

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Gymnocarpium dryopteris</i> (L.) Newman / Western or Northern oakfern / GYDR			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	<i>Gymnocarpium dryopteris</i> is listed as occasional in the Black Hills, occurring only in Custer and Lawrence counties. It is listed as rare in Wyoming (S1), and S2/S3 in Colorado. The disjunct nature of the populations in Region 2, along with the S rankings in each state are the reason for the A ranking. A ranking of B would be assigned if the populations in Region 2 were contiguous with the main range of the species and/or if the species was ranked S3 in Colorado. Confidence in Rank <b>Medium</b>	<ul style="list-style-type: none"> <li>Larson &amp; Johnson, 1999</li> <li>Fertig, 2001</li> <li>NatureServe, 2001</li> <li>Great Plains Flora, 1986</li> </ul>
2 Distribution outside R2	C	Circumboreal. Widespread in northern North America. Colorado, South Dakota and Wyoming populations are disjunct from the main range. Hybrids with other species of <i>Gymnocarpium</i> are common in North America. Confidence in Rank <b>High</b>	<ul style="list-style-type: none"> <li>Fertig, 2001</li> <li>FNA, Vol. 2 1993</li> </ul>
3 Dispersal Capability	B	The spores of <i>Gymnocarpium dryopteris</i> , like the spores of other ferns and fern allies, can occasionally be transported over long distances, but the locations in R2 are disjunct from the normal range, and from each other. Spores can only germinate in appropriate environments. Confidence in Rank <b>Medium</b>	<ul style="list-style-type: none"> <li>FNA, Vol. 1, 1993</li> <li>FNA, Vol. 2, 1993</li> </ul>
4 Abundance in R2	B	Occasional in the Black Hills of South Dakota, rare in the Black Hills of Wyoming (2 sites), unknown abundance in Colorado, but listed as S2/S3. Confidence in Rank <b>Medium</b>	<ul style="list-style-type: none"> <li>NatureServe, 2001</li> <li>Larson &amp; Johnson, 1999</li> </ul>
5 Population Trend in R2	D	Population trends are unknown. Confidence in Rank <b>High</b>	<ul style="list-style-type: none"> <li></li> </ul>
6 Habitat Trend in R2	B	The occurrence of this species on moist rocky slopes, crevices, ledges, and open forest indicates its habitat is stable, at least in the Black Hills. Confidence in Rank <b>Medium</b>	<ul style="list-style-type: none"> <li>Larson &amp; Johnson, 1999</li> </ul>

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Criteria	Rank	Rationale	Literature Citations
7 Habitat Vulnerability or Modification	B	Disturbance of the substrate could cause disturbance and decline of any given population.  Confidence in Rank <b>Low</b>	•
8 Life History and Demographics	C	<i>Gymnocarpium dryopteris</i> , like most species of fern allies, reproduces clonally as well as sexually, and should tolerate some small-scale disturbance. Some disturbance may actually benefit the establishment and spread of this species.  Confidence in Rank <b>High</b>	• Larson & Johnson, 1999
Evaluator(s): Reed Wight Crook – Black Hills National Forest Botanist			Date: 26 Nov. 2001

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

Species Name: <i>Gymnocarpium dryopteris</i> (L.) Newman / Western or Northern oakfern / GYDR													
<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		Known Likely		Known Likely
Arapaho-Roosevelt NF	X	Cimarron NG		Samuel R. McKelvie NF		Black Hills NF	X	Shoshone NF					
White River NF	X			Halsey NF		Buffalo Gap NG		Bighorn NF					
Routt NF	X			Nebraska NF		Ft. Pierre NG		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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<sup>1</sup> 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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### Notes

Since this species has not been tracked in South Dakota, specific information about populations and abundance in the Black Hills is lacking. This is another species that may benefit from being put on a watch list until there is sufficient data available to make a reliable determination of its abundance.

### References

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