

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Asplenium septentrionale</i> / Forked Spleenwort, Northern Spleenwort			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	CB	<p>Forked Spleenwort is at the northeastern limits of its range in Region 2, occurring in South Dakota, Colorado and Wyoming. In Wyoming, this species is found on the Medicine Bow National Forest in the Laramie and Medicine Bow ranges in Albany, Carbon, Converse, Laramie, and Platte counties. Additional distribution information is needed from Colorado and South Dakota.</p> <p>It occurs in crevices and shelves in granite boulder outcrops and cliff faces within shady coniferous forests or open areas, at elevation ranging from 5700-9200 feet.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Burke 2000 • Dorn 2001 • Fertig 2000 • Great Plains Flora Association 1986 • Larson and Johnson 1999 • University of Wyoming 1998 • Welp et al. 2000
2 Distribution outside R2	CB	<p>This species ranges from southwestern South Dakota to Arizona and Texas and along the California Sierra Nevada to southwestern Oregon, with a disjunct population in West Virginia.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Lellinger 1985 • NatureServe 2002
3 Dispersal Capability	C	<p>Its spores readily disperse across unsuitable habitat.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • -
4 Abundance in R2	CB	<p>It is known from 10 extant locations and 4 historical records in Wyoming, 8 of these on the Medicine Bow National Forest. Five occurrences have been discovered or relocated since 1994 (most recently in 1999). Individual colonies are often small and localized, with less than 50 clusters of plants. It is ranked S2 but not currently tracked in Wyoming based on the low degree of threat. It is ranked "S3" in Colorado (vulnerable) and "S4" in Wyoming (potentially secure; NatureServe 2002).</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • Fertig 2000 • NatureServe 2002 • Welp et al. 2000
5 Population Trend in R2	BD	<p>Not known. At least 4 sites have not been relocated in the last 60 years.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • -

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6 Habitat Trend in R2	BD	The granitic rock outcrop habitat is likely to be stable, but may be affected by tree canopy. Confidence in Rank Medium	• -
7 Habitat Vulnerability or Modification	CD	Not known. The rock outcrop habitat is resilient but may be slightly affected by rock-climbing. It occurs on lands managed by Medicine Bow National Forest and Curt Gowdy State Park. Confidence in Rank Medium	• Fertig 2000
8 Life History and Demographics	D	Forked Spleenwort is a perennial arising from creeping rhizomes, with grass-like blades. Spores can be produced during most of the growing season, June-September. They germinate to produce the gametophyte, a haploid life cycle stage that in most ferns is a heart-shaped green object less than 1 cm long. Sperms and eggs are produced on the same or different gametophytes. Genetic analysis of fern populations indicates that the predominant mode of breeding is cross-breeding. Sperms are likely to travel via water. Additional information on the species, including population structure, longevity, and mortality, are not available. Confidence in Rank High	<ul style="list-style-type: none"> • Lellinger 1985 • Vitt 1988
Initial Evaluator(s): Bonnie Heidel and Scott Laursen			Date: 5 January 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		
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

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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. Report prepared for the US Forest Service Region 2 by the Wyoming Natural Diversity Database, Laramie, WY.