

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Bouteloua eriopoda* / Black Grama (Synonym = *Chondrosum eriopodum*)

| Criteria | Rank | Rationale | Literature Citations |
|------------------------------|------|---|---|
| 1 Distribution within R2 | D | <p>In Region 2, Black Grama is known from southeastern Colorado (Mesa de Maya) and southwestern Kansas. Additional data are needed on population size and distribution from these states and whether the plant actually occurs on USFS lands. This species is also reported for Wyoming by Gould (1979), but no specific locations are provided.</p> <p>Black grama occurs on rocky or sandy mesas and dry, open ground with well-drained sandy and gravelly soils. It is rarely found on clay loams or adobe flats, preferring sandy but firm soils. Black grama occurs in both seral and late-successional communities.</p> <p>Confidence in Rank High</p> | <ul style="list-style-type: none"> • Dorn 2001 • Gould 1979 • Great Plains Flora Assoc. 1986 • Weber 1990 • USDA Forest Service 2002 |
| 2 Distribution outside R2 | C | <p>Black grama ranges from southeastern California to southern Utah, southern Colorado, and southwestern Kansas to western Texas and northern Mexico. Populations reported for Wyoming would be disjunct from the core of the species' range. Black grama is a major grass within western desert grassland areas receiving 12 to 18 inches (300-457 mm) mean annual precipitation.</p> <p>Confidence in Rank High</p> | <ul style="list-style-type: none"> • Cronquist et al. 1977 • Great Plains Flora Assoc. 1986 • USDA Forest Service 2002 |
| 3 Dispersal Capability | C | <p>Black grama is a bunchgrass that also produces stolons. It characteristically has poor seed production. Its seeds may be wind-dispersed.</p> <p>Black grama is reported to be fire sensitive. It usually recovers from fire slowly, through vegetative spread. Black grama can carry fire if cover is dense and conditions are windy. However, black grama's high reliance upon layering and stolons for expansion, along with its poor seed production, support arguments that historical fires were infrequent in areas dominated by black grama. Black grama is generally killed by hot fires. Black grama can recover from low-intensity fire particularly when above-average summer precipitation occurs after fire.</p> <p>Confidence in Rank High</p> | <ul style="list-style-type: none"> • Cronquist et al. 1977 • USDA Forest Service 2002 |
| 4 Abundance in R2 | D | <p>Data are needed on abundance in Colorado and Kansas. Reports for Wyoming have not been confirmed, and the species is ranked as "status uncertain" in Wyoming.</p> <p>Confidence in Rank High</p> | <ul style="list-style-type: none"> • Fertig and Beauvais 1999 |

ATTACHMENT SS2

| Species: <i>Bouteloua eriopoda</i> / Black Grama (Synonym = <i>Chondrosum eriopodum</i>) | | | |
|---|------|--|----------------------------|
| Criteria | Rank | Rationale | Literature Citations |
| 5 Population Trend in R2 | D | Population abundance and trend data are needed for Colorado and Kansas. Trend data are lacking in Wyoming, where the species is only reported (the authenticity and nativity of this report has not been verified). Confidence in Rank High | • |
| 6 Habitat Trend in R2 | D | Better information needed for Colorado and Kansas populations. Loss or alteration of native, sandy-soil grasslands in the Great Plains may be a factor in this species' rarity. Confidence in Rank High | • |
| 7 Habitat Vulnerability or Modification | DA | Habitat of this plant on sandy grasslands may be highly vulnerable to disturbance from dry-land agriculture, grazing, and competition from non-native plants. Additional information is needed from Colorado and Kansas populations to determine actual threats and trends. Confidence in Rank High | • |
| 8 Life History and Demographics | B | The perennial bunchgrass growth form of this species could make it vulnerable to habitat conversion to agriculture or high grazing pressure. Flowering, fruiting, and seed dispersal occur during late summer and fall rains. Early seedling establishment may also occur after these rains. Growth begins in late April to early May, Flowering begins in late August to early September, and fruiting occurs in late September to early October. Black grama does not seed well because the majority of spikelets produce sterile florets. Black grama primarily regenerates asexually through tillering, layering, and stoloniferous expansion, all of which are effective under arid conditions. Parent plants provide support to new plants during establishment. Additional information is needed on its life history at the edge of its range. Confidence in Rank Medium | • USDA Forest Service 2002 |
| Initial Evaluator(s): Walter Fertig and Scott Laursen | | | Date: February 3, 2002 |

ATTACHMENT SS2

National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)¹ to occur:

| <u>Colorado NF/NG</u> | Known | Likely | <u>Kansas NF/NG</u> | Known | Likely | <u>Nebraska NF/NG</u> | Known | Likely | <u>South Dakota NF/NG</u> | Known | Likely | <u>Wyoming NF/NG</u> | Known | Likely |
|--|-------|--------|---------------------|-------|--------|-----------------------|-------|--------|---------------------------|-------|--------|----------------------|-------|--------|
| Arapaho-Roosevelt NF | | | Cimmaron NG | | ? | Samuel R. McKelvie NF | | | Black Hills NF | | | Shoshone NF | | |
| White River NF | | | | | | Halsey NF | | | Buffalo Gap NG | | | Bighorn NF | | |
| Routt NF | | | | | | Nebraska NF | | | Ft. Pierre NG | | | Black Hills NF | | |
| Grand Mesa, Uncompahgre, Gunnison NF | | | | | | Ogalala NG | | | | | | Medicine Bow NF | | |
| San Juan NF | | | | | | | | | | | | Thunder Basin NG | | |
| Rio Grande NF | | | | | | | | | | | | | | |
| Pike-San Isabel NF | | | | | | | | | | | | | | |
| Comanche NG | | ? | | | | | | | | | | | | |

Literature cited

Cronquist, A., A.H. Holmgren, N.H. Holmgren, J.L. Reveal, and P.K. Holmgren. 1977. Volume 6: The Monocotyledons. Intermountain Flora, Vascular Plants of the Intermountain West, USA. New York Botanical Garden, Bronx, NY.

Dorn, R.D. 2001. Vascular Plants of Wyoming, third edition. Mountain West Publ., Cheyenne, WY.

Fertig, W. and G. Beauvais. 1999. Wyoming Plant and Animal Species of Special Concern. Wyoming Natural Diversity Database, University of Wyoming, Laramie, WY.

Gould, F.W. 1979. The genus *Bouteloua* (Poaceae). Annals Missouri Botanical Garden 66:348-416.

Great Plains Flora Association. 1986. Flora of the Great Plains. University of Kansas Press, Lawrence, KS.

Weber, W.A. 1990. Colorado Flora: Eastern Slope. University Press of Colorado, Niwot, CO.

¹ Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.