. In late summer the herbage decreases slightly in palatability. It has moderate grazing tolerance. It produces a large amount of forage and remains fairly green from spring to fall. The over-all forage value has been rated good to excellent (Sampson, 1952; Herzman, et al., 1975; Guker 2006).

**Erosion Control:** Arizona fescue has an extensive root system making it a valuable plant for soil stabilization. It has moderate drought and shade tolerant qualities (USDA, SCS, NM, 1982; Gay and Dwyer, 1965; NMSU, CES, 1977; Wasser, 1982).

**Reclamation/Restoration:** Arizona fescue has performed well on slightly acid mine waste materials in areas receiving adequate precipitation (USDA, SCS, PMC, 1988)

**Wildlife Habitat:** Arizona fescue has been reported to provide forage for deer, elk, antelope, mountain goat and bighorn sheep. In addition, Arizona fescue has been reported to provide food and cover for a

number of small mammals and birds (Guker, 2006; SCS, PMC, 1988).

**Recreational/Residential:** Arizona fescue does not tolerate trampling, and will not withstand foot traffic. Arizona fescue can be used as an ornamental in landscape gardens (USDA, SCS, NM, 1982; SCS, PMC, 1988; Univ. of Idaho, Ext., 2008)

#### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

#### Description

**General:** Arizona fescue is a native, cool season, long lived perennial bunch grass. The plant has no rhizomes. The culms or stems can range from about 1 to 3 feet tall, clustered, pale blue-green, and are rough to the touch. Leaf blades are mostly basal, pale blue-green, 6 to 10 inches long, shaped like a string, and rough to the touch. The inflorescence is a panicle about 3-8 inches long. It has a deep, dense fibrous root system (Harrington, 1954; Guker, 200; Gay, et al., 1965)

#### Distribution:

For individual county distribution, within each state where Arizona fescue occurs, please consult the Plant Profile page for this species on the PLANTS Web site.

**Habitat:** Arizona fescue occurs in almost pure stands under coniferous canopies. Grass species such as blue grama (*Bouteloua gracilis*) and mountain muhly (*Muhlenbergia montana*) are sometimes found growing along with Arizona fescue (Guker, 2006).

#### Adaptation

Arizona fescue is commonly found on dry, shallow, clay loam soils; however, it can also grow on loams and sandy to gravelly soils. It most often grows in association with ponderosa pine at elevations of 6000 to 10000 feet and on sites receiving at least 10 inches of annual precipitation. It grows better on areas that receive 14 inches of precipitation in a year. It occurs from Colorado south to Texas and west to Nevada. Arizona fescue is moderately shade and drought tolerant. It has been reported to survive most fires and recovers quickly with monsoon rains in ponderosa pine forests of Arizona and New Mexico (Thornburg, 1982; Wasser, 1982; NMSU, CES, 1977; Gay et al., 1965; Sampson, 1952).

### Establishment

It is recommended to fall plant Arizona fescue, unless irrigation water is available for establishment during early spring or at other times during the year. The seed can be drilled or broadcast. Drill seed ¼ to ½ inch deep in a clean, weed-free seedbed. Two to 9 pounds of Pure Live Seed per acre have been recommended for establishment under irrigation, and half this recommended rates for dry land plantings. For critical area planting 4-9 pounds of Pure Live Seeds have been recommended (Hijar, 2002; Sharkoff, 2002; USDA, SCS, AZ, 1983; USDA, SCS, NM, 1982; NMSU, CES, 1977).

### Management

Control weeds and withhold grazing during the seedling year. Arizona fescue will tolerate moderate grazing, but stands will decline under close grazing or heavy use. Use proper grazing management to keep a healthy stand (Wasser, 1982; USDA, SCS, AZ, 1983).

### Pests and Potential Problems

No pests for Arizona fescue were found in the literature reviewed. Allelopathic effects of Arizona fescue were observed in the laboratory in seedlings of bottlebrush squirreltail, blue grama and ponderosa pine (Guker, 2006).

### Environmental Concerns

None were reported in the references reviewed.

### Seeds and Plant Production



Arizona fescue seeds (Source: Steve Hurst @ USDA-NRCS PLANTS Database)

Seed production fields have been planted at 36 inches or more between rows to aid with cultivation for weed control and for roguing off-type plants. Yields up to 200 pound per acre of clean seed have been reported using the release 'Redondo' (USDA-SCS, AZ, 1983).

Arizona fescue has 480,500 seeds per pound (USDA, NRCS, 2008)

### Cultivars, Improved, and Selected Materials (and area of origin)

'Redondo' Arizona fescue is the only cultivar release of this species. 'Redondo' was released in 1973 by New Mexico State University; Colorado State University; New Mexico State Highway Department, and the Natural Resources Conservation Service (formerly Soil Conservation Service) of the United States Department of Agriculture.

The release 'Redondo' originated from a 1956 collection west of Los Alamos, New Mexico. Initial testing and selection was conducted at Los Lunas Plant Materials center, New Mexico; Bridger Plant Materials center, Montana; and field locations in Colorado and New Mexico (Alderson and Sharp, 1994; SCS, PMC, 1988; NMSU, CES, 1977).

'Redondo' Arizona fescue is available commercially and foundation seed is maintained at Upper Colorado Environmental Plant Center, Meeker, Colorado.

### For Further Information

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government". The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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