

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Carex luzulina var. atropurpurea* / Black and Purple Sedge

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	<p>Black and purple sedge is a regional endemic known in Region 2 only from the Wind River Range on the Shoshone National Forest in Fremont County, Wyoming. It is not known from any other Region 2 state.</p> <p>Within its restricted range, this species is found in moist subalpine sedge- or willow-dominated meadows and along creek banks and ponds at 10000-10600 feet.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • Dorn 1988, 2001 • Fertig 1998 • Fertig et al. 1994 • Fertig 1998 • Mills and Fertig 1996, 2000 • University of Wyoming 2001 • Welp et al. 2000
2 Distribution outside R2	B	<p>Black and purple sedge is a regional endemic of eastern Idaho, southwestern Montana, and western Wyoming. In Wyoming it is also known outside Region 2 in the the Wind River and Gros Ventre ranges in Fremont, Sublette, and Teton counties.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • Dorn 2001 • Fertig 1992a • Fertig 1992b • Fertig et al. 1991 • Fertig et al. 1994 • Hartman 1995 • Mills and Fertig 2000 • Scott 1997 • Welp 2000
3 Dispersal Capability	D	<p>Dispersal vectors are not known, but it may be inferred that water and aquatic animals aid in seed dispersal across unsuitable habitats.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • -
4 Abundance in R2	A	<p>This taxon is known from 10 occurrences in Wyoming, 6 of which have been discovered since 1990. Only one of these populations is in Region 2.</p> <p>It is ranked "S2" in Wyoming.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • Mills and Fertig 2000 • Welp 2000 • WYNDD 2002

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5 Population Trend in R2	D	Census data are not available. Confidence in Rank Medium	• -
6 Habitat Trend in R2	D	Unknown. Confidence in Rank Medium	• -
7 Habitat Vulnerability or Modification	BC	Potential threats to this taxon include grazing (most likely by sheep) and habitat disturbance. But all known occurrences are in wilderness areas on the Bridger-Teton and Shoshone National Forests. Confidence in Rank Medium	<ul style="list-style-type: none"> • Fertig 1998 • Mills and Fertig 2000 • Welp 2000
8 Life History and Demographics	D	Black and purple sedge is a wind-pollinated, tufted perennial that flowers and fruits more than once in its lifecycle. Flowering and fruiting occur from July through August. Additional information on the species, including life history stages, population structure, longevity, mortality, and seed biology, are not available. Confidence in Rank High	<ul style="list-style-type: none"> • Hitchcock et al. 1969
Initial Evaluator(s): Joy Handley, Bonnie Heidel and Scott Laursen			Date: February 11, 2002

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

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.

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<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	X	
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

Dorn, R.D. 1988. Vascular Plants of Wyoming. Mountain West Publ., Cheyenne.

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

Fertig, W. 1992a. Checklist of the Vascular plant flora of the west slope of the Wind River Range and status report on the sensitive plant species of Bridger-Teton National Forest. Unpublished report prepared for the Bridger-Teton National Forest by the Rocky Mountain Herbarium, University of Wyoming.

Fertig, W. 1992b. A floristic survey of the west slope of the Wind River Range, Wyoming. Unpublished Master's Thesis, University of Wyoming, Department of Botany.

Fertig, W. 1998. The status of rare plants on Shoshone National Forest: 1995-97 survey results. Report prepared by the Wyoming Natural Diversity Database, Laramie, WY.

Fertig, W., R.L. Hartman, and B.E. Nelson. 1991. General floristic survey of the west slope of the Wind River Range, Bridger-Teton National Forest, 1990. Report prepared for Bridger-Teton National Forest by the Rocky Mountain Herbarium, University of Wyoming, Laramie.

Fertig, W., C. Refsdal, and J. Whipple. 1994. Wyoming Rare Plant Field Guide. Wyoming Rare Plant Technical Committee, Cheyenne Wyoming.

Hartman, R.L. 1995. General floristic/ sensitive plant species survey of the Gros Ventre Range, Wyoming. Unpublished report prepared for Bridger-Teton National Forest by the Rocky Mountain Herbarium, University of Wyoming.

Heidel, B. 1996. Noteworthy Collections - Montana. Madrono 43: 436-440.

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- Hitchcock, C.L., A. Cronquist, and M. Ownbey. 1969. Pt. 1. Vascular Cryptogams, Gymnosperms, and Monocotyledons, IN: Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson (eds). Vascular Plants of the Pacific Northwest. University of Washington Publications in Biology 17(1): 1-914.
- Mills, S. and W. Fertig. 1996. Field guide to rare and sensitive plants of the Shoshone National Forest. Report prepared by the Wyoming Natural Diversity Database, Laramie, WY.
- Mills, S. and W. Fertig. 2000. State Species Abstract: *Carex luzulina* var. *atropurpurea*. Wyoming Natural Diversity Database. Available on the internet at www.uwyo.edu/wyndd
- Scott, R.W. 1997. The Alpine Flora of the Rocky Mountains. Volume 1 The Middle Rockies. University of Utah Press, Salt Lake City, UT.
- University of Wyoming – Rocky Mountain Herbarium. 1998. Atlas of the Flora of Wyoming. Posted electronically through 1998 at: <http://www.esb.utexas.edu/tchumley/wyomap/> and unposted accession information at the Rocky Mountain Herbarium through 2001.
- Welp, L., W.F. Fertig, G.P. Jones, G.P. Beauvais, and S.M. Ogle. 2000. Fine filter analysis of the Bighorn, Medicine Bow, and Shoshone National Forests in Wyoming. Wyoming Natural Diversity Database, Laramie, WY.
- Wyoming Natural Diversity Database. 2001. Ongoing documentation of sensitive species distribution, biology, status, and references for the state of Wyoming. University of Wyoming, Laramie.