

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Asplenium trichomanes</i> / Maidenhair Spleenwort			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	BD	<p>Region 2 is central in Maidenhair spleenwort distribution. In Wyoming, it is known only from the Granite Mountains and Laramie Range on Medicine Bow National Forest in Natrona and Albany counties. It is a rare species of the Black Hills National Forest in South Dakota, but is not known from the Wyoming side. It is reported from Colorado, Kansas and Nebraska, and distribution information is needed from these three other states to assess its R2 status.</p> <p>In Wyoming, this species is found in cool, shaded crevices, ledges, and cliffs on granite at elevations of 7900-8200 feet. The species is much more rare than its microhabitat, signifying a patchy distribution.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Fertig 2000 • Welp et al. 2000 • Burke 2000 • Harrington and Burrell 1950 • Dorn and Dorn 1972 • Ode and Marriott 1990 • Larson and Johnson 1999
2 Distribution outside R2	C	<p>Maidenhair spleenwort is a circumboreal species that extends from Alaska to Newfoundland and south to Arizona, Texas, and Georgia.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Lellinger 1985 • Cronquist et al. 1992 • Hitchcock et al. 1969
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	BD	<p>It is known from 2 extant records in Wyoming (last observed in 2000) and one historical record (last seen in 1939). Surveyed populations are extremely small, averaging less than 75 plants, and highly localized. It is ranked "S1" in Wyoming, "S2" in South Dakota, "S3" in Kansas, and is not ranked in Colorado and Nebraska.</p> <p>Confidence in Rank Low</p>	<ul style="list-style-type: none"> • Fertig 2000 • Welp et al. 2000
5 Population Trend in R2	D	<p>Population trends are not known, but are probably stable in the Laramie Range. Over-collection could be a potential problem. The one Granite Mountain colony has not been seen since 1939.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Fertig 2000

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6 Habitat Trend in R2	B	The general granite outcrop habitat and microhabitat are probably stable. Confidence in Rank Medium	• -
7 Habitat Vulnerability or Modification	C	Threats are probably low, although It could be affected by removal of surrounding timber. It occurs on lands managed by Medicine Bow National Forest and the state of Wyoming. Confidence in Rank Medium	• Fertig 2000
8 Life History and Demographics	D	Maidenhair Spleenwort is a perennial arising from creeping rhizomes, with evergreen fronds. 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"> • Vitt et al. • Hitchcock et al. 1969
Initial Evaluator(s): Bonnie Heidel and Scott Laursen			Date: 8 February 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	X		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														

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