

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Pellaea atropurpurea</i> (L.) Link / Purple cliffbrake / PEAT2			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	B	S1 in Wyoming (plants labeled <i>Pellaea atropurpurea</i> may actually be <i>P. gastonyi</i> , because until recently all plants were considered <i>P. atropurpurea</i> until <i>P. gastonyi</i> was recognized as a separate species). S2/S3 in Colorado. Listed as occasional in the Black Hills of South Dakota. No reports of the number of populations except for Wyoming (2). Wyoming and South Dakota populations are peripheral to the main distribution. Confidence in Rank High	<ul style="list-style-type: none"> Fertig, 2000 NatureServe, 2001 Larson & Johnson, 1999
2 Distribution outside R2	C	Widely distributed in the eastern half of the U.S. Found throughout much of the southwestern U.S. Region 2 populations are not widely disjunct, but Wyoming and South Dakota populations are peripheral to the main distribution. Confidence in Rank High	<ul style="list-style-type: none"> FNA Vol2., 1993
3 Dispersal Capability	B	The spores of <i>Pellaea atropurpurea</i> , like the spores of other ferns and fern allies, can occasionally be transported over long distances. Spores can only germinate in appropriate environments, but this species is apogamous (no sexual reproduction even though spores are produced – there is no egg-sperm fusion), so any given spore may lead to a new population. Confidence in Rank Medium	<ul style="list-style-type: none"> FNA Vol1., 1993
4 Abundance in R2	D	No information is available on abundance, but the S1 ranking in Wyoming, and the S2/S3 ranking in Colorado indicate that the plant is not abundant. More information needs to be gathered to assess this criterion effectively. Confidence in Rank Medium	<ul style="list-style-type: none"> Fertig, 2000 NatureServe, 2001
5 Population Trend in R2	D	No information. Confidence in Rank High	<ul style="list-style-type: none">
6 Habitat Trend in R2	B	<i>Pellaea atropurpurea</i> grows primarily on limestone or sandstone ledges and cliffs in the Black Hills. Confidence in Rank High	<ul style="list-style-type: none"> Fertig, 2000 Larson & Johnson, 1999

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Criteria	Rank	Rationale	Literature Citations
7 Habitat Vulnerability or Modification	B	Cliffs and ledges may be disturbed during mining or logging; otherwise the habitat is relatively unaffected by management activities. Confidence in Rank Medium	•
8 Life History and Demographics	D	<i>Pellaea atropurpurea</i> , like most species of fern, reproduces clonally as well as by spores, and should tolerate some small-scale disturbance. The removal or destruction of limestone cliffs or outcrops may adversely affect this species. Confidence in Rank High	• Larson & Johnson, 1999
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National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY (L)¹ to occur:

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Colorado NF/NG	Kansas NF/NG		Nebraska NF/NG		South Dakota NF/NG		Wyoming NF/NG		
	Known	Likely	Known	Likely	Known	Likely	Known	Likely	
Arapaho-Roosevelt NF	X				Black Hills NF	X		Shoshone NF	
White River NF	X				Halsey NF			Bighorn NF	
Routt NF	X				Nebraska NF			Black Hills NF	X
Grand Mesa, Uncompahgre, Gunnison NF	X				Ogalala NG			Medicine Bow NF	X
San Juan NF								Thunder Basin NG	
Rio Grande NF									
Pike-San Isabel NF	X								
Comanche NG									
Pawnee NG									

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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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References

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