

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: *Carex sartwellii* var. *sartwellii* / Sartwell's Sedge (*Carex sartwellii*)

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	AD	<p>Region 2 marks the southern limits of the Great Plains and Rocky Mountain distribution of Sartwell's sedge. In Wyoming, it is known from Medicine Bow National Forest in the Medicine Bow Range, and outside national forest boundaries in the Wind River Basin. It may occur in the Thunder River National Grasslands based on a collection thought to be from the Powder River Basin (based on a 1900 collection.) In Colorado it is also in at least four north central and one southwestern county (Johnston 2001). In South Dakota, it is in at least three southwestern counties, and in Nebraska it is known from at least six western counties (Larson 1993).</p> <p>Throughout its range, it is reported from a variety of palustrine habitats. In the Rocky Mountain region, it is in wet marshes, bogs, wet meadows and sloughs in the foothills, plains, and lower mountains (Johnston 2001). It is sometimes confined to a discrete zone or microhabitat and is probably localized and patchy on the landscape. Wyoming occurrences range from 3500-6220 ft, with the exception of the Medicine Bow NF population with a location that is not precisely known and may be as high at 8000 ft.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • Dorn 2001 • Hermann 1970 • Johnston 2001 • Larson 1993 • University of Wyoming 1998 • WYNDD 2001
2 Distribution outside R2	C	<p>Sartwell's sedge occurs from Quebec to British Columbia, extending south to Indiana, Missouri, Nebraska, and Colorado. Wyoming locations outside of Region 2 include Jackson Hole and the Yellowstone Plateau.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Hitchcock et al. 1969 • Larson 1993 • Dorn 2001
3 Dispersal Capability	D	<p>Not known.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • -
4 Abundance in R2	AD	<p>It is known from 5 records in Wyoming, only one of which is in Region 2 (last observed in 1964). Those records that note the extent of the population characterize it as confined to small areas of less than 1 acre.</p> <p>In Colorado and Wyoming, it is ranked "S1." It is ranked "S4" in Nebraska and is not ranked in Kansas or South Dakota.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • WYNDD 2001

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Criteria	Rank	Rationale	Literature Citations
5 Population Trend in R2	D	Not known. Confidence in Rank High	• -
6 Habitat Trend in R2	AD	Low elevation wetland habitats have declined historically. Specific information is not available for habitats of this species. Confidence in Rank Low	• -
7 Habitat Vulnerability or Modification	BD	Low elevation wetland habitats are subject to development pressure and uses that may alter composition. Confidence in Rank Medium	• -
8 Life History and Demographics	D	Sartwell's sedge is an herbaceous perennial that also reproduces vegetatively by rhizomes. It is likely to be wind-pollinated. 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 • Hitchcock et al. 1969
Initial Evaluator(s): Joy Handley and Bonnie Heidel			Date: 30 Jan 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.

ATTACHMENT SS2

<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	X	
San Juan NF												Thunder Basin NG		?
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG														

Literature cited

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

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.

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.

Johnston, B. 2001. Field guide to the sedge species of the Rocky Mountain Region: The genus Carex in Colorado, Wyoming, western South Dakota, western Nebraska, and western Kansas. Renewable Resources R2-RR-01-03. Denver, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Region. 318 pp.

Larson, G.E. 1993. Aquatic and wetland vascular plants of the northern Great Plains. USDA Forest Service, Rocky Mountain Forest and Range Exp. Stn. Fort Collins, CO. Gen Tech. Rep. RM-238.

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.