

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Equisetum scirpoides</i> / Dwarf scouringrush / EQSC			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	B	<i>Equisetum scirpoides</i> is found only in the Black Hills National Forest in Region 2. Currently, 24+ populations exist, in about 8 – 10 drainages. The distribution in only one forest in Region 2 would warrant a ranking of A, but due to the fact that there are sufficient and large (several thousand ramets) populations within the Black Hills National Forest, a rank of B was assigned. Confidence in Rank High	<ul style="list-style-type: none"> • Black Hills Sensitive Plant Monitoring, 2000, 2001 • PLANTS, NRCS. 2001
2 Distribution outside R2	C	Circumboreal, including the northern tier of states in the United States. Confidence in Rank High	<ul style="list-style-type: none"> • PLANTS, NRCS. 2001 • Great Plains Flora, 1986
3 Dispersal Capability	B	The spores of <i>Equisetum scirpoides</i> , like the spores of other ferns and fern allies, can occasionally be transported over long distances, though most dispersal occurs near the parent plant. Spores can only germinate in appropriate environments. Confidence in Rank Medium	<ul style="list-style-type: none"> • FNA, Vol. 1, 1993
4 Abundance in R2	C	Currently, <i>Equisetum scirpoides</i> is known only from the Black Hills National Forest in Region 2. There are at least 24 known populations (some containing thousands of ramets), with others suspected. Twelve sites are known in Pennington Co. SD, 8 in Lawrence Co. SD, and 4 in Crook Co. WY. Confidence in Rank High	<ul style="list-style-type: none"> • Black Hills Sensitive Plant Monitoring, 2000, 2001
5 Population Trend in R2	D	Population trends are currently unknown, but the species has been known to occur in the Black Hills since 1927. Confidence in Rank High	<ul style="list-style-type: none"> • R2 sensitive Plant Scorecard - April 2001
6 Habitat Trend in R2	C	Historically, riparian areas have been steadily degraded in the Black Hills and are vulnerable to development, grazing and road building. However, current survey information from the Black Hills indicates this plant has broader ecological amplitude than previously thought. It has been found in a dry scoured wash, an old placer mining pit, and along a roadside in addition to the classic riparian streamside habitat. Some sites contain several thousand ramets. Confidence in Rank High	<ul style="list-style-type: none"> • Parrish et al, 1996 • Tatina, 1993 • Black Hills Sensitive Plant Monitoring, 2000, 2001

ATTACHMENT SS2

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7 Habitat Vulnerability or Modification	B	Unknown, but some <i>Equisetum</i> sp. may benefit from a flooding regime in order for spores to establish. <i>Equisetum scirpoides</i> occurs primarily in moist, shaded draws and along cold streams. Management activities that alter the hydrology of the known sites might put them at risk. Historically, riparian areas have been steadily degraded in the Black Hills and are vulnerable to development, grazing and road building. Current survey information from the Black Hills indicates a wider range of habitat than previously thought. Confidence in Rank Medium	<ul style="list-style-type: none"> • Black Hills Sensitive Plant Monitoring, 2000, 2001 • Duckett & Duckett, 1980 • Parrish et al, 1996
8 Life History and Demographics	C	No interactions detrimental to EQSC with other species are known. The plant is clonal, so small disturbances will likely have little effect on survivability. Due to the high silica content and toxic properties of most <i>Equisetum</i> spp., it is unlikely that <i>E. scirpoides</i> will be grazed heavily, and trampling of the plant may initiate new clonal growth. Confidence in Rank High	<ul style="list-style-type: none"> • Burrill, 1994 • Hauke, Fiddlehead Forum 10, 1983.
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ATTACHMENT SS2

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

Species Name: <u>Equisetum scirpoides / Dwarf scouringrush / EQSC</u>									
<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
		Cimarron NG		Samuel R. McKelvie NF		Black Hills NF	X	Shoshone NF	
				Halsey NF		Buffalo Gap NG		Bighorn NF	
				Nebraska NF		Ft. Pierre NG		Black Hills NF	X
				Ogalala NG				Medicine Bow NF	
								Thunder Basin NG	

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References

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Hauke, R.L. 1983. Horsetails (*Equisetum*) in North America. Fiddlehead Forum 10:39-42.

Parrish, J.B., Herman, D.J., Reyher, D.J. 1996. A Century of Change in the Black Hills Forest and Riparian Ecosystems. South Dakota Agricultural Experiment Station/U.S. Forest Service. Brookings, SD.

Tatina, R. 1993. T.E.S. Plant Survey Final Report: Hollow and Nugget Project Areas, Pactola District, Black Hills National Forest, South Dakota. Summary, Recommendations and Documentation.

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

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USDA, NRCS. 2001. The PLANTS Database, Version 3.1 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

