

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Carex scirpoidea* var. *scirpiformis* / Canadian Single-spike Sedge
 Synonym: *Carex scirpiformis*)

Criteria	Rank	Rationale	Literature Citations
<p>1 Distribution within R2</p>	AD	<p>Canadian single-spike sedge is present in the Northern Absaroka Range on the Shoshone National Forest in Wyoming. It may be present in Colorado, but is included in <i>C. scirpoidea</i> var <i>scirpoidea</i> by Dunlop and Crow (1999).</p> <p>This taxon occurs on wet substrates with a high level of calcium. In Region 2, at Swamp Lake, it has been observed on semi-moist hummocks in marly <i>Triglochin-Eleocharis</i> communities and on floating mats of <i>Carex simulata/ Calamagrostis inexpansa</i>. This peat habitat is rare, small, and isolated on the landscape. Similarly, populations outside Region 2 on the National Elk Refuge are mostly on exposures of dry to moist marl-clay near seep springs and dried stream channels.</p> <p>Note: Information on the three varieties of <i>Carex scirpoidea</i> is presented on separate evaluation forms. In the most recent monograph (Dunlop and Crow 1999), <i>C. s. var. scirpiformis</i> is included in <i>C.s. var. scirpoidea</i>, so that information on these latter two varieties inside and outside the region depends on the accepted taxonomic treatment. The three varieties are recognized but treated together by Johnston (2001).</p> <p>Confidence in Rank LOW</p>	<ul style="list-style-type: none"> • Dorn 2001 • Dunlop and Crow 1999 • Fertig 1998a • Fertig 1999 • Fertig and Jones 1992 • Hermann 1970 • Johnston 2001 • University of Wyoming 1998
<p>2 Distribution outside R2</p>	C	<p>Canadian single-spike sedge occurs from Manitoba to Alberta and south to North Dakota, northern Wyoming, and Utah. In Wyoming, outside of Region 2, it is known from Jackson Hole, occurring on lands managed by the National Elk Refuge (US Fish and Wildlife Service).</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Dorn 1992 • Fertig 1998b • Fertig 1999 • Hermann 1970 • NatureServe 2002
<p>3 Dispersal Capability</p>	D	<p>Canadian single-spike sedge reproduces vegetatively by rhizomes, and from seed. Dispersal vectors are not known.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • Hermann 1970 • Fertig 1999

ATTACHMENT SS2

Species: *Carex scirpoidea* var. *scirpiformis* / Canadian Single-spike Sedge
 Synonym: *Carex scirpiformis*)

Criteria	Rank	Rationale	Literature Citations
4 Abundance in R2	AD	In Wyoming, it is known from two occurrences, both observed since 1992, one of which is in Region 2 on Shoshone National Forest. Census data are lacking, but known populations appear to be restricted to small areas (ca 5-10 acres or less) and specialized microhabitats. In Wyoming it is ranked "S1". It is not accepted as a distinct variety in Colorado so abundance information and rank are not known. Confidence in Rank Low	<ul style="list-style-type: none"> Fertig 1999 WYNDD 2001
5 Population Trend in R2	D	Not known. Confidence in Rank High	<ul style="list-style-type: none"> -
6 Habitat Trend in R2	D	Not known. Confidence in Rank High	<ul style="list-style-type: none"> -
7 Habitat Vulnerability or Modification	B	Canadian single-spike sedge may be impacted by changes in hydrology or grazing in its wetland habitat. Confidence in Rank High	<ul style="list-style-type: none"> Fertig 1999
8 Life History and Demographics	D	Canadian single-spike sedge is a wind-pollinated, rhizomatous perennial that flowers and fruits more than once in its lifecycle. 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"> Hermann 1970
Initial Evaluator(s): Joy Handley, Bonnie Heidel and Scott Laursen			Date: January 30, 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>		<u>Kansas NF/NG</u>		<u>Nebraska NF/NG</u>		<u>South Dakota NF/NG</u>		<u>Wyoming NF/NG</u>	
Known	Likely	Known	Likely	Known	Likely	Known	Likely	Known	Likely
		Cimmaron NG		Samuel R. McKelvie NF		Black Hills NF		Shoshone NF	X
				Halsey NF		Buffalo Gap NG		Bighorn NF	
				Nebraska NF		Ft. Pierre NG		Black Hills NF	
				Ogalala NG				Medicine Bow NF	
								Thunder Basin NG	

Literature cited

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

Dunlop, D.A. and G.E. Crow. 1999. The taxonomy of *Carex* section *Scirpinae* (Cyperaceae). *Rhodora* 101:163-199.

Fertig, W. 1998a. Plant species of special concern and vascular plant flora of the National Elk Refuge. Unpublished report prepared for the US Fish and Wildlife Service by the Wyoming Natural Diversity Database, Laramie, WY.

Fertig, W. 1998b. 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. 1999. State Species Abstract: *Carex scirpoidea* var. *scirpiformis*. Wyoming Natural Diversity Database. Available on the internet at www.uwyo.edu/wyndd

Fertig, W. and G. Jones. 1992. Plant communities and rare plants of the Swamp Lake Botanical Area, Clarks Fork Ranger District, Shoshone National Forest. Unpublished report prepared for the Shoshone National Forest by the Wyoming Natural Diversity Database.

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.

ATTACHMENT SS2

Hermann, F.J. 1970. Manual of the Carices of the Rocky Mountains and Colorado Basin. Agriculture Handbook 374: 1-397. USDA Forest Service, Washington DC.

Johnston, B.C. 2001. Field Guide to Sedge Species of the Rocky Mountain Region. Pub. R2-RR-01-03. USDA Forest Service, Rocky Mountain Region, Denver, CO.

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.

Wyoming Natural Diversity Database. 2001. Ongoing documentation of sensitive species distribution, biology, status, and references for the state of Wyoming. University of Wyoming, Laramie.